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CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

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** - Not Requested

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

Date: 08-03-2006
EMAX Batch No.: 06G039

Attn: Ron Halpern

Arcadis
1400 North Harbor Blvd, Ste 700
Fullerton CA 92835

Subject: Laboratory Report
Project: Omega Chemical

Enclosed is the Laboratory report for samples received on 07/10/06.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
OC2-PMW15-0-17	G039-01	07/10/06	WATER	VOLATILE ORGANICS BY GC/MS
				1,2,3-TRICHLOROPROPANE SIM
				1,4-DIOXANE BY 8270 SIM
				ANIONS BY IC
				CHROMIUM HEXAVALENT BY IC
				CYANIDE TOTAL
				SILICA, DISSOLVED
				METALS, DISSOLVED BY ICP-MS
				MERCURY DISSOLVED
				PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS SIM
				SOLIDS TOTAL DISSOLVED
				TKN
				TOTAL ORGANIC CARBON
				N-NITROSODIMETHYLAMINE BY GCMS
				SEMIVOLATILE ORGANICS BY GCMS
OC2-00-W-1-19	G039-02	07/10/06	WATER	VOLATILE ORGANICS BY GC/MS
OC2-00-W-4-18	G039-03	07/10/06	WATER	VOLATILE ORGANICS BY GC/MS
OC2-PMW15-5-21	G039-04	07/10/06	WATER	VOLATILE ORGANICS BY GC/MS

Sample ID	Control #	Col Date	Matrix	Analysis
				1,2,3-TRICHLOROPROPANE SIM
				1,4-DIOXANE BY 8270 SIM
				ANIONS BY IC
				CHROMIUM HEXAVALENT BY IC
				CYANIDE TOTAL
				SILICA, DISSOLVED
				METALS, DISSOLVED BY ICP-MS
				MERCURY DISSOLVED
				PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS SIM
				SOLIDS TOTAL DISSOLVED
				TKN
				TOTAL ORGANIC CARBON
				N-NITROSODIMETHYLAMINE BY GCMS
				SEMIVOLATILE ORGANICS BY GCMS
OC2-PMW15-1-20	G039-05	07/10/06	WATER	VOLATILE ORGANICS BY GC/MS
				1,2,3-TRICHLOROPROPANE SIM
				1,4-DIOXANE BY 8270 SIM
				ANIONS BY IC
				CHROMIUM HEXAVALENT BY IC
				CYANIDE TOTAL
				SILICA, DISSOLVED
				METALS, DISSOLVED BY ICP-MS
				MERCURY DISSOLVED
				PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS SIM
				SOLIDS TOTAL DISSOLVED
				TKN
				TOTAL ORGANIC CARBON
				N-NITROSODIMETHYLAMINE BY GCMS
				SEMIVOLATILE ORGANICS BY GCMS
OC2-PMW18A-0-22	G039-06	07/10/06	WATER	VOLATILE ORGANICS BY GC/MS
				1,2,3-TRICHLOROPROPANE SIM
				1,4-DIOXANE BY 8270 SIM
				ANIONS BY IC
				CHROMIUM HEXAVALENT BY IC
				CYANIDE TOTAL
				SILICA, DISSOLVED
				METALS, DISSOLVED BY ICP-MS
				MERCURY DISSOLVED
				PERCHLORATE BY IC

Sample ID	Control #	Col Date	Matrix	Analysis
				SEMIVOLATILE ORGANICS SIM
				SOLIDS TOTAL DISSOLVED
				TKN
				TOTAL ORGANIC CARBON
				N-NITROSODIMETHYLAMINE BY GCMS
				SEMIVOLATILE ORGANICS BY GCMS
OC2-PMW18B-0-23	G039-07	07/10/06	WATER	VOLATILE ORGANICS BY GC/MS
				1,2,3-TRICHLOROPROPANE SIM
				1,4-DIOXANE BY 8270 SIM
				ANIONS BY IC
				CHROMIUM HEXAVALENT BY IC
				CYANIDE TOTAL
				SILICA, DISSOLVED
				METALS, DISSOLVED BY ICP-MS
				MERCURY DISSOLVED
				PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS SIM
				SOLIDS TOTAL DISSOLVED
				TKN
				TOTAL ORGANIC CARBON
				N-NITROSODIMETHYLAMINE BY GCMS
				SEMIVOLATILE ORGANICS BY GCMS
OC2-PMW18C-0-24	G039-08	07/10/06	WATER	VOLATILE ORGANICS BY GC/MS
				1,2,3-TRICHLOROPROPANE SIM
				1,4-DIOXANE BY 8270 SIM
				ANIONS BY IC
				CHROMIUM HEXAVALENT BY IC
				CYANIDE TOTAL
				SILICA, DISSOLVED
				METALS, DISSOLVED BY ICP-MS
				MERCURY DISSOLVED
				PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS SIM
				SOLIDS TOTAL DISSOLVED
				TKN
				TOTAL ORGANIC CARBON
				N-NITROSODIMETHYLAMINE BY GCMS
				SEMIVOLATILE ORGANICS BY GCMS

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

Pg 1 of 12

CHAIN OF CUSTODY

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

PO NUMBER: CA000646.0001
SAMPLE STORAGE

EMAX CONTROL NO. * 06G039
PROJECT CODE: CA000646.0001

CLIENT: ARCADIS
PROJECT: Omega Chemical OU-2
COORDINATOR: Ron Halpern
TEL: 949-294-1532 FAX: EMAIL: rhalpern@arcadis-us.com
SEND REPORT TO: Ron Halpern
COMPANY: ARCADIS
ADDRESS: 1400 N. Harbor Blvd, Suite 700, Fullerton, CA 92835
EMAX PM: Richard

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

ANALYSIS REQUIRED: VOCs - 8260B; 1,2,3-TCP - 8260 SIM; TOC - 415.1; SVOCs - 8270C; NDMA - 8270C; 1,4 Dioxane - 8270C; Dissolved TAL Metals; TKN - 351.3

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

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	VOCs - 8260B (HC)	1,2,3-TCP - 8260 SIM (HC)	TOC - 415.1 (HC)	SVOCs - 8270C (IC)	NDMA - 8270C (IC)	1,4 Dioxane - 8270C (IC)	Dissolved TAL Metals (IC)	TKN - 351.3 (HS)	COMMENTS
1	OC2-PMW15-0-17		7/10/06	0940	3	40ml	VOA	GW		X								
2					3						X							
3					1	1L						X						
4					2	1lt	Amber						X					
5					2									X				
6					1										X			
7					1	500	Poly									X		
8					1	500											X	
9					1	250												
0					1	125												

QC Level III package to APC

Instructions (1) Dissolved TAL Metals + Boron + Silicon by 6010/7000, 200.8 245.1
Note - Sample is unfiltered and unpreserved - Lab to filter.
(2) Send PDF + Excel EDF to Ron Halpern

Cooler #	Temp. (°C)
1	3.0
2	3.4
3	3.2
4	3.7
5	3.5

Sample #s

SAMPLER

COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
	7/10/06	17:50	
7/10/06 1849	7/10/06	1849	

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

1

CHAIN OF CUSTODY

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

PO NUMBER: CA000646.0001
SAMPLE STORAGE
EMAX CONTROL NO. *
PROJECT CODE: CA000646.0001

CLIENT: ARCADIS
PROJECT: Omega Chemical OU-2
COORDINATOR: Ron Halpern
TEL: 949-294-1532 FAX: EMAIL: rhalpern@arcadis-us.com
SEND REPORT TO: Ron Halpern
COMPANY: ARCADIS
ADDRESS: 1400 N. Harbor Blvd, Ste 700, Fullerton, CA
EMAX PM: Richard

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

ANALYSIS REQUIRED: Anions, TDS, Perchlorate, Cr+6 | Cyanide - 335.2 | VOCs - 8260B

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

	SAMPLE ID LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	PRESERVATIVE CODE IC	SH		HC					COMMENTS
1	1	OC2-PMW15-0-17		7/10/06	0940	1	250	poly	GW		X								level III QC TO LDC
	2			↓	↓	1	125	poly	GW			X							
	3																		
2	4	OC2-00-W-2-19		7/10/06	0940	1								X					
3	5	OC2-00-W-4-18		7/10	0940	1								X					
	6																		
	7																		
	8																		
	9																		
	0																		

Instructions: Anions: Bromide, chloride, fluoride, sulfates, nitrates, nitrite by EPA 300.0; TDS by EPA 160.1; Perchlorate by 314; Hex Chrome by EPA 218.6

Cooler #	Temp. (°C)	Sample #s

SAMPLER
COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
7/10/06 1849	7/10/06	17:50	

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

3-12

CHAIN OF CUSTODY

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

PO NUMBER: CA000646.0001
SAMPLE STORAGE
EMAX CONTROL NO. *
PROJECT CODE: CA000646.0001

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL OU-2
COORDINATOR: RON HALPERN
TEL: 949-294-1532 FAX: EMAIL: LHALPERN@ARCADIS-US
SEND REPORT TO: RON HALPERN
COMPANY: ARCADIS
ADDRESS: 1400 N. HARBOR BLVD #200, FULLERTON, CA 92835
EMAX PM:

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

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

SAMPLE ID LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	VOC: 8260B (HC)	1,2,3 TCP 8260SIM (HC)	TOC 415.1 (HC)	SVOC 8270C (IC)	NDMA 8270C SIM (IC)	1,4-Dio Xane (IC)	Dissolved TAL MET. (IC)	TKN 351.3 (HS)	COMMENTS
1	OC2-PMW15-5-21		7/10	0940	3	40mL	VOA	GW		X								
2					3						X							
3					1							X						
4					2	1 H	Amber						X					
5					2									X				
6					1										X			
7					1	500	Poly									X		
8					1	500											X	
9					1	250												
10					1	125												

Instructions (1) dissolved TAL METALS + BORON + Si by EPA 6010/7000, 200.8
NOTE: SAMPLES IN UNFILTERED AND UNPRESERVED LAB TO FILTER
SEND PDF + EXCEL EDF to RON HALPERN

Cooler #	Temp. (°C)	Sample #s

SAMPLER
COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
7/10/06/1849	7/10/06	17:50	

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

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1095

4-12

CHAIN OF CUSTODY

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

PO NUMBER CA001646.0001
SAMPLE STORAGE
EMAX CONTROL NO. *
PROJECT CODE: CA001646-0005

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
COORDINATOR: RON HALPERN
TEL: 949 294 1532 FAX: EMAIL: HHALPERN@ARCADIS-US.
SEND REPORT TO: RON HALPERN
COMPANY: ARCADIS
ADDRESS: 1400 N HARBOR BLVD #706, FULLERTON, CA 92835
EMAX PM:

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

ANALYSIS REQUIRED: Anions, TDS, Perchlorate; CYANIDE 335.2; V.

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

	SAMPLE ID LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	SAMPLING DATE	SAMPLING TIME	CONTAINER NO.	CONTAINER SIZE	CONTAINER TYPE	MATRIX CODE	QC	PRESERVATIVE CODE IC	PRESERVATIVE CODE HS	COMMENTS
4	1	OC2-PMW15-5-21		7-10-06	0940	1	1L	POLY	GW		X		
	2			↓	↓	1	125	POLY	GW			X	
	3												
	4												
	5												
	6												
	7												
	8												
	9												
	0												

Instructions: ANIONS; Bromide, Chloride, Fluoride, Sulfate, Nitrate, Nitrite, by EPA 300.0, TDS by EPA 160.1, Perchlorate by 314, Hexchrome by EPA 218.6

Cooler #	Temp. (°C)	Sample #s

SAMPLER
COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
[illegible]			
[signature]	7/10/06	17:50	[signature]
[signature]	7/10/06	1849	[signature]

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

1905

5-12

CHAIN OF CUSTODY

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

PO NUMBER: CA000646.000
SAMPLE STORAGE

EMAX CONTROL NO. *
PROJECT CODE: CA000646.0001

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL OU2
COORDINATOR: RON HALPERN
TEL: 949-294-1530 FAX: EMAIL: RHALPERN@ARCADIS-US.COM
SEND REPORT TO: RON HALPERN (ARCADIS)
COMPANY: 1400 N. HARBOR BLVD #700
ADDRESS: FULLERTON, CA 92835
EMAX PM:

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

ANALYSIS REQUIRED: VOCs 8260B; 1,2,3-TCP 8260 SIM; TOC - 415.1; SVOCs 8270C; NDMA - 8270C; 1,4-Dioxane 8270C; Dissolved Total Metals; TKN 351.3

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

LAB	CLIENT ID	LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	VOCs (HC)	1,2,3-TCP (HC)	TOC (HC)	SVOCs (IC)	NDMA (IC)	1,4-Dioxane (IC)	Dissolved Metals (IC)	TKN (HS)	COMMENTS
1	O2-PMW15-T-20		7-10-06	0940	3	40ml	VOA	GW		X								
2					3	↓	↓				X							
3					1	↓	↓					X						
4					2	1 H	Amber						X					
5					2	↓	↓							X				
6					1	↓	↓								X			
7					1	500	Poly									X		
8					1	500	↓										X	
9					1	250	↓											
0					1	125	↓											

Instructions (1) Dissolved Total Metals + Boron + Si by EPA 6010/7000 200.8, 245.1 NOTE - Sample is unfiltered and unpreserved lab to filter.
(2) Send PDF + Excel to Ron Halpern

Cooler #	Temp. (°C)	Sample #s

SAMPLER:
COURIER/AIRBILL:

RELINQUISHED BY	Date	Time	RECEIVED BY
[signature]	7/10/06	12:50	[signature]
[signature]	7/10/06	1849	[signature]

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

1 of 1

6-12

CHAIN OF CUSTODY

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

PO NUMBER: CA000646.0001
SAMPLE STORAGE

EMAX CONTROL NO. *
PROJECT CODE: CA 000646.0001

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL OU-2
COORDINATOR: RON HALPERN
TEL: 949 294.1532 FAX: EMAIL: rhalpern@arcadis-us
SEND REPORT TO: RON HALPERN
COMPANY: ARCADIS
ADDRESS: 1400 N HARBOR BLVD #700, FULLERTON, CA 92835
EMAX PM:

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

ANALYSIS REQUIRED: ANIONS, TDS, CHLORIDE, FLUORIDE, SULFATES, CYANIDE 335.4

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

SAMPLE ID LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	SAMPLING DATE	SAMPLING TIME	CONTAINER NO.	CONTAINER SIZE	CONTAINER TYPE	MATRIX CODE	QC	PRESERVATIVE CODE IC	PRESERVATIVE CODE SH	COMMENTS
5 1	OC2-PMW 15-1-20		7-16-06	0940	1	250	Poly	GW		X		
2					1	125	↓	↓			X	
3												
4												
5												
6												
7												
8												
9												
0												

Instructions: ANIONS, Bromide, chloride, Fluride, sulfates, NITRATES NITRITE, by EPA 300.0; TDS by EPA 160.1, PERCHLORATE by 314.1, Hexchrome by EPA 218.6

Cooler #	Temp. (°C)	Sample #s

SAMPLER

COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
[signature]	7/16/06	12:50	[signature]
	7/16/06	1899	

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

1000

7-12

CHAIN OF CUSTODY

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

PO NUMBER: CA000646.0001
SAMPLE STORAGE:
EMAX CONTROL NO. *
PROJECT CODE: CA000646.0001

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL OU 2
COORDINATOR: RON HALPERN
TEL: 949 294-1532 FAX: EMAIL: rhalpern@arcadis-us
SEND REPORT TO:
COMPANY:
ADDRESS:
EMAX PM:

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

ANALYSIS REQUIRED: VOCs 8260B; 1,2,3TCP 8260SIM; TOC 415.1; SVOC 8270C; NDMA 8270C; 1,4-Dioxane 8270C; dissolved TAL Metal; TKN 351.3

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

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	VOCs 8260B (HC)	1,2,3TCP 8260SIM (HC)	TOC 415.1 (HC)	SVOC 8270C (IC)	NDMA 8270C (IC)	1,4-Dioxane 8270C (IC)	dissolved TAL Metal (IC)	TKN 351.3 (HS)	COMMENTS
1	OC2-PMW18A-0-22		7-18-06	1550		40ml	VOA	GW		X								
2											X							
3												X						
4						1 lt	Amber						X					
5														X				
6															X			Level III QC package for DC
7						500	Poly									X		
8						500											X	
9						250												
10						125												

6

Instructions: (1) dissolved TAL METALS + BORON + Si by EPA 6010/7000, 200.8, 245.1. NOTE Samples are UNFILTERED and UNPRESERVED Lab To FILTER.
(2) SEND PDF + EXCEL To RON HALPERN.

Cooler #	Temp. (°C)	Sample #s

SAMPLER:
COURIER/AIRBILL:

RELINQUISHED BY	Date	Time	RECEIVED BY
	7/18/06	17:50	
	7/18/06	18:49	

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

1095

8-12

CHAIN OF CUSTODY

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

PO NUMBER CA000646.0001
SAMPLE STORAGE

EMAX CONTROL NO. *
PROJECT CODE: CA000646.0001

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL OU2
COORDINATOR: RON HALPERN
TEL: 949-394-1532 FAX: EMAIL: rhalpern@arcadis-us.com
SEND REPORT TO: RON HALPERN
COMPANY: ARCADIS
ADDRESS: 1400 N. Harbor Blvd #700, Fullerton CA 92835
EMAX PM:

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

ANALYSIS REQUIRED: Anions, TDS, Perchlorate; Cyanide 335.1

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

SAMPLE ID LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	SAMPLING DATE	SAMPLING TIME	CONTAINER NO.	CONTAINER SIZE	CONTAINER TYPE	MATRIX CODE	QC	PRESERVATIVE CODE IC	PRESERVATIVE CODE HS	COMMENTS
6 1	OC2-PMW18A-0-22		7-16	1550	1	250	[illegible]	GW		X		level ~~III~~ QC package to LDC
2			↓	↓	1	125	Poly	GW			X	
3												
4												
5												
6												
7												
8												
9												
0												

Instructions: ANIONS: Bromide, Chloride, Fluride, Sulfate, Nitrate, Nitrite by EPA 300.0, TDS by EPA 160.1, Perchlorate by 314.1
Hexchrome by EPA 218.6

Cooler #	Temp. (°C)	Sample #s

SAMPLER

COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
[signature]	7/16/06	17:50	[signature]
	7/16/06	1849	[signature]

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

1219

9-12

CHAIN OF CUSTODY

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

PO NUMBER CA000646.0001
SAMPLE STORAGE

EMAX CONTROL NO. *
PROJECT CODE: CA000646.0001

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL OU2
COORDINATOR: RON HAL PERN
TEL: 949 294-1532 FAX: EMAIL: r halpern@ARCADIS-US.com
SEND REPORT TO: RON HALPERN
COMPANY: ARCADIS
ADDRESS: 1400 N. Harbor Blvd #700, FULLERTON CA 92835
EMAX PM:

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

ANALYSIS REQUIRED: VOC 8260B; 1,2,3 TCP 8260B; TOC - 415.1; SVOC's 8270C; NDMA 8270C; 1,4 DIOXANE 8270C; Dissolved TRL METAL; TKN 351.2

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

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	VOC (HC)	1,2,3 TCP (HC)	TOC (HC)	SVOC's (IC)	NDMA (IC)	1,4 DIOXANE (IC)	Dissolved TRL METAL (IC)	TKN (HS)	COMMENTS
1	OC2-PMW18B-0-23		7-10-06	1510	3	40ml	VOA	GW		X								
2					3						X							
3					1							X						
4					2	1L	amber						X					
5					2									X				
6					1										X			
7					1	500	Poly									X		
8					1	500											X	
					1	250												
0					1	125												

7

Level III QC pack & TO + DC

Instructions (1) dissolved TOL-METAL + BARIUM + SI by EPA 6010/7000, 2008, 245.1
NOTE = SAMPLE IS UNFILTERED and IN a RESERVED - lab to FILTER
(2) SEND PDF + EXCEL EDF TO RON HALPERN

Cooler #	Temp. (°C)	Sample #s

SAMPLER

COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
[signature]	7/10/06	17:50	[signature]
[signature]	7/10/06	1849	[signature]

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

1 of 1

TO E-MAX

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040

FOR LABORATORY USE ONLY:

P.O.#: CA000646.0001

Logged By: _____ Date: _____

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FEDEX ☐ Other: _____

Sample Condition Upon Receipt: 1. CHILLED Y☐ N☐ 2. HEADSPACE (VOA) Y☐ N☐ 3. CONTAINER INTACT Y☐ N☐ 4. SEALED Y☐ N☐ 5. # OF SPLS MATCH COC Y☐ N☐ 6. PRESERVED Y☐ N☐

Client: Attn: ARCADIS / RON HALPERN

Address: 1400 N. Harbor Blvd #700 City FULLERTON State CA Zip Code 92835

TEL: (949) 394 1572 FAX: ( )

Project Name: OMEGA CHEMICAL CO Project #: CA000646.0001 Sampler: (Printed Name) (Signature)

Relinquished by: (Signature and Printed Name) Date: 7/10/06 Time: 17:50 Received by: (Signature and Printed Name) Date: 7/10/06 Time: 17:50

Relinquished by: (Signature and Printed Name) Date: 7/10/06 Time: 18 49 Received by: (Signature and Printed Name) Date: Time:

Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Print Name Date
Signature

Send Report To: Attn: Co: Address City State Zip

Bill To: Attn: Co: Address City State Zip

Special Instructions/Comments: Anions: Bromide, chloride, fluoride, sulfate, nitrate, nitrite by 300.0 TDS by 160.1; perchlorate by 314.1 Cr+6 by 218.6

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8081A (Pesticides), 8082 (PCB), 8260B (Volatiles), 8270C (BNA), 6010B (Total Metal), 8015B (GRO) / 8020 (BTEX), 8015B (DRO), 8021 (BTEX), TITLE 22 / CAM 17 (6010 / 7000), Cr+6, CHLORATE, TDS, CYANIDE, 335.2

SPECIFY APPROPRIATE MATRIX: SOIL, WATER, GROUND WATER, WASTEWATER

QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D. / Location	Date	Time	Cr+6	CHLORATE	CYANIDE	TDS	335.2	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Type	PRESERVATION	REMARKS
7		OC2-PMW18B-0-23	7/10/06	1570	X										1		HC	Level III QC
						X									1		HS	

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: White with report Yellow to folder. Pink to submitter.

1912

E-MAX

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040

FOR LABORATORY USE ONLY:

P.O.#: CA000646.0001

Logged By: _____ Date: 7-10-06

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FEDEX ☐ Other: _____

Sample Condition Upon Receipt: 1. CHILLED Y☐ N☐ 2. HEADSPACE (VOA) Y☐ N☐ 3. CONTAINER INTACT Y☐ N☐ 4. SEALED Y☐ N☐ 5. # OF SPLS MATCH COC Y☐ N☐ 6. PRESERVED Y☐ N☐

Client: Attn: ARCADIS / RON HALPERN

Address: 1400 N. HARBOR BLVD #700 City FULLERTON State CA Zip Code 92835

TEL: (949) 294-1532 FAX: ( )

Project Name: Omega Chemical OU-2 Project #: Sampler: (Printed Name) (Signature)

Relinquished by: (Signature and Printed Name) Date: 7/10/06 Time: 17:50 Received by: (Signature and Printed Name) Date: 7/10/06 Time: 1750

Relinquished by: (Signature and Printed Name) Date: 7/10/06 Time: 1849 Received by: (Signature and Printed Name) Date: Time:

Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Print Name Date
Signature

Send Report To: Attn: Co: Address City State Zip

Bill To: Attn: Co: Address City State Zip

Special Instructions/Comments: see page 1

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested — SPECIFY APPROPRIATE MATRIX

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	VOC 8260B	123TCP 8260B	TOC 415.1	SVOC 8270C	NDMA 8270C	SOIL	WATER	GROUND WATER	WASTEWATER				TAT	Container(s) #	Type	PRESERVATION	REMARKS
8		002-PMW18C-0-24	7/10	1630									X														3		HC	
		↓	↓	↓										X													3		HC	
															X												1		HC	
																X											2		IC	
																	X										2		IC	

Q A / Q C: RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: White with report Yellow to folder Pink to submitter

1512

E-MAX

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040

FOR LABORATORY USE ONLY:

P.O.#: CA000646-0001

Logged By: _____ Date: 7-10-06

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FEDEX ☐ Other: _____

Sample Condition Upon Receipt: 1. CHILLED Y☐ N☐ 2. HEADSPACE (VOA) Y☐ N☐ 3. CONTAINER INTACT Y☐ N☐ 4. SEALED Y☐ N☐ 5. # OF SPLS MATCH COC Y☐ N☐ 6. PRESERVED Y☐ N☐

Client:
Attn: ARCADIS / RON HALPERN
Address: 1400 N. Harbor Blvd #700
City Fullerton State CA Zip Code 92835
TEL: ( )
FAX: ( )

Project Name: OMEGA CHEMICAL Project #: CA000646.0001 Sampler: (Printed Name) (Signature)

Relinquished by: (Signature and Printed Name)	Date: 7/10/06	Time: 17:50	Received by: (Signature and Printed Name)	Date: 7/10/06	Time: 17:50
Relinquished by: (Signature and Printed Name)	Date: 7/10/06	Time: 18 49	Received by: (Signature and Printed Name)	Date:	Time:
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Print Name Date
Signature

Send Report To:
Attn: _____
Co: _____
Address _____
City _____ State _____ Zip _____

Bill To:
Attn: _____
Co: _____
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments: see page 1 & 2

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8081A (Pesticides), 8082 (PCB), 8260B (Volatiles), 8270C (BNA), 6010B (Total Metal), 8015B (GRO) / 8020 (BTEX), 8015B (DRO), 8021 (BTEX), TITLE 22 / CAM 17 (6010 / 7000), 14-DIOXANE 8270C, DISSOLVED TAL METALS, TKN 351.3, TDS 160.1, CYANIDE

SPECIFY APPROPRIATE MATRIX: SOIL, WATER, GROUND WATER, WASTEWATER

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	14-DIOXANE 8270C	DISSOLVED TAL METALS	TKN 351.3	TDS 160.1	CYANIDE	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
8		OC2-PMW18C-0-34	7/10/06	1630									X											1		IC	
														X										1		IC	
															X									1		IC	
																X								1		IC	
																	X							1		HG	

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

Q A / Q C: RTNE ☐ CT ☐ SWRCB ☐ Logcode _____ OTHER _____

DISTRIBUTION: White with report Yellow to folder Pink to submitter

1071

SAMPLE RECEIPT FORM 1

Type of Delivery	Delivered By/Airbill		
☑ EMAX Courier	SEE COC	ECN	06 G039
☐ Client Delivery		Recepient	J. Luna
☐ Third Party		Date	7-10-06
		Time	1859

COC Inspection

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

Packaging Inspection

Container	☑ Coolers	☐ Box	☐	☐
Condition	☐ Custody Seal	☑ Intact	☐ Damaged	☐
Packaging	☑ Bubble Pack	☐ Styrofoam	☑ Sufficient	☑ Plastic Bag
Temperatures	☑ Cooler 1 3.0	☑ Cooler 2 3.4	☐ Cooler 3 3.2	☑ Cooler 4 3.7
	☑ Cooler 5 3.5	☐ Cooler 6 ____	☐ Cooler 7 ____	☐ Cooler 8 ____
	☐ Cooler 9 ____	☐ Cooler 10 ____	☐ Cooler 11 ____	☐ Cooler 12 ____

Comments:

LSCID	Client ID	Discrepancy	Corrective Action
02	OC2-00-W-1-19	Rec'd (3) Vials for 8260 But COC Reads one Vial	OK. Informed Client
08	OC2-PMW18C-0-24	No Time on all vials Containers.	↓

LSCID : Lab Sample Container ID

REVIEWS

Sample Labeling [signature] Date 7-10-06

SRF [signature] Date 7/11/06

PM [signature] Date 7/12/06

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

ARCADIS

OMEGA CHEMICAL

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

SDG#: 06G039

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

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

Eight (8) water samples were received on 07/10/06 for Volatile Organic analysis by Method 5030B/8260B in accordance with USEPA SW846, 3rd ed.

1. Holding Time

Analytical holding time was met.

2. Tuning and Calibration

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

3. Method Blank

Method 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

Sample G039-01 was spiked. All recoveries were within QC limit except TCE in MS and MSD, 1, 1-DCE in MSD due to matrix interference.

7. Sample Analysis

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

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : ARCADIS
Project : OMEGA CHEMICAL

SDG NO. : 06G039
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	V005G19Q	1	NA	07/13/0604:14	07/13/0604:14	RGQ198	RGQ022	V005G19	Method Blank
LCS1W	V005G19L	1	NA	07/13/0602:23	07/13/0602:23	RGQ195	RGQ022	V005G19	Lab Control Sample (LCS)
LCD1W	V005G19C	1	NA	07/13/0603:00	07/13/0603:00	RGQ196	RGQ022	V005G19	LCS Duplicate
OC2-00-W-1-19	G039-02	1	NA	07/13/0609:10	07/13/0609:10	RGQ206	RGQ022	V005G19	Field Sample
OC2-PMW15-5-21	G039-04	1	NA	07/13/0609:47	07/13/0609:47	RGQ207	RGQ022	V005G19	Field Sample
OC2-PMW15-1-20	G039-05	1	NA	07/13/0611:39	07/13/0611:39	RGQ210	RGQ022	V005G19	Field Sample
MBLK2W	V005G22Q	1	NA	07/14/0605:39	07/14/0605:39	RGQ238	RGQ022	V005G22	Method Blank
LCS2W	V005G22L	1	NA	07/14/0603:47	07/14/0603:47	RGQ235	RGQ022	V005G22	Lab Control Sample (LCS)
LCD2W	V005G22C	1	NA	07/14/0604:24	07/14/0604:24	RGQ236	RGQ022	V005G22	LCS Duplicate
OC2-PMW15-0-17	G039-01	1	NA	07/14/0610:36	07/14/0610:36	RGQ246	RGQ022	V005G22	Field Sample
OC2-PMW15-0-17MS	G039-01U	1	NA	07/14/0614:16	07/14/0614:16	RGQ252	RGQ022	V005G22	Matrix Spike Sample (MS)
OC2-PMW15-0-17MSD	G039-01S	1	NA	07/14/0613:39	07/14/0613:39	RGQ251	RGQ022	V005G22	MS Duplicate (MSD)
OC2-00-W-4-18	G039-03	1	NA	07/14/0612:26	07/14/0612:26	RGQ249	RGQ022	V005G22	Field Sample
OC2-PMW18A-0-22	G039-06R	1	NA	07/14/0609:59	07/14/0609:59	RGQ245	RGQ022	V005G22	Field Sample
OC2-PMW18B-0-23	G039-07	1	NA	07/14/0611:49	07/14/0611:49	RGQ248	RGQ022	V005G22	Field Sample
OC2-PMW15-5-21DL	G039-04T	100	NA	07/14/0608:44	07/14/0608:44	RGQ243	RGQ022	V005G22	Diluted Sample
OC2-PMW15-1-20DL	G039-05T	100	NA	07/14/0609:21	07/14/0609:21	RGQ244	RGQ022	V005G22	Diluted Sample
MBLK3W	V005G25Q	1	NA	07/15/0608:06	07/15/0608:06	RGQ281	RGQ022	V006G25	Method Blank
LCS3W	V005G25L	1	NA	07/15/0606:15	07/15/0606:15	RGQ278	RGQ022	V006G25	Lab Control Sample (LCS)
LCD3W	V005G25C	1	NA	07/15/0606:52	07/15/0606:52	RGQ279	RGQ022	V006G25	LCS Duplicate
OC2-PMW18C-0-24	G039-08R	1	NA	07/15/0609:20	07/15/0609:20	RGQ283	RGQ022	V006G25	Field Sample
OC2-PMW15-0-17DL	G039-01T	100	NA	07/15/0608:43	07/15/0608:43	RGQ282	RGQ022	V006G25	Diluted Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/14/06 10:36
Sample ID:	OC2-PMW15-0-17	Date Analyzed:	07/14/06 10:36
Lab Samp ID:	G039-01	Dilution Factor:	1
Lab File ID:	RGQ246	Matrix :	WATER
Ext Btch ID:	VO05G22	% Moisture :	NA
Calib. Ref.:	RGQ022	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1	.2
1,1,1-TRICHLOROETHANE	1.1	.5	.2
1,1,2,2-TETRACHLOROETHANE	ND	.5	.2
1,1,2-TRICHLOROETHANE	.6	.5	.2
1,1-DICHLOROETHANE	3.2	.5	.2
1,1-DICHLOROETHENE	170E	.5	.2
1,1-DICHLOROPROPENE	ND	.5	.2
1,2,3-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRIMETHYLBENZENE	ND	.5	.2
1,2-DIBROMO-3-CHLOROPROPANE	ND	1	.5
1,2-DICHLOROBENZENE	ND	.5	.2
1,2-DICHLOROETHANE	12	.5	.2
1,2-DICHLOROPROPANE	ND	.5	.2
1,2-DIBROMOETHANE	ND	.5	.2
1,3,5-TRIMETHYLBENZENE	ND	1	.2
1,3-DICHLOROBENZENE	ND	.5	.2
1,3-DICHLOROPROPANE	ND	.5	.2
1,4-DICHLOROBENZENE	ND	.5	.2
2,2-DICHLOROPROPANE	ND	1	.2
2-CHLOROTOLUENE	ND	1	.2
4-CHLOROTOLUENE	ND	1	.2
BENZENE	.34J	.5	.2
BROMODICHLOROMETHANE	ND	.5	.2
BROMOFORM	ND	.5	.3
BROMOMETHANE	ND	.5	.2
CARBON DISULFIDE	ND	1	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	1	.2
CHLOROETHANE	ND	.5	.2
CHLOROFORM	210E	1	.2
CHLOROMETHANE	ND	1	.2
CIS-1,2-DICHLOROETHENE	3.8	.5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
CYCLOHEXANE	ND	1	.2
DIBROMOCHLOROMETHANE	ND	1	.2
DIBROMOMETHANE	ND	1	.2
DICHLORODIFLUOROMETHANE	2.2	1	.3
ETHYLBENZENE	ND	.5	.2
HEXACHLOROBUTADIENE	ND	1	.2
ISOPROPYL BENZENE	ND	.5	.2
M/P-XYLENES	ND	1	.5
METHYL ACETATE	ND	1	.5
METHYLCYCLOHEXANE	ND	1	.2
METHYLENE CHLORIDE	ND	1	.5
N-BUTYLBENZENE	ND	1	.2
N-PROPYLBENZENE	ND	1	.2
NAPHTHALENE	ND	2	.5
O-XYLENE	ND	1	.2
SEC-BUTYLBENZENE	ND	1	.2
STYRENE	ND	.5	.2
TERT-BUTYLBENZENE	ND	1	.2
TETRACHLOROETHENE	200E	.5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	1.4	.5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	260E	.5	.2
TRICHLOROFLUOROMETHANE	140E	1	.2
VINYL ACETATE	ND	2	.5
VINYL CHLORIDE	ND	.5	.2
FC 113	450E	1	.2
MTBE	3.1	1	.2
XYLENES, TOTAL	ND	2	.7
ACETONE	ND	10	5
2-BUTANONE	ND	5	1
2-HEXANONE	ND	10	5
4-METHYL-2-PENTANONE	ND	10	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	108	70-140
4-BROMOFLUOROBENZENE	106	70-130
TOLUENE-D8	105	70-140

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/15/06 08:43
Sample ID:	OC2-PMW15-0-17DL	Date Analyzed:	07/15/06 08:43
Lab Samp ID:	G039-01T	Dilution Factor:	100
Lab File ID:	RGQ282	Matrix :	WATER
Ext Btch ID:	VO06G25	% Moisture :	NA
Calib. Ref.:	RGQ022	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	100	20
1,1,1-TRICHLOROETHANE	ND	50	20
1,1,2,2-TETRACHLOROETHANE	ND	50	20
1,1,2-TRICHLOROETHANE	ND	50	20
1,1-DICHLOROETHANE	ND	50	20
1,1-DICHLOROETHENE	1200	50	20
1,1-DICHLOROPROPENE	ND	50	20
1,2,3-TRICHLOROBENZENE	ND	100	20
1,2,4-TRICHLOROBENZENE	ND	100	20
1,2,4-TRIMETHYLBENZENE	ND	50	20
1,2-DIBROMO-3-CHLOROPROPANE	ND	100	50
1,2-DICHLOROBENZENE	ND	50	20
1,2-DICHLOROETHANE	ND	50	20
1,2-DICHLOROPROPANE	ND	50	20
1,2-DIBROMOETHANE	ND	50	20
1,3,5-TRIMETHYLBENZENE	ND	100	20
1,3-DICHLOROBENZENE	ND	50	20
1,3-DICHLOROPROPANE	ND	50	20
1,4-DICHLOROBENZENE	ND	50	20
2,2-DICHLOROPROPANE	ND	100	20
2-CHLOROTOLUENE	ND	100	20
4-CHLOROTOLUENE	ND	100	20
BENZENE	ND	50	20
BROMODICHLOROMETHANE	ND	50	20
BROMOFORM	ND	50	30
BROMOMETHANE	ND	50	20
CARBON DISULFIDE	ND	100	20
CARBON TETRACHLORIDE	ND	50	20
CHLOROBENZENE	ND	100	20
CHLOROETHANE	ND	50	20
CHLOROFORM	230	100	20
CHLOROMETHANE	ND	100	20
CIS-1,2-DICHLOROETHENE	ND	50	20
CIS-1,3-DICHLOROPROPENE	ND	50	20
CYCLOHEXANE	ND	100	20
DIBROMOCHLOROMETHANE	ND	100	20
DIBROMOMETHANE	ND	100	20
DICHLORODIFLUOROMETHANE	ND	100	30
ETHYLBENZENE	ND	50	20
HEXACHLOROBUTADIENE	ND	100	20
ISOPROPYL BENZENE	ND	50	20
M/P-XYLENES	ND	100	50
METHYL ACETATE	ND	100	50
METHYLCYCLOHEXANE	ND	100	20
METHYLENE CHLORIDE	ND	100	50
N-BUTYLBENZENE	ND	100	20
N-PROPYLBENZENE	ND	100	20
NAPHTHALENE	ND	200	50
O-XYLENE	ND	100	20
SEC-BUTYLBENZENE	ND	100	20
STYRENE	ND	50	20
TERT-BUTYLBENZENE	ND	100	20
TETRACHLOROETHENE	1300	50	20
TOLUENE	ND	50	20
TRANS-1,2-DICHLOROETHENE	ND	50	20
TRANS-1,3-DICHLOROPROPENE	ND	50	20
TRICHLOROETHENE	290	50	20
TRICHLOROFLUOROMETHANE	540	100	20
VINYL ACETATE	ND	200	50
VINYL CHLORIDE	ND	50	20
FC 113	1400	100	20
MTBE	ND	100	20
XYLENES, TOTAL	ND	200	70
ACETONE	ND	1000	500
2-BUTANONE	ND	500	100
2-HEXANONE	ND	1000	500
4-METHYL-2-PENTANONE	ND	1000	500

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

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

Client : ARCADIS	Date Collected: 07/10/06
Project : OMEGA CHEMICAL	Date Received: 07/10/06
Batch No. : 06G039	Date Extracted: 07/13/06 09:10
Sample ID: OC2-00-W-1-19	Date Analyzed: 07/13/06 09:10
Lab Samp ID: G039-02	Dilution Factor: 1
Lab File ID: RGQ206	Matrix : WATER
Ext Btch ID: V005G19	% Moisture : NA
Calib. Ref.: RGQ022	Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1	.2
1,1,1-TRICHLOROETHANE	ND	.5	.2
1,1,2,2-TETRACHLOROETHANE	ND	.5	.2
1,1,2-TRICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHENE	ND	.5	.2
1,1-DICHLOROPROPENE	ND	.5	.2
1,2,3-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRIMETHYLBENZENE	ND	.5	.2
1,2-DIBROMO-3-CHLOROPROPANE	ND	1	.5
1,2-DICHLOROBENZENE	ND	.5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	.5	.2
1,2-DIBROMOETHANE	ND	.5	.2
1,3,5-TRIMETHYLBENZENE	ND	1	.2
1,3-DICHLOROBENZENE	ND	.5	.2
1,3-DICHLOROPROPANE	ND	.5	.2
1,4-DICHLOROBENZENE	ND	.5	.2
2,2-DICHLOROPROPANE	ND	1	.2
2-CHLOROTOLUENE	ND	1	.2
4-CHLOROTOLUENE	ND	1	.2
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	.5	.2
BROMOFORM	ND	.5	.3
BROMOMETHANE	ND	.5	.2
CARBON DISULFIDE	ND	1	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	1	.2
CHLOROETHANE	ND	.5	.2
CHLOROFORM	.31J	1	.2
CHLOROMETHANE	ND	1	.2
CIS-1,2-DICHLOROETHENE	ND	.5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
CYCLOHEXANE	ND	1	.2
DIBROMOCHLOROMETHANE	ND	1	.2
DIBROMOMETHANE	ND	1	.2
DICHLORODIFLUOROMETHANE	ND	1	.3
ETHYLBENZENE	ND	.5	.2
HEXACHLOROBUTADIENE	ND	1	.2
ISOPROPYL BENZENE	ND	.5	.2
M/P-XYLENES	ND	1	.5
METHYL ACETATE	ND	1	.5
METHYLCYCLOHEXANE	ND	1	.2
METHYLENE CHLORIDE	ND	1	.5
N-BUTYLBENZENE	ND	1	.2
N-PROPYLBENZENE	ND	1	.2
NAPHTHALENE	ND	2	.5
O-XYLENE	ND	1	.2
SEC-BUTYLBENZENE	ND	1	.2
STYRENE	ND	.5	.2
TERT-BUTYLBENZENE	ND	1	.2
TETRACHLOROETHENE	ND	.5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	.5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	.5	.2
TRICHLOROFLUOROMETHANE	ND	1	.2
VINYL ACETATE	ND	2	.5
VINYL CHLORIDE	ND	.5	.2
FC 113	ND	1	.2
MTBE	ND	1	.2
XYLENES, TOTAL	ND	2	.7
ACETONE	ND	10	5
2-BUTANONE	ND	5	1
2-HEXANONE	ND	10	5
4-METHYL-2-PENTANONE	ND	10	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	70-140
4-BROMOFLUOROBENZENE	103	70-130
TOLUENE-D8	106	70-140

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/14/06 12:26
Sample ID:	OC2-00-W-4-18	Date Analyzed:	07/14/06 12:26
Lab Samp ID:	G039-03	Dilution Factor:	1
Lab File ID:	RGQ249	Matrix :	WATER
Ext Btch ID:	VO05G22	% Moisture :	NA
Calib. Ref.:	RGQ022	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1	.2
1,1,1-TRICHLOROETHANE	ND	.5	.2
1,1,2,2-TETRACHLOROETHANE	ND	.5	.2
1,1,2-TRICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHENE	ND	.5	.2
1,1-DICHLOROPROPENE	ND	.5	.2
1,2,3-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRIMETHYLBENZENE	ND	.5	.2
1,2-DIBROMO-3-CHLOROPROPANE	ND	1	.5
1,2-DICHLOROBENZENE	ND	.5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	.5	.2
1,2-DIBROMOETHANE	ND	.5	.2
1,3,5-TRIMETHYLBENZENE	ND	1	.2
1,3-DICHLOROBENZENE	ND	.5	.2
1,3-DICHLOROPROPANE	ND	.5	.2
1,4-DICHLOROBENZENE	ND	.5	.2
2,2-DICHLOROPROPANE	ND	1	.2
2-CHLOROTOLUENE	ND	1	.2
4-CHLOROTOLUENE	ND	1	.2
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	.5	.2
BROMOFORM	ND	.5	.3
BROMOMETHANE	ND	.5	.2
CARBON DISULFIDE	ND	1	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	1	.2
CHLOROETHANE	ND	.5	.2
CHLOROFORM	ND	1	.2
CHLOROMETHANE	ND	1	.2
CIS-1,2-DICHLOROETHENE	ND	.5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
CYCLOHEXANE	ND	1	.2
DIBROMOCHLOROMETHANE	ND	1	.2
DIBROMOMETHANE	ND	1	.2
DICHLORODIFLUOROMETHANE	ND	1	.3
ETHYLBENZENE	ND	.5	.2
HEXACHLOROBUTADIENE	ND	1	.2
ISOPROPYL BENZENE	ND	.5	.2
M/P-XYLENES	ND	1	.5
METHYL ACETATE	ND	1	.5
METHYLCYCLOHEXANE	ND	1	.2
METHYLENE CHLORIDE	ND	1	.5
N-BUTYLBENZENE	ND	1	.2
N-PROPYLBENZENE	ND	1	.2
NAPHTHALENE	ND	2	.5
O-XYLENE	ND	1	.2
SEC-BUTYLBENZENE	ND	1	.2
STYRENE	ND	.5	.2
TERT-BUTYLBENZENE	ND	1	.2
TETRACHLOROETHENE	ND	.5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	.5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	.5	.2
TRICHLOROFLUOROMETHANE	ND	1	.2
VINYL ACETATE	ND	2	.5
VINYL CHLORIDE	ND	.5	.2
FC 113	ND	1	.2
MTBE	ND	1	.2
XYLENES, TOTAL	ND	2	.7
ACETONE	ND	10	5
2-BUTANONE	ND	5	1
2-HEXANONE	ND	10	5
4-METHYL-2-PENTANONE	ND	10	5

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

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/13/06 09:47
Sample ID:	OC2-PMW15-5-21	Date Analyzed:	07/13/06 09:47
Lab Samp ID:	G039-04	Dilution Factor:	1
Lab File ID:	RGQ207	Matrix :	WATER
Ext Btch ID:	VO05G19	% Moisture :	NA
Calib. Ref.:	RGQ022	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1	.2
1,1,1-TRICHLOROETHANE	1	.5	.2
1,1,2,2-TETRACHLOROETHANE	ND	.5	.2
1,1,2-TRICHLOROETHANE	.67	.5	.2
1,1-DICHLOROETHANE	3.1	.5	.2
1,1-DICHLOROETHENE	130E	.5	.2
1,1-DICHLOROPROPENE	ND	.5	.2
1,2,3-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRIMETHYLBENZENE	ND	.5	.2
1,2-DIBROMO-3-CHLOROPROPANE	ND	1	.5
1,2-DICHLOROBENZENE	ND	.5	.2
1,2-DICHLOROETHANE	11	.5	.2
1,2-DICHLOROPROPANE	ND	.5	.2
1,2-DIBROMOETHANE	ND	.5	.2
1,3,5-TRIMETHYLBENZENE	ND	1	.2
1,3-DICHLOROBENZENE	ND	.5	.2
1,3-DICHLOROPROPANE	ND	.5	.2
1,4-DICHLOROBENZENE	ND	.5	.2
2,2-DICHLOROPROPANE	ND	1	.2
2-CHLOROTOLUENE	ND	1	.2
4-CHLOROTOLUENE	ND	1	.2
BENZENE	.34J	.5	.2
BROMODICHLOROMETHANE	ND	.5	.2
BROMOFORM	ND	.5	.3
BROMOMETHANE	ND	.5	.2
CARBON DISULFIDE	ND	1	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	1	.2
CHLOROETHANE	ND	.5	.2
CHLOROFORM	210E	1	.2
CHLOROMETHANE	ND	1	.2
CIS-1,2-DICHLOROETHENE	3.7	.5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
CYCLOHEXANE	ND	1	.2
DIBROMOCHLOROMETHANE	ND	1	.2
DIBROMOMETHANE	ND	1	.2
DICHLORODIFLUOROMETHANE	2.3	1	.3
ETHYLBENZENE	ND	.5	.2
HEXACHLOROBUTADIENE	ND	1	.2
ISOPROPYL BENZENE	ND	.5	.2
M/P-XYLENES	ND	1	.5
METHYL ACETATE	ND	1	.5
METHYLCYCLOHEXANE	ND	1	.2
METHYLENE CHLORIDE	ND	1	.5
N-BUTYLBENZENE	ND	1	.2
N-PROPYLBENZENE	ND	1	.2
NAPHTHALENE	ND	2	.5
O-XYLENE	ND	1	.2
SEC-BUTYLBENZENE	ND	1	.2
STYRENE	ND	.5	.2
TERT-BUTYLBENZENE	ND	1	.2
TETRACHLOROETHENE	260E	.5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	1.4	.5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	260E	.5	.2
TRICHLOROFLUOROMETHANE	110E	1	.2
VINYL ACETATE	ND	2	.5
VINYL CHLORIDE	ND	.5	.2
FC 113	320E	1	.2
MTBE	2.9	1	.2
XYLENES, TOTAL	ND	2	.7
ACETONE	ND	10	5
2-BUTANONE	ND	5	1
2-HEXANONE	ND	10	5
4-METHYL-2-PENTANONE	ND	10	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	70-140
4-BROMOFLUOROBENZENE	107	70-130
TOLUENE-D8	105	70-140

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/14/06 08:44
Sample ID:	OC2-PMW15-5-21DL	Date Analyzed:	07/14/06 08:44
Lab Samp ID:	G039-04T	Dilution Factor:	100
Lab File ID:	RGQ243	Matrix :	WATER
Ext Btch ID:	VO05G22	% Moisture :	NA
Calib. Ref.:	RGQ022	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	100	20
1,1,1-TRICHLOROETHANE	ND	50	20
1,1,2,2-TETRACHLOROETHANE	ND	50	20
1,1,2-TRICHLOROETHANE	ND	50	20
1,1-DICHLOROETHANE	ND	50	20
1,1-DICHLOROETHENE	1200	50	20
1,1-DICHLOROPROPENE	ND	50	20
1,2,3-TRICHLOROBENZENE	ND	100	20
1,2,4-TRICHLOROBENZENE	ND	100	20
1,2,4-TRIMETHYLBENZENE	ND	50	20
1,2-DIBROMO-3-CHLOROPROPANE	ND	100	50
1,2-DICHLOROBENZENE	ND	50	20
1,2-DICHLOROETHANE	ND	50	20
1,2-DICHLOROPROPANE	ND	50	20
1,2-DIBROMOETHANE	ND	50	20
1,3,5-TRIMETHYLBENZENE	ND	100	20
1,3-DICHLOROBENZENE	ND	50	20
1,3-DICHLOROPROPANE	ND	50	20
1,4-DICHLOROBENZENE	ND	50	20
2,2-DICHLOROPROPANE	ND	100	20
2-CHLOROTOLUENE	ND	100	20
4-CHLOROTOLUENE	ND	100	20
BENZENE	ND	50	20
BROMODICHLOROMETHANE	ND	50	20
BROMOFORM	ND	50	30
BROMOMETHANE	ND	50	20
CARBON DISULFIDE	ND	100	20
CARBON TETRACHLORIDE	ND	50	20
CHLOROBENZENE	ND	100	20
CHLOROETHANE	ND	50	20
CHLOROFORM	240	100	20
CHLOROMETHANE	ND	100	20
CIS-1,2-DICHLOROETHENE	ND	50	20
CIS-1,3-DICHLOROPROPENE	ND	50	20
CYCLOHEXANE	ND	100	20
DIBROMOCHLOROMETHANE	ND	100	20
DIBROMOMETHANE	ND	100	20
DICHLORODIFLUOROMETHANE	ND	100	30
ETHYLBENZENE	ND	50	20
HEXACHLOROBUTADIENE	ND	100	20
ISOPROPYL BENZENE	ND	50	20
M/P-XYLENES	ND	100	50
METHYL ACETATE	ND	100	50
METHYLCYCLOHEXANE	ND	100	20
METHYLENE CHLORIDE	ND	100	50
N-BUTYLBENZENE	ND	100	20
N-PROPYLBENZENE	ND	100	20
NAPHTHALENE	ND	200	50
O-XYLENE	ND	100	20
SEC-BUTYLBENZENE	ND	100	20
STYRENE	ND	50	20
TERT-BUTYLBENZENE	ND	100	20
TETRACHLOROETHENE	1400	50	20
TOLUENE	ND	50	20
TRANS-1,2-DICHLOROETHENE	ND	50	20
TRANS-1,3-DICHLOROPROPENE	ND	50	20
TRICHLOROETHENE	300	50	20
TRICHLOROFLUOROMETHANE	550	100	20
VINYL ACETATE	ND	200	50
VINYL CHLORIDE	ND	50	20
FC 113	1400	100	20
MTBE	ND	100	20
XYLENES, TOTAL	ND	200	70
ACETONE	ND	1000	500
2-BUTANONE	ND	500	100
2-HEXANONE	ND	1000	500
4-METHYL-2-PENTANONE	ND	1000	500

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	107	70-140
4-BROMOFLUOROBENZENE	105	70-130
TOLUENE-D8	107	70-140

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/13/06 11:39
Sample ID:	OC2-PMW15-1-20	Date Analyzed:	07/13/06 11:39
Lab Samp ID:	G039-05	Dilution Factor:	1
Lab File ID:	RGQ210	Matrix :	WATER
Ext Btch ID:	VO05G19	% Moisture :	NA
Calib. Ref.:	RGQ022	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1	.2
1,1,1-TRICHLOROETHANE	1.1	.5	.2
1,1,2,2-TETRACHLOROETHANE	ND	.5	.2
1,1,2-TRICHLOROETHANE	.68	.5	.2
1,1-DICHLOROETHANE	3.4	.5	.2
1,1-DICHLOROETHENE	180E	.5	.2
1,1-DICHLOROPROPENE	ND	.5	.2
1,2,3-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRIMETHYLBENZENE	ND	.5	.2
1,2-DIBROMO-3-CHLOROPROPANE	ND	1	.5
1,2-DICHLOROBENZENE	ND	.5	.2
1,2-DICHLOROETHANE	11	.5	.2
1,2-DICHLOROPROPANE	ND	.5	.2
1,2-DIBROMOETHANE	ND	.5	.2
1,3,5-TRIMETHYLBENZENE	ND	1	.2
1,3-DICHLOROBENZENE	ND	.5	.2
1,3-DICHLOROPROPANE	ND	.5	.2
1,4-DICHLOROBENZENE	ND	.5	.2
2,2-DICHLOROPROPANE	ND	1	.2
2-CHLOROTOLUENE	ND	1	.2
4-CHLOROTOLUENE	ND	1	.2
BENZENE	.34J	.5	.2
BROMODICHLOROMETHANE	ND	.5	.2
BROMOFORM	ND	.5	.3
BROMOMETHANE	ND	.5	.2
CARBON DISULFIDE	ND	1	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	1	.2
CHLOROETHANE	ND	.5	.2
CHLOROFORM	210E	1	.2
CHLOROMETHANE	ND	1	.2
CIS-1,2-DICHLOROETHENE	3.8	.5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
CYCLOHEXANE	ND	1	.2
DIBROMOCHLOROMETHANE	ND	1	.2
DIBROMOMETHANE	ND	1	.2
DICHLORODIFLUOROMETHANE	2.4	1	.3
ETHYLBENZENE	ND	.5	.2
HEXACHLOROBUTADIENE	ND	1	.2
ISOPROPYL BENZENE	ND	.5	.2
M/P-XYLENES	ND	1	.5
METHYL ACETATE	ND	1	.5
METHYLCYCLOHEXANE	ND	1	.2
METHYLENE CHLORIDE	ND	1	.5
N-BUTYLBENZENE	ND	1	.2
N-PROPYLBENZENE	ND	1	.2
NAPHTHALENE	ND	2	.5
O-XYLENE	ND	1	.2
SEC-BUTYLBENZENE	ND	1	.2
STYRENE	ND	.5	.2
TERT-BUTYLBENZENE	ND	1	.2
TETRACHLOROETHENE	190E	.5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	1.5	.5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	260E	.5	.2
TRICHLOROFLUOROMETHANE	140E	1	.2
VINYL ACETATE	ND	2	.5
VINYL CHLORIDE	ND	.5	.2
FC 113	360E	1	.2
MTBE	3.2	1	.2
XYLENES, TOTAL	ND	2	.7
ACETONE	ND	10	5
2-BUTANONE	ND	5	1
2-HEXANONE	ND	10	5
4-METHYL-2-PENTANONE	ND	10	5

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

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/14/06 09:21
Sample ID:	OC2-PMW15-1-20DL	Date Analyzed:	07/14/06 09:21
Lab Samp ID:	G039-05T	Dilution Factor:	100
Lab File ID:	RGQ244	Matrix :	WATER
Ext Btch ID:	VO05G22	% Moisture :	NA
Calib. Ref.:	RGQ022	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	100	20
1,1,1-TRICHLOROETHANE	ND	50	20
1,1,2,2-TETRACHLOROETHANE	ND	50	20
1,1,2-TRICHLOROETHANE	ND	50	20
1,1-DICHLOROETHANE	ND	50	20
1,1-DICHLOROETHENE	1200	50	20
1,1-DICHLOROPROPENE	ND	50	20
1,2,3-TRICHLOROBENZENE	ND	100	20
1,2,4-TRICHLOROBENZENE	ND	100	20
1,2,4-TRIMETHYLBENZENE	ND	50	20
1,2-DIBROMO-3-CHLOROPROPANE	ND	100	50
1,2-DICHLOROBENZENE	ND	50	20
1,2-DICHLOROETHANE	ND	50	20
1,2-DICHLOROPROPANE	ND	50	20
1,2-DIBROMOETHANE	ND	50	20
1,3,5-TRIMETHYLBENZENE	ND	100	20
1,3-DICHLOROBENZENE	ND	50	20
1,3-DICHLOROPROPANE	ND	50	20
1,4-DICHLOROBENZENE	ND	50	20
2,2-DICHLOROPROPANE	ND	100	20
2-CHLOROTOLUENE	ND	100	20
4-CHLOROTOLUENE	ND	100	20
BENZENE	ND	50	20
BROMODICHLOROMETHANE	ND	50	20
BROMOFORM	ND	50	30
BROMOMETHANE	ND	50	20
CARBON DISULFIDE	ND	100	20
CARBON TETRACHLORIDE	ND	50	20
CHLOROBENZENE	ND	100	20
CHLOROETHANE	ND	50	20
CHLOROFORM	230	100	20
CHLOROMETHANE	ND	100	20
CIS-1,2-DICHLOROETHENE	ND	50	20
CIS-1,3-DICHLOROPROPENE	ND	50	20
CYCLOHEXANE	ND	100	20
DIBROMOCHLOROMETHANE	ND	100	20
DIBROMOMETHANE	ND	100	20
DICHLORODIFLUOROMETHANE	ND	100	30
ETHYLBENZENE	ND	50	20
HEXACHLOROBUTADIENE	ND	100	20
ISOPROPYL BENZENE	ND	50	20
M/P-XYLENES	ND	100	50
METHYL ACETATE	ND	100	50
METHYLCYCLOHEXANE	ND	100	20
METHYLENE CHLORIDE	ND	100	50
N-BUTYLBENZENE	ND	100	20
N-PROPYLBENZENE	ND	100	20
NAPHTHALENE	ND	200	50
O-XYLENE	ND	100	20
SEC-BUTYLBENZENE	ND	100	20
STYRENE	ND	50	20
TERT-BUTYLBENZENE	ND	100	20
TETRACHLOROETHENE	1400	50	20
TOLUENE	ND	50	20
TRANS-1,2-DICHLOROETHENE	ND	50	20
TRANS-1,3-DICHLOROPROPENE	ND	50	20
TRICHLOROETHENE	290	50	20
TRICHLOROFLUOROMETHANE	570	100	20
VINYL ACETATE	ND	200	50
VINYL CHLORIDE	ND	50	20
FC 113	1500	100	20
MTBE	ND	100	20
XYLENES, TOTAL	ND	200	70
ACETONE	ND	1000	500
2-BUTANONE	ND	500	100
2-HEXANONE	ND	1000	500
4-METHYL-2-PENTANONE	ND	1000	500

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	70-140
4-BROMOFLUOROBENZENE	104	70-130
TOLUENE-D8	105	70-140

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/14/06 09:59
Sample ID:	OC2-PMW18A-0-22	Date Analyzed:	07/14/06 09:59
Lab Samp ID:	G039-06R	Dilution Factor:	1
Lab File ID:	RGQ245	Matrix :	WATER
Ext Btch ID:	VO05G22	% Moisture :	NA
Calib. Ref.:	RGQ022	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1	.2
1,1,1-TRICHLOROETHANE	ND	.5	.2
1,1,2,2-TETRACHLOROETHANE	ND	.5	.2
1,1,2-TRICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHENE	ND	.5	.2
1,1-DICHLOROPROPENE	ND	.5	.2
1,2,3-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRIMETHYLBENZENE	ND	.5	.2
1,2-DIBROMO-3-CHLOROPROPANE	ND	1	.5
1,2-DICHLOROBENZENE	ND	.5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	.5	.2
1,2-DIBROMOETHANE	ND	.5	.2
1,3,5-TRIMETHYLBENZENE	ND	1	.2
1,3-DICHLOROBENZENE	ND	.5	.2
1,3-DICHLOROPROPANE	ND	.5	.2
1,4-DICHLOROBENZENE	ND	.5	.2
2,2-DICHLOROPROPANE	ND	1	.2
2-CHLOROTOLUENE	ND	1	.2
4-CHLOROTOLUENE	ND	1	.2
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	.5	.2
BROMOFORM	ND	.5	.3
BROMOMETHANE	ND	.5	.2
CARBON DISULFIDE	ND	1	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	1	.2
CHLOROETHANE	ND	.5	.2
CHLOROFORM	ND	1	.2
CHLOROMETHANE	ND	1	.2
CIS-1,2-DICHLOROETHENE	ND	.5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
CYCLOHEXANE	ND	1	.2
DIBROMOCHLOROMETHANE	ND	1	.2
DIBROMOMETHANE	ND	1	.2
DICHLORODIFLUOROMETHANE	ND	1	.3
ETHYLBENZENE	ND	.5	.2
HEXACHLOROBUTADIENE	ND	1	.2
ISOPROPYL BENZENE	ND	.5	.2
M/P-XYLENES	ND	1	.5
METHYL ACETATE	ND	1	.5
METHYLCYCLOHEXANE	ND	1	.2
METHYLENE CHLORIDE	ND	1	.5
N-BUTYLBENZENE	ND	1	.2
N-PROPYLBENZENE	ND	1	.2
NAPHTHALENE	ND	2	.5
O-XYLENE	ND	1	.2
SEC-BUTYLBENZENE	ND	1	.2
STYRENE	ND	.5	.2
TERT-BUTYLBENZENE	ND	1	.2
TETRACHLOROETHENE	5.6	.5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	.5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	.84	.5	.2
TRICHLOROFLUOROMETHANE	ND	1	.2
VINYL ACETATE	ND	2	.5
VINYL CHLORIDE	ND	.5	.2
FC 113	ND	1	.2
MTBE	ND	1	.2
XYLENES, TOTAL	ND	2	.7
ACETONE	11	10	5
2-BUTANONE	ND	5	1
2-HEXANONE	ND	10	5
4-METHYL-2-PENTANONE	ND	10	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	107	70-140
4-BROMOFLUOROBENZENE	103	70-130
TOLUENE-D8	105	70-140

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/14/06 11:49
Sample ID:	OC2-PMW18B-0-23	Date Analyzed:	07/14/06 11:49
Lab Samp ID:	G039-07	Dilution Factor:	1
Lab File ID:	RGQ248	Matrix :	WATER
Ext Btch ID:	VO05G22	% Moisture :	NA
Calib. Ref.:	RGQ022	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1	.2
1,1,1-TRICHLOROETHANE	ND	.5	.2
1,1,2,2-TETRACHLOROETHANE	ND	.5	.2
1,1,2-TRICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHENE	ND	.5	.2
1,1-DICHLOROPROPENE	ND	.5	.2
1,2,3-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRIMETHYLBENZENE	ND	.5	.2
1,2-DIBROMO-3-CHLOROPROPANE	ND	1	.5
1,2-DICHLOROBENZENE	ND	.5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	.5	.2
1,2-DIBROMOETHANE	ND	.5	.2
1,3,5-TRIMETHYLBENZENE	ND	1	.2
1,3-DICHLOROBENZENE	ND	.5	.2
1,3-DICHLOROPROPANE	ND	.5	.2
1,4-DICHLOROBENZENE	ND	.5	.2
2,2-DICHLOROPROPANE	ND	1	.2
2-CHLOROTOLUENE	ND	1	.2
4-CHLOROTOLUENE	ND	1	.2
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	.5	.2
BROMOFORM	ND	.5	.3
BROMOMETHANE	ND	.5	.2
CARBON DISULFIDE	ND	1	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	1	.2
CHLOROETHANE	ND	.5	.2
CHLOROFORM	ND	1	.2
CHLOROMETHANE	ND	1	.2
CIS-1,2-DICHLOROETHENE	ND	.5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
CYCLOHEXANE	ND	1	.2
DIBROMOCHLOROMETHANE	ND	1	.2
DIBROMOMETHANE	ND	1	.2
DICHLORODIFLUOROMETHANE	ND	1	.3
ETHYLBENZENE	ND	.5	.2
HEXACHLOROBUTADIENE	ND	1	.2
ISOPROPYL BENZENE	ND	.5	.2
M/P-XYLENES	ND	1	.5
METHYL ACETATE	ND	1	.5
METHYLCYCLOHEXANE	ND	1	.2
METHYLENE CHLORIDE	ND	1	.5
N-BUTYLBENZENE	ND	1	.2
N-PROPYLBENZENE	ND	1	.2
NAPHTHALENE	ND	2	.5
O-XYLENE	ND	1	.2
SEC-BUTYLBENZENE	ND	1	.2
STYRENE	ND	.5	.2
TERT-BUTYLBENZENE	ND	1	.2
TETRACHLOROETHENE	.76	.5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	.5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	.75	.5	.2
TRICHLOROFLUOROMETHANE	ND	1	.2
VINYL ACETATE	ND	2	.5
VINYL CHLORIDE	ND	.5	.2
FC 113	.27J	1	.2
MTBE	ND	1	.2
XYLENES, TOTAL	ND	2	.7
ACETONE	5.4J	10	5
2-BUTANONE	ND	5	1
2-HEXANONE	ND	10	5
4-METHYL-2-PENTANONE	ND	10	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	108	70-140
4-BROMOFLUOROBENZENE	104	70-130
TOLUENE-D8	106	70-140

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/15/06 09:20
Sample ID:	OC2-PMW18C-0-24	Date Analyzed:	07/15/06 09:20
Lab Samp ID:	G039-08R	Dilution Factor:	1
Lab File ID:	RGQ283	Matrix :	WATER
Ext Btch ID:	VO06G25	% Moisture :	NA
Calib. Ref.:	RGQ022	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1	.2
1,1,1-TRICHLOROETHANE	ND	.5	.2
1,1,2,2-TETRACHLOROETHANE	ND	.5	.2
1,1,2-TRICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHENE	ND	.5	.5
1,1-DICHLOROPROPENE	ND	.5	.5
1,2,3-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRIMETHYLBENZENE	ND	.5	.2
1,2-DIBROMO-3-CHLOROPROPANE	ND	1	.5
1,2-DICHLOROBENZENE	ND	.5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	.5	.5
1,2-DIBROMOETHANE	ND	.5	.5
1,3,5-TRIMETHYLBENZENE	ND	1	.2
1,3-DICHLOROBENZENE	ND	.5	.2
1,3-DICHLOROPROPANE	ND	.5	.5
1,4-DICHLOROBENZENE	ND	.5	.5
2,2-DICHLOROPROPANE	ND	1	.2
2-CHLOROTOLUENE	ND	1	.2
4-CHLOROTOLUENE	ND	1	.5
BENZENE	ND	.5	.5
BROMODICHLOROMETHANE	ND	.5	.2
BROMOFORM	ND	.5	.3
BROMOMETHANE	ND	.5	.5
CARBON DISULFIDE	ND	1	.5
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	1	.2
CHLOROETHANE	ND	.5	.5
CHLOROFORM	ND	1	.5
CHLOROMETHANE	ND	1	.2
CIS-1,2-DICHLOROETHENE	ND	.5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.5
CYCLOHEXANE	ND	1	.5
DIBROMOCHLOROMETHANE	ND	1	.2
DIBROMOMETHANE	ND	1	.2
DICHLORODIFLUOROMETHANE	ND	1	.3
ETHYLBENZENE	ND	.5	.5
HEXACHLOROBUTADIENE	ND	1	.2
ISOPROPYL BENZENE	ND	.5	.2
M/P-XYLENES	ND	1	.5
METHYL ACETATE	ND	1	.5
METHYLCYCLOHEXANE	ND	1	.2
METHYLENE CHLORIDE	ND	1	.5
N-BUTYLBENZENE	ND	1	.2
N-PROPYLBENZENE	ND	1	.5
NAPHTHALENE	ND	2	.5
O-XYLENE	ND	1	.2
SEC-BUTYLBENZENE	ND	1	.5
STYRENE	ND	.5	.5
TERT-BUTYLBENZENE	ND	1	.2
TETRACHLOROETHENE	ND	.5	.2
TOLUENE	ND	.5	.5
TRANS-1,2-DICHLOROETHENE	ND	.5	.5
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	.5	.2
TRICHLOROFLUOROMETHANE	ND	1	.5
VINYL ACETATE	ND	2	.5
VINYL CHLORIDE	ND	.5	.2
FC 113	ND	1	.2
MTBE	ND	1	.5
XYLENES, TOTAL	ND	2	.7
ACETONE	ND	10	5
2-BUTANONE	ND	5	1
2-HEXANONE	ND	10	5
4-METHYL-2-PENTANONE	ND	10	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	70-140
4-BROMOFLUOROBENZENE	104	70-130
TOLUENE-D8	108	70-140

QC SUMMARIES

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

Client	: ARCADIS	Date Collected:	NA
Project	: OMEGA CHEMICAL	Date Received:	07/13/06
Batch No.	: 06G039	Date Extracted:	07/13/06 04:14
Sample ID:	MBLK1W	Date Analyzed:	07/13/06 04:14
Lab Samp ID:	V005G19Q	Dilution Factor:	1
Lab File ID:	RGQ198	Matrix :	WATER
Ext Btch ID:	V005G19	% Moisture :	NA
Calib. Ref.:	RGQ022	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1	.2
1,1,1-TRICHLOROETHANE	ND	.5	.2
1,1,2,2-TETRACHLOROETHANE	ND	.5	.2
1,1,2-TRICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHENE	ND	.5	.2
1,1-DICHLOROPROPENE	ND	.5	.2
1,2,3-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRIMETHYLBENZENE	ND	.5	.2
1,2-DIBROMO-3-CHLOROPROPANE	ND	1	.5
1,2-DICHLOROBENZENE	ND	.5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	.5	.2
1,2-DIBROMOETHANE	ND	.5	.2
1,3,5-TRIMETHYLBENZENE	ND	1	.2
1,3-DICHLOROBENZENE	ND	.5	.2
1,3-DICHLOROPROPANE	ND	.5	.2
1,4-DICHLOROBENZENE	ND	.5	.2
2,2-DICHLOROPROPANE	ND	1	.2
2-CHLOROTOLUENE	ND	1	.2
4-CHLOROTOLUENE	ND	1	.2
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	.5	.2
BROMOFORM	ND	.5	.3
BROMOMETHANE	ND	.5	.2
CARBON DISULFIDE	ND	1	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	1	.2
CHLOROETHANE	ND	.5	.2
CHLOROFORM	ND	1	.2
CHLOROMETHANE	ND	1	.2
CIS-1,2-DICHLOROETHENE	ND	.5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
CYCLOHEXANE	ND	1	.2
DIBROMOCHLOROMETHANE	ND	1	.2
DIBROMOMETHANE	ND	1	.2
DICHLORODIFLUOROMETHANE	ND	1	.3
ETHYLBENZENE	ND	.5	.2
HEXACHLOROBUTADIENE	ND	1	.2
ISOPROPYL BENZENE	ND	.5	.2
M/P-XYLENES	ND	1	.5
METHYL ACETATE	ND	1	.5
METHYLCYCLOHEXANE	ND	1	.2
METHYLENE CHLORIDE	ND	1	.5
N-BUTYLBENZENE	ND	1	.2
N-PROPYLBENZENE	ND	1	.2
NAPHTHALENE	ND	2	.5
O-XYLENE	ND	1	.2
SEC-BUTYLBENZENE	ND	1	.2
STYRENE	ND	.5	.2
TERT-BUTYLBENZENE	ND	1	.2
TETRACHLOROETHENE	ND	.5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	.5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	.5	.2
TRICHLOROFLUOROMETHANE	ND	1	.2
VINYL ACETATE	ND	2	.5
VINYL CHLORIDE	ND	.5	.2
FC 113	ND	1	.2
MTBE	ND	1	.2
XYLENES, TOTAL	ND	2	.7
ACETONE	ND	10	5
2-BUTANONE	ND	5	1
2-HEXANONE	ND	10	5
4-METHYL-2-PENTANONE	ND	10	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	70-140
4-BROMOFLUOROBENZENE	106	70-130
TOLUENE-D8	107	70-130

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: SW 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	V005G19Q	V005G19L	V005G19C		
LAB FILE ID:	RGQ198	RGQ195	RGQ196		
DATE EXTRACTED:	07/13/0604:14	07/13/0602:23	07/13/0603:00	DATE COLLECTED:	NA
DATE ANALYZED:	07/13/0604:14	07/13/0602:23	07/13/0603:00	DATE RECEIVED:	07/13/06
PREP. BATCH:	V005G19	V005G19	V005G19		
CALIB. REF:	RGQ022	RGQ022	RGQ022		

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	10.4	104	10	10.2	102	2	70-130	30
Benzene	ND	10	10.8	108	10	10.3	103	5	70-130	30
Chlorobenzene	ND	10	10.9	109	10	10.4	104	4	70-130	30
Toluene	ND	10	11.3	113	10	10.7	108	5	70-130	30
Trichloroethene	ND	10	10.6	106	10	10.3	103	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	10.3	103	10	10.4	104	70-140
4-Bromofluorobenzene	10	10.4	104	10	10.4	104	70-130
Toluene-d8	10	10.9	109	10	10.6	106	70-130

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

Client	: ARCADIS	Date Collected:	NA
Project	: OMEGA CHEMICAL	Date Received:	07/14/06
Batch No.	: 06G039	Date Extracted:	07/14/06 05:39
Sample ID:	MBLK2W	Date Analyzed:	07/14/06 05:39
Lab Samp ID:	VO05G22Q	Dilution Factor:	1
Lab File ID:	RGQ238	Matrix :	WATER
Ext Btch ID:	VO05G22	% Moisture :	NA
Calib. Ref.:	RGQ022	Instrument ID :	T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1	.2
1,1,1-TRICHLOROETHANE	ND	.5	.2
1,1,2,2-TETRACHLOROETHANE	ND	.5	.2
1,1,2-TRICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHENE	ND	.5	.2
1,1-DICHLOROPROPENE	ND	.5	.2
1,2,3-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRIMETHYLBENZENE	ND	.5	.2
1,2-DIBROMO-3-CHLOROPROPANE	ND	1	.5
1,2-DICHLOROBENZENE	ND	.5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	.5	.2
1,2-DIBROMOETHANE	ND	.5	.2
1,3,5-TRIMETHYLBENZENE	ND	1	.2
1,3-DICHLOROBENZENE	ND	.5	.2
1,3-DICHLOROPROPANE	ND	.5	.2
1,4-DICHLOROBENZENE	ND	.5	.2
2,2-DICHLOROPROPANE	ND	1	.2
2-CHLOROTOLUENE	ND	1	.2
4-CHLOROTOLUENE	ND	1	.2
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	.5	.2
BROMOFORM	ND	.5	.3
BROMOMETHANE	ND	.5	.2
CARBON DISULFIDE	ND	1	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	1	.2
CHLOROETHANE	ND	.5	.2
CHLOROFORM	ND	1	.2
CHLOROMETHANE	ND	1	.2
CIS-1,2-DICHLOROETHENE	ND	.5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
CYCLOHEXANE	ND	1	.2
DIBROMOCHLOROMETHANE	ND	1	.2
DIBROMOMETHANE	ND	1	.2
DICHLORODIFLUOROMETHANE	ND	1	.3
ETHYLBENZENE	ND	.5	.2
HEXACHLOROBUTADIENE	ND	1	.2
ISOPROPYL BENZENE	ND	.5	.2
M/P-XYLENES	ND	1	.5
METHYL ACETATE	ND	1	.5
METHYLCYCLOHEXANE	ND	1	.2
METHYLENE CHLORIDE	ND	1	.5
N-BUTYLBENZENE	ND	1	.2
N-PROPYLBENZENE	ND	1	.2
NAPHTHALENE	ND	2	.5
O-XYLENE	ND	1	.2
SEC-BUTYLBENZENE	ND	1	.2
STYRENE	ND	.5	.2
TERT-BUTYLBENZENE	ND	1	.2
TETRACHLOROETHENE	ND	.5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	.5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	.5	.2
TRICHLOROFLUOROMETHANE	ND	1	.2
VINYL ACETATE	ND	2	.5
VINYL CHLORIDE	ND	.5	.2
FC 113	ND	1	.2
MTBE	ND	1	.2
XYLENES, TOTAL	ND	2	.7
ACETONE	ND	10	5
2-BUTANONE	ND	5	1
2-HEXANONE	ND	10	5
4-METHYL-2-PENTANONE	ND	10	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	107	70-140
4-BROMOFLUOROBENZENE	106	70-130
TOLUENE-D8	106	70-130

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: SW 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK2W				
LAB SAMP ID:	V005G22Q	V005G22L	V005G22C		
LAB FILE ID:	RGQ238	RGQ235	RGQ236		
DATE EXTRACTED:	07/14/0605:39	07/14/0603:47	07/14/0604:24	DATE COLLECTED:	NA
DATE ANALYZED:	07/14/0605:39	07/14/0603:47	07/14/0604:24	DATE RECEIVED:	07/14/06
PREP. BATCH:	V005G22	V005G22	V005G22		
CALIB. REF:	RGQ022	RGQ022	RGQ022		

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	9.62	96	10	9.34	93	3	70-130	30
Benzene	ND	10	10.2	102	10	10	100	2	70-130	30
Chlorobenzene	ND	10	10.2	102	10	10.1	101	2	70-130	30
Toluene	ND	10	10.4	104	10	10.4	104	1	70-130	30
Trichloroethene	ND	10	10.2	102	10	10.3	103	1	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	10.4	104	10	10.4	104	70-140
4-Bromofluorobenzene	10	10.2	102	10	10.2	102	70-130
Toluene-d8	10	10.8	108	10	10.7	107	70-130

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

Client : ARCADIS	Date Collected: NA
Project : OMEGA CHEMICAL	Date Received: 07/15/06
Batch No. : 06G039	Date Extracted: 07/15/06 08:06
Sample ID: MBLK3W	Date Analyzed: 07/15/06 08:06
Lab Samp ID: V005G25Q	Dilution Factor: 1
Lab File ID: RGQ281	Matrix : WATER
Ext Btch ID: V006G25	% Moisture : NA
Calib. Ref.: RGQ022	Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1,2-TETRACHLOROETHANE	ND	1	.2
1,1,1-TRICHLOROETHANE	ND	.5	.2
1,1,2,2-TETRACHLOROETHANE	ND	.5	.2
1,1,2-TRICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHANE	ND	.5	.2
1,1-DICHLOROETHENE	ND	.5	.2
1,1-DICHLOROPROPENE	ND	.5	.2
1,2,3-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRICHLOROBENZENE	ND	1	.2
1,2,4-TRIMETHYLBENZENE	ND	.5	.2
1,2-DIBROMO-3-CHLOROPROPANE	ND	1	.5
1,2-DICHLOROBENZENE	ND	.5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	.5	.2
1,2-DIBROMOETHANE	ND	.5	.2
1,3,5-TRIMETHYLBENZENE	ND	1	.2
1,3-DICHLOROBENZENE	ND	.5	.2
1,3-DICHLOROPROPANE	ND	.5	.2
1,4-DICHLOROBENZENE	ND	.5	.2
2,2-DICHLOROPROPANE	ND	1	.2
2-CHLOROTOLUENE	ND	1	.2
4-CHLOROTOLUENE	ND	1	.2
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	.5	.2
BROMOFORM	ND	.5	.3
BROMOMETHANE	ND	.5	.2
CARBON DISULFIDE	ND	1	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	1	.2
CHLOROETHANE	ND	.5	.2
CHLOROFORM	ND	1	.2
CHLOROMETHANE	ND	1	.2
CIS-1,2-DICHLOROETHENE	ND	.5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
CYCLOHEXANE	ND	1	.2
DIBROMOCHLOROMETHANE	ND	1	.2
DIBROMOMETHANE	ND	1	.2
DICHLORODIFLUOROMETHANE	ND	1	.3
ETHYLBENZENE	ND	.5	.2
HEXACHLOROBUTADIENE	ND	1	.2
ISOPROPYL BENZENE	ND	.5	.2
M/P-XYLENES	ND	1	.5
METHYL ACETATE	ND	1	.5
METHYLCYCLOHEXANE	ND	1	.2
METHYLENE CHLORIDE	ND	1	.5
N-BUTYLBENZENE	ND	1	.2
N-PROPYLBENZENE	ND	1	.2
NAPHTHALENE	ND	2	.5
O-XYLENE	ND	1	.2
SEC-BUTYLBENZENE	ND	1	.2
STYRENE	ND	.5	.2
TERT-BUTYLBENZENE	ND	1	.2
TETRACHLOROETHENE	ND	.5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	.5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	.5	.2
TRICHLOROFLUOROMETHANE	ND	1	.2
VINYL ACETATE	ND	2	.5
VINYL CHLORIDE	ND	.5	.2
FC 113	ND	1	.2
MTBE	ND	1	.2
XYLENES, TOTAL	ND	2	.7
ACETONE	ND	10	5
2-BUTANONE	ND	5	1
2-HEXANONE	ND	10	5
4-METHYL-2-PENTANONE	ND	10	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	70-140
4-BROMOFLUOROBENZENE	104	70-130
TOLUENE-D8	105	70-130

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: SW 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK3W				
LAB SAMP ID:	V005G25Q	V005G25L	V005G25C		
LAB FILE ID:	RGQ281	RGQ278	RGQ279		
DATE EXTRACTED:	07/15/0608:06	07/15/0606:15	07/15/0606:52	DATE COLLECTED:	NA
DATE ANALYZED:	07/15/0608:06	07/15/0606:15	07/15/0606:52	DATE RECEIVED:	07/15/06
PREP. BATCH:	V006G25	V006G25	V006G25		
CALIB. REF:	RGQ022	RGQ022	RGQ022		

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	10.3	103	10	9.98	100	3	70-130	30
Benzene	ND	10	10.6	106	10	10.4	104	2	70-130	30
Chlorobenzene	ND	10	10.8	108	10	10.6	106	2	70-130	30
Toluene	ND	10	11	110	10	10.8	108	1	70-130	30
Trichloroethene	ND	10	10.5	105	10	10.4	104	1	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	10.5	105	10	10.5	105	70-140
4-Bromofluorobenzene	10	10.2	102	10	10.2	102	70-130
Toluene-d8	10	10.6	106	10	10.7	107	70-130

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: SW 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	OC2-PMW15-0-17				
LAB SAMP ID:	G039-01	G039-01U	G039-01S		
LAB FILE ID:	RGQ246	RGQ252	RGQ251		
DATE EXTRACTED:	07/14/0610:36	07/14/0614:16	07/14/0613:39	DATE COLLECTED:	07/10/06
DATE ANALYZED:	07/14/0610:36	07/14/0614:16	07/14/0613:39	DATE RECEIVED:	07/10/06
PREP. BATCH:	VO05G22	VO05G22	VO05G22		
CALIB. REF:	RGQ022	RGQ022	RGQ022		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	166E	10	174E	82	10	134E	-320*	26	70-130	30
Benzene	.344J	10	10.8	105	10	11.1	107	2	70-130	30
Chlorobenzene	ND	10	10.7	107	10	11	110	2	70-130	30
Toluene	ND	10	11	110	10	11	110	0	70-130	30
Trichloroethene	263E	10	282E	193*	10	259E	-42*	9	70-130	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	10	10	100	10	11	110	70-140
4-Bromofluorobenzene	10	10.5	105	10	10.2	102	70-130
Toluene-d8	10	10.8	108	10	10.6	106	70-140

INITIAL CALIBRATION

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RGQ016
Instrument ID: T-005
GC Column:RTX502.2ID:0.32mm (mm)

Contract: OMEGA CHEMICAL
SAS No.: SDG No.: 06G039
BFB Injection Date : 07/06/06
BFB Injection Time : 16:51
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.36
75	30.0 - 60.0% of mass 95	41.59
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.07
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	84.80
175	5.0 - 9.0% of mass 174	6.13(7.2)1
176	95.0 - 101.0% of mass 174	81.89(96.6)1
177	5.0 - 9.0% of mass 176	5.40(6.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD0.3	VO05G061	RGQ017	07/06/06	17:38
2	VSTD0.5	VO05G062	RGQ018	07/06/06	18:16
3	VSTD01	VO05G063	RGQ019	07/06/06	18:54
4	VSTD02	VO05G064	RGQ020	07/06/06	19:31
5	VSTD05	VO05G065	RGQ021	07/06/06	20:08
6	VSTD010	VO05G066	RGQ022	07/06/06	20:44
7	VSTD020	VO05G067	RGQ023	07/06/06	21:21
8	VSTD030	VO05G068	RGQ024	07/06/06	21:58
9	VSTD040	VO05G069	RGQ025	07/06/06	22:35
10	VSTD050	VO05G0610	RGQ026	07/06/06	23:11
11	VSTD010	IVO05G061	RGQ029	07/07/06	01:02
12	VSTD010	IVO05G064	RGQ032	07/07/06	02:52

FORM V VOA OLM02.0

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :TOO5
Beginning DateTime :07/06/06 17:38
Spike Units :PPB
IC File :RGQ022

Column Spec :RTX502.2 ID :0.3
Ending DateTime :07/06/06 23:
HPChem Method :VOO5G06

M	IDX	Parameters	3 17:38 RGQ017	5 18:16 RGQ018	1 18:54 RGQ019	2 19:31 RGQ020	5 20:08 RGQ021	10 20:44 RGQ022	20 21:21 RGQ023	30 21:58 RGQ024	40 22:35 RGQ025	50 23:11 RGQ026	Av_RRF	% RSD	Av_Rt
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.51
	2	Dichlorodifluoromethane	0.473	0.502	0.492	0.512	0.562	0.500	0.512	0.502	0.508	0.500	0.506	4.44	1.67
	3	Chloromethane	0.380	0.350	0.362	0.368	0.399	0.368	0.367	0.368	0.369	0.369	0.370	3.42	1.92
	4	Vinyl chloride	0.369	0.357	0.368	0.386	0.400	0.363	0.366	0.357	0.350	0.340	0.366	4.73	2.05
	5	Bromomethane	------	0.272	0.277	0.251	0.279	0.267	0.309	0.306	0.321	0.325	0.290	9.05	2.56
	6	Chloroethane	0.312	0.273	0.226	0.215	0.235	0.215	0.226	0.218	0.217	0.218	0.235	13.64	2.66
	7	Dichlorofluoromethane	0.644	0.643	0.610	0.590	0.666	0.620	0.605	0.615	0.641	0.637	0.627	3.62	2.71
	8	Trichlorofluoromethane	0.587	0.536	0.552	0.577	0.616	0.557	0.561	0.549	0.556	0.550	0.564	4.11	2.97
	9	sec-Propyl alcohol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.00
2	10	Acrolein	------	0.015	0.012	0.013	0.016	0.015	0.015	0.015	0.015	0.015	0.014	7.95	3.53
	11	1,1,2-Trichloro-1,2,2-trifluoroethane	0.317	0.288	0.275	0.260	0.297	0.277	0.265	0.268	0.275	0.268	0.279	6.21	3.54
2	12	Acetone	------	------	0.045	0.042	0.031	0.033	0.032	0.036	0.035	0.033	0.036	13.60	3.62
	13	1,1-Dichloroethene	0.576	0.485	0.477	0.464	0.523	0.482	0.462	0.472	0.488	0.483	0.491	6.95	3.75
5	14	tert-Butyl alcohol	------	------	0.006	0.006	0.007	0.007	0.007	0.007	0.008	0.007	0.007	6.97	3.92
	15	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.00
	16	Iodomethane	------	0.096	0.184	0.252	0.378	0.367	0.383	0.358	0.369	0.371	0.306	34.19	4.15
	17	Methyl acetate	------	0.125	0.093	0.088	0.076	0.072	0.070	0.067	0.068	0.067	0.081	23.77	4.25
	18	Methylene chloride	------	0.396	0.341	0.307	0.326	0.296	0.287	0.285	0.294	0.286	0.313	11.68	4.41
	19	Carbon disulfide	1.184	1.036	1.025	0.976	1.125	1.042	1.024	1.050	1.087	1.069	1.062	5.52	4.39
2	20	Acrylonitrile	------	0.031	0.034	0.031	0.033	0.032	0.031	0.030	0.030	0.029	0.031	4.87	4.61
	21	tert-Butyl methyl ether (MTBE)	0.354	0.346	0.354	0.342	0.386	0.359	0.348	0.344	0.361	0.340	0.353	3.84	4.67
	22	trans-1,2-Dichloroethene	0.481	0.415	0.412	0.396	0.444	0.409	0.401	0.404	0.414	0.408	0.418	6.07	4.83
	23	Isopropyl ether (DIPE)	0.625	0.762	0.746	0.701	0.765	0.703	0.756	0.755	0.801	0.775	0.739	6.80	5.36
	24	1,1-Dichloroethane	0.544	0.553	0.548	0.529	0.597	0.556	0.542	0.543	0.560	0.545	0.552	3.30	5.46
	25	Vinyl acetate	------	0.238	0.203	0.202	0.239	0.220	0.219	0.222	0.230	0.221	0.221	5.98	5.50
	26	tert-Butyl ethyl ether (ETBE)	0.483	0.493	0.499	0.496	0.574	0.542	0.536	0.523	0.541	0.522	0.521	5.42	5.97
2	27	2-Butanone	------	------	0.043	0.044	0.039	0.041	0.040	0.038	0.040	0.038	0.040	5.15	6.15
	28	2,2-Dichloropropane	0.351	0.353	0.338	0.332	0.373	0.338	0.311	0.302	0.301	0.289	0.329	8.27	6.32
	29	cis-1,2-Dichloroethene	0.494	0.450	0.459	0.438	0.506	0.471	0.449	0.451	0.464	0.452	0.464	4.60	6.39
2	30	tert-Butyl formate (TBF)	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.00
	31	Chloroform	0.561	0.545	0.525	0.504	0.576	0.534	0.517	0.520	0.540	0.528	0.535	3.99	6.64
	32	Bromochloromethane	0.187	0.186	0.175	0.171	0.193	0.180	0.171	0.167	0.171	0.165	0.177	5.37	6.89
2	33	Tetrahydrofuran	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.00
	34	1,1,1-Trichloroethane	0.509	0.462	0.477	0.454	0.517	0.482	0.470	0.469	0.487	0.479	0.481	4.13	7.28
	35	Cyclohexane	0.359	0.472	0.427	0.530	0.560	0.546	0.520	0.511	0.494	0.489	0.491	12.23	7.29
	36	tert-Amyl methyl ether (TAME)	0.309	0.327	0.339	0.332	0.393	0.378	0.373	0.368	0.384	0.372	0.358	7.85	7.80
	37	1,2-Dichloroethane-d4	0.155	0.172	0.182	0.185	0.206	0.201	0.192	0.190	0.192	0.184	0.186	7.80	7.81
	38	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	14.42
	39	1,1-Dichloropropene	0.180	0.185	0.176	0.182	0.204	0.190	0.180	0.185	0.185	0.188	0.186	4.17	7.54
	40	Carbon tetrachloride	0.632	0.608	0.590	0.557	0.631	0.590	0.561	0.571	0.583	0.585	0.591	4.40	7.69
	41	1,2-Dichloroethane	0.321	0.315	0.316	0.314	0.354	0.328	0.312	0.317	0.324	0.323	0.322	3.75	7.97
	42	Benzene	1.478	1.484	1.460	1.428	1.623	1.497	1.427	1.455	1.495	1.516	1.486	3.78	7.98
	43	Trichloroethene	0.510	0.468	0.465	0.464	0.516	0.482	0.463	0.469	0.480	0.490	0.481	4.01	9.06
	44	Methylcyclohexane	0.431	0.599	0.540	0.662	0.727	0.703	0.676	0.665	0.636	0.654	0.629	13.87	9.16
	45	1,2-Dichloropropane	0.296	0.327	0.334	0.314	0.363	0.333	0.323	0.327	0.337	0.340	0.329	5.26	9.38
	46	Bromodichloromethane	0.418	0.426	0.426	0.427	0.494	0.457	0.444	0.443	0.456	0.457	0.445	5.11	9.80
	47	Dibromomethane	0.142	0.165	0.163	0.176	0.197	0.170	0.161	0.160	0.179	0.179	0.169	8.71	9.88
	48	2-Chloroethyl vinyl ether	------	------	------	0.025	0.032	0.029	0.033	0.036	------	------	0.031	13.05	10.46
2	49	4-Methyl-2-pentanone	------	0.096	0.104	0.112	0.123	0.128	0.125	0.123	0.125	0.123	0.118	9.45	10.53
	50	cis-1,3-Dichloropropene	0.403	0.399	0.415	0.409	0.483	0.462	0.455	0.457	0.473	0.472	0.443	7.35	10.86
	51	Toluene-d8	1.074	1.069	1.162	1.179	1.378	1.340	1.274	1.267	1.279	1.293	1.231	8.61	11.31
	52	Toluene	0.841	0.849	0.869	0.846	0.996	0.931	0.900	0.915	0.941	0.946	0.903	5.72	11.47
	53	Ethyl methacrylate	0.214	0.162	0.180	0.186	0.230	0.222	0.216	0.224	0.229	0.223	0.209	11.39	11.93
	54	trans-1,3-Dichloropropene	0.216	0.218	0.258	0.252	0.313	0.305	0.305	0.309	0.316	0.314	0.281	14.41	11.87
	55	1,1,2-Trichloroethane	0.175	0.175	0.201	0.189	0.217	0.200	0.194	0.196	0.202	0.199	0.195	6.61	12.17
2	56	2-Hexanone	------	------	0.062	0.067	0.076	0.079	0.076	0.075	0.076	0.073	0.073	7.86	12.27
	57	1,3-Dichloropropane	0.324	0.312	0.331	0.315	0.363	0.337	0.328	0.335	0.340	0.344	0.333	4.47	12.69
	58	Tetrachloroethene	0.328	0.345	0.340	0.336	0.382	0.355	0.341	0.352	0.355	0.358	0.349	4.35	12.77
	59	Dibromochloromethane	0.275	0.260	0.265	0.257	0.307	0.286	0.281	0.283	0.293	0.290	0.280	5.59	13.17
	60	2-Ethyl-1-butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.00
	61	1,2-Dibromoethane	0.186	0.176	0.190	0.184	0.220	0.206	0.199	0.201	0.204	0.203	0.197	6.53	13.59
	62	1-Chlorohexane	0.513	0.500	0.502	0.513	0.623	0.597	0.573	0.593	0.603	0.607	0.562	8.79	14.06
	63	Chlorobenzene	1.043	1.004	0.999	0.955	1.102	1.036	0.995	1.008	1.040	1.044	1.023	3.86	14.50
	64	1,1,1,2-Tetrachloroethane	0.287	0.287	0.303	0.299	0.348	0.329	0.323	0.325	0.335	0.335	0.317	6.81	14.62
	65	Ethylbenzene	1.736	1.606	1.609	1.596	1.861	1.742	1.684	1.729	1.763	1.771	1.710	5.01	14.66
2	66	m-Xylene & p-Xylene	1.374	1.284	1.265	1.255	1.419	1.339	1.303	1.337	1.365	1.387	1.333	4.13	14.83
	67	o-Xylene	1.171	1.124	1.165	1.162	1.373	1.293	1.239	1.268	1.290	1.284	1.237	6.34	15.77
	68	Styrene	0.860	0.873	0.884	0.896	1.072	1.018	0.982	1.007	1.036	1.030	0.966	8.19	15.86
	69	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	20.71
	70	Bromoform	0.313	0.356	0.382	0.367	0.443	0.408	0.415	0.420	0.443	0.443	0.399	10.91	16.53
	71	Isopropylbenzene	4.471	4.249	4.267	4.140	4.888	4.546	4.558	4.657	4.826	4.890	4.549	5.96	16.61
	72	1,1,2,2-Tetrachloroethane	------	0.519	0.521	0.526	0.619	0.571	0.555	0.569	0.588	0.586	0.562	6.12	17.01
	73	4-Bromofluorobenzene	1.055	0.962	1.039	1.037	1.211	1.171	1.130	1.113	1.139	1.133	1.099	6.78	17.14
	74	1,2,3-Trichloropropane	------	------	0.086	0.087	0.105	0.097	0.097	0.097	0.101	0.102	0.097	7.17	17.33
	75	trans-1,4-Dichloro-2-butene	------	------	0.080	0.096	0.121	0.106	0.107	0.107	0.109	0.109	0.104	11.31	17.55
	76	n-Propylbenzene	5.717	5.694	5.602	5.497	6.441	6.046	5.888	6.083	6.277	6.399	5.965	5.65	17.53
	77	Bromobenzene	0.910	0.925	0.905	0.902	1.065	0.983	0.964	0.991	1.030	1.036	0.971	6.16	17.52
	78	2-Chlorotoluene	3.498	3.467	3.411	3.354	3.810	3.576	3.416	3.477	3.619	3.659	3.529	3.90	17.87
	79	1,3,5-Trimethylbenzene	3.786	3.734	3.647	3.593	4.151	3.888	3.798	3.885	4.021	4.119	3.862	4.88	17.91
	80	4-Chlorotoluene	3.248	3.311	3.212	3.039	3.503	3.279	3.206	3.198	3.363	3.385	3.274	3.86	17.99
	81	tert-Butylbenzene	3.759	3.602	3.603	3.493	4.150	3.906	3.829	3.949	4.068	4.126	3.849	6.03	18.22
	82	1,2,4-Trimethylbenzene	3.681	3.651	3.588	3.535	4.072	3.832	3.754	3.848	3.957	4.005	3.792	4.79	18.80
	83	sec-Butylbenzene	5.433	5.288	5.197	5.094	5.930	5.626	5.519	5.695	5.911	5.983	5.567	5.69	19.22
	84	p-Isopropyltoluene	4.143	3.890	3.864	3.807	4.472	4.236	4.177	4.289	4.447	4.503	4.183	6.17	19.57
	85	1,3-Dichlorobenzene	1.922	1.916	1.889	1.821	2.127	1.991	1.958	1.976	2.021	2.022	1.964	4.29	19.67
	86	1,4-Dichlorobenzene	1.923	1.857	1.834	1.798	2.092	1.947	1.906	1.924	1.965	1.964	1.921	4.28	19.93
	87	n-Butylbenzene	3.789	3.875	3.808	3.743	4.424	4.240	4.078	4.235	4.308	4.321	4.082	6.29	20.53
	88	1,2-Dichlorobenzene	1.752	1.566	1.612	1.512	1.719	1.612	1.555	1.590	1.623	1.607	1.615	4.48	20.77
	89	1,2-Dibromo-3-chloropropane	------	------	0.059	0.064	0.086	0.083	0.085	0.088	0.092	0.089	0.081	15.01	22.67
	90	1,2,4-Trichlorobenzene	1.003	1.014	0.995	0.999	1.193	1.137	1.101	1.134	1.187	1.181	1.094	7.66	24.87
	91	Hexachlorobutadiene	0.869	0.759	0.751	0.734	0.855	0.802	0.752	0.789	0.811	0.813	0.793	5.70	25.30
	92	Naphthalene	------	1.093	1.089	1.164	1.394	1.384	1.350	1.418	1.520	1.500	1.323	12.57	25.44
	93	1,2,3-Trichlorobenzene	0.867	0.807	0.792	0.817	0.959	0.909	0.870	0.892	0.946	0.939	0.880	6.81	26.05

Spike Amount = Nominal Amount * M
Ave_%RSD : 7.3 Max_%RSD : 34.2

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
16	Iodomethane	-0.01571	0.37476	0.9994
17	Methyl acetate	0.00313	0.06702	0.9997

7/10/06

2025

SECOND SOURCE VERIFICATION

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G06\RGQ029.D Vial: 15
Acq On : 7 Jul 2006 1:02 am Operator: DN
Sample : IVO05G061 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
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)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	110	0.00
2	T	Dichlorodifluoromethane	10.000	10.075	-0.7	112	0.00
3	P,T	Chloromethane	10.000	10.172	-1.7	112	0.00
4	C,T	Vinyl chloride	10.000	10.308	-3.1	114	0.00
5	T	Bromomethane	10.000	11.253	-12.5	134	0.00
6	T	Chloroethane	10.000	9.249	7.5	111	0.00
7	T	Dichlorofluoromethane	10.000	9.269	7.3	103	0.00
8	T	Trichlorofluoromethane	10.000	10.047	-0.5	112	0.00
9	T	sec-Propyl alcohol	-1.000	0.000	0.0	66	0.05
10	T	Acrolein *	20.000	14.888	25.6#	80	0.00
11	T	1,1,2-Trichloro-1,2,2-trifl	10.000	9.240	7.6	102	0.00
12	T	Acetone	20.000	16.818	15.9	101	0.00
13	C,TM	1,1-Dichloroethene	10.000	9.078	9.2	102	0.00
14	T	tert-Butyl alcohol	50.000	46.408	7.2	103	0.00
15	T	Acetonitrile	-1.000	0.000	0.0	98	0.00
16	T	Iodomethane *	10.000	6.897	31.0#	73	0.00
17	T	Methyl acetate *	10.000	0.844	91.6#	13	0.00
18	T	Methylene chloride	10.000	8.837	11.6	103	0.00
19	T	Carbon disulfide	10.000	9.311	6.9	104	0.00
20	T	Acrylonitrile	20.000	19.440	2.8	104	0.00
21	T	tert-Butyl methyl ether (MT	10.000	9.382	6.2	102	0.00
22	T	trans-1,2-Dichloroethene	10.000	9.258	7.4	104	0.00
23	T	Isopropyl ether (DIPE)	10.000	9.730	2.7	112	0.00
24	P,T	1,1-Dichloroethane	10.000	9.486	5.1	103	0.00
25	T	Vinyl acetate	10.000	9.533	4.7	105	0.00
26	T	tert-Butyl ethyl ether (ETB	10.000	9.598	4.0	101	0.00
27	T	2-Butanone	20.000	18.413	7.9	100	0.00
28	T	2,2-Dichloropropane	10.000	8.751	12.5	94	0.00
29	T	cis-1,2-Dichloroethene	10.000	9.272	7.3	100	0.00
30	T	tert-Butyl formate (TBF)	-1.000	0.000	0.0	93	-0.02
31	C,T	Chloroform	10.000	9.305	7.0	103	0.00
32	T	Bromochloromethane	10.000	9.805	2.0	106	0.00
33	T	Tetrahydrofuran	-1.000	0.000	0.0	99	0.02
34	T	1,1,1-Trichloroethane	10.000	9.334	6.7	102	0.00
35	T	Cyclohexane *	10.000	0.137	98.6#	1	0.03
36	T	tert-Amyl methyl ether (TAM	10.000	9.802	2.0	102	0.00
37	S	1,2-Dichloroethane-d4	10.000	10.743	-7.4	109	0.00
38	I	CHLOROBENZENE-D5	10.000	10.000	0.0	110	0.00
39	T	1,1-Dichloropropene	10.000	9.491	5.1	102	0.00
40	T	Carbon tetrachloride	10.000	9.371	6.3	103	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G06\RGQ029.D
Acq On : 7 Jul 2006 1:02 am
Sample : IVO05G061
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA
MS Integration Params: 524TAIL.P

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

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006 * 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	9.398	6.0	102	0.00
42	M,T	Benzene	10.000	9.373	6.3	103	0.00
43	M,T	Trichloroethene	10.000	9.457	5.4	104	0.00
44	T	Methylcyclohexane *	10.000	0.110	98.9#	1	0.00
45	C,T	1,2-Dichloropropane	10.000	9.500	5.0	104	0.00
46	T	Bromodichloromethane	10.000	9.412	5.9	101	0.00
47	T	Dibromomethane	10.000	9.483	5.2	104	0.00
48	T	2-Chloroethyl vinyl ether	10.000	9.003	10.0	105	0.00
49	T	4-Methyl-2-pentanone	20.000	20.317	-1.6	103	0.00
50	T	cis-1,3-Dichloropropene	10.000	9.559	4.4	101	0.00
51	S	Toluene-d8	10.000	10.859	-8.6	110	0.00
52	C,TM	Toluene	10.000	9.664	3.4	103	0.00
53	T	Ethyl methacrylate	10.000	9.825	1.8	102	0.00
54	T	trans-1,3-Dichloropropene	10.000	9.780	2.2	99	0.00
55	T	1,1,2-Trichloroethane	10.000	9.514	4.9	102	0.00
56	T	2-Hexanone	20.000	19.686	1.6	100	0.00
57	T	1,3-Dichloropropane	10.000	9.450	5.5	103	0.00
58	T	Tetrachloroethene	10.000	9.553	4.5	103	0.00
59	T	Dibromochloromethane	10.000	9.497	5.0	102	0.00
60	T	2-Ethyl-1-butanol	-1.000	0.000	0.0	104	0.00
61	T	1,2-Dibromoethane	10.000	9.638	3.6	101	0.00
62	T	1-Chlorohexane	10.000	9.864	1.4	102	0.00
63	P,M	Chlorobenzene	10.000	9.399	6.0	102	0.00
64	T	1,1,1,2-Tetrachloroethane	10.000	9.579	4.2	102	0.00
65	C,T	Ethylbenzene	10.000	9.474	5.3	102	0.00
66	T	m-Xylene & p-Xylene	20.000	18.692	6.5	102	0.00
67	T	o-Xylene	10.000	9.701	3.0	102	0.00
68	T	Styrene	10.000	9.832	1.7	103	0.00
69	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	109	-0.02
70	P,T	Bromoform	10.000	9.663	3.4	103	0.00
71	T	Isopropylbenzene	10.000	9.531	4.7	104	0.00
72	P,T	1,1,2,2-Tetrachloroethane	10.000	9.401	6.0	101	0.00
73	S	4-Bromofluorobenzene	10.000	10.592	-5.9	109	0.00
74	T	1,2,3-Trichloropropane	10.000	9.160	8.4	99	0.00
75	T	trans-1,4-Dichloro-2-butene	10.000	9.313	6.9	100	0.00
76	T	n-Propylbenzene	10.000	9.464	5.4	102	0.00
77	T	Bromobenzene	10.000	9.575	4.3	103	0.00
78	T	2-Chlorotoluene	10.000	9.421	5.8	102	0.00
79	T	1,3,5-Trimethylbenzene	10.000	9.506	4.9	103	0.00
80	T	4-Chlorotoluene	10.000	9.339	6.6	102	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G06\RGQ029.D Vial: 15
Acq On : 7 Jul 2006 1:02 am Operator: DN
Sample : IVO05G061 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T	tert-Butylbenzene	10.000	9.565	4.4	103	0.00
82	T	1,2,4-Trimethylbenzene	10.000	9.474	5.3	103	0.00
83	T	sec-Butylbenzene	10.000	9.515	4.8	103	0.00
84	T	p-Isopropyltoluene	10.000	9.516	4.8	103	0.00
85	T	1,3-Dichlorobenzene	10.000	9.484	5.2	102	0.00
86	T	1,4-Dichlorobenzene	10.000	9.360	6.4	101	0.00
87	T	n-Butylbenzene	10.000	9.460	5.4	100	0.00
88	T	1,2-Dichlorobenzene	10.000	9.416	5.8	103	0.00
89	T	1,2-Dibromo-3-chloropropane	10.000	9.805	2.0	104	0.00
90	T	1,2,4-Trichlorobenzene	10.000	9.520	4.8	100	0.00
91	T	Hexachlorobutadiene	10.000	9.441	5.6	102	0.00
92	T	Naphthalene	10.000	9.528	4.7	100	0.00
93	T	1,2,3-Trichlorobenzene	10.000	9.543	4.6	101	0.00

DAILY CALIBRATION

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RGQ192
Instrument ID: T-005
GC Column:RTX502.2ID:0.32mm (mm)

Contract: OMEGA CHEMICAL
SAS No.: SDG No.: 06G039
BFB Injection Date : 07/13/06
BFB Injection Time : 00:32
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.90
75	30.0 - 60.0% of mass 95	42.88
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.08
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	85.50
175	5.0 - 9.0% of mass 174	6.22(7.3)1
176	95.0 - 101.0% of mass 174	85.32(99.8)1
177	5.0 - 9.0% of mass 176	5.67(6.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD010	CV005G0616	RGQ193	07/13/06	01:09
2	LCS1W	V005G19L	RGQ195	07/13/06	02:23
3	LCD1W	V005G19C	RGQ196	07/13/06	03:00
4	MBLK1W	V005G19Q	RGQ198	07/13/06	04:14
5	OC2-00-W-1-19	G039-02	RGQ206	07/13/06	09:10
6	OC2-PMW15-5-21	G039-04	RGQ207	07/13/06	09:47
7	OC2-PMW15-1-20	G039-05	RGQ210	07/13/06	11:39

FORM V VOA OLM02.0

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGQ022
Instrument ID: T-005
GC Column: RTX502.2 ID: 0.32mm (mm)

Project:OMEGA CHEMICAL
SDG No.: 06G039
Date Analyzed: 07/06/06
Time Analyzed: 20:44
Heated Purge: (Y/N) N

		IS1(DBF)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	1714798	8.52	1317081	14.42	464640	20.72
	UPPER LIMIT	3429596	9.02	2634162	14.92	929280	21.22
	LOWER LIMIT	857399	8.02	658541	13.92	232320	20.22
	SAMPLE ID						
1	VSTD010	1459386	8.52	1137707	14.42	412819	20.72
2	MBLK1W	1404719	8.53	1061023	14.43	352391	20.72
3	LCS1W	1440320	8.52	1106531	14.43	383051	20.71
4	LCD1W	1455558	8.52	1141681	14.43	391189	20.72
5	OC2-00-W-1-19	1459144	8.52	1125615	14.43	384186	20.71
6	OC2-PMW15-5-21	1502918	8.52	1170783	14.42	379973	20.71
7	OC2-PMW15-1-20	1514996	8.52	1183373	14.42	384291	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\06G12\RGQ193.D Vial: 3
Acq On : 13 Jul 2006 1:09 am Operator: DN
Sample : CVO05G0616 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	85	0.00
2	T	Dichlorodifluoromethane	10.000	7.973	20.3#	69	0.00
3	P,T	Chloromethane	10.000	9.428	5.7	81	0.00
4	C,T	Vinyl chloride	10.000	9.920	0.8	85	0.00
5	T	Bromomethane	10.000	11.365	-13.7	105	0.00
6	T	Chloroethane	10.000	9.695	3.0	90	0.00
7	T	Dichlorofluoromethane	10.000	10.276	-2.8	88	0.00
8	T	Trichlorofluoromethane	10.000	10.565	-5.6	91	0.00
9	T	sec-Propyl alcohol	-1.000	0.000	0.0	36583	0.18
10	T	Acrolein	20.000	23.623	-18.1	99	0.00
11	T	1,1,2-Trichloro-1,2,2-trifl	10.000	10.258	-2.6	88	0.00
12	T	Acetone	20.000	18.584	7.1	86	0.00
13	C,TM	1,1-Dichloroethene	10.000	10.051	-0.5	87	0.00
14	T	tert-Butyl alcohol	50.000	44.884	10.2	77	0.00
15	T	Acetonitrile	-1.000	0.000	0.0	97	0.02
16	T	Iodomethane	10.000	8.879	11.2	74	0.00
17	T	Methyl acetate	10.000	9.896	1.0	82	0.00
18	T	Methylene chloride	10.000	10.048	-0.5	91	0.00
19	T	Carbon disulfide	10.000	9.989	0.1	87	0.00
20	T	Acrylonitrile	20.000	22.295	-11.5	93	0.00
21	T	tert-Butyl methyl ether (MT	10.000	8.840	11.6	74	0.00
22	T	trans-1,2-Dichloroethene	10.000	10.039	-0.4	87	0.00
23	T	Isopropyl ether (DIPE)	10.000	10.337	-3.4	92	0.00
24	P,T	1,1-Dichloroethane	10.000	10.494	-4.9	89	0.00
25	T	Vinyl acetate	10.000	10.872	-8.7	93	0.00
26	T	tert-Butyl ethyl ether (ETB	10.000	8.534	14.7	70	0.00
27	T	2-Butanone	20.000	19.895	0.5	84	0.00
28	T	2,2-Dichloropropane	10.000	9.496	5.0	79	0.00
29	T	cis-1,2-Dichloroethene	10.000	10.262	-2.6	86	0.00
30	T	tert-Butyl formate (TBF)	-1.000	0.000	0.0	7	-0.08
31	C,T	Chloroform	10.000	10.559	-5.6	90	0.00
32	T	Bromochloromethane	10.000	11.004	-10.0	92	0.00
33	T	Tetrahydrofuran	-1.000	0.000	0.0	1877	-0.32
34	T	1,1,1-Trichloroethane	10.000	10.349	-3.5	88	0.00
35	T	Cyclohexane	10.000	8.968	10.3	69	0.00
36	T	tert-Amyl methyl ether (TAM	10.000	8.246	17.5	67	0.00
37	S	1,2-Dichloroethane-d4	10.000	10.518	-5.2	83	0.00
38	I	CHLOROBENZENE-D5	10.000	10.000	0.0	86	0.00
39	T	1,1-Dichloropropene	10.000	10.407	-4.1	88	0.00
40	T	Carbon tetrachloride	10.000	10.110	-1.1	87	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G12\RGQ193.D Vial: 3
Acq On : 13 Jul 2006 1:09 am Operator: DN
Sample : CVO05G0616 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	T	1,2-Dichloroethane	10.000	10.295	-2.9	87	0.00
42	M,T	Benzene	10.000	10.385	-3.8	89	0.00
43	M,T	Trichloroethene	10.000	10.250	-2.5	88	0.00
44	T	Methylcyclohexane	10.000	10.666	-6.7	82	0.00
45	C,T	1,2-Dichloropropane	10.000	10.565	-5.6	90	0.00
46	T	Bromodichloromethane	10.000	10.727	-7.3	90	0.00
47	T	Dibromomethane	10.000	10.381	-3.8	89	0.00
48	T	2-Chloroethyl vinyl ether	10.000	1.152	NT88.5#	11	0.23
49	T	4-Methyl-2-pentanone	20.000	19.833	0.8	79	0.00
50	T	cis-1,3-Dichloropropene	10.000	10.415	-4.1	86	0.00
51	S	Toluene-d8	10.000	10.676	-6.8	85	0.00
52	C,TM	Toluene	10.000	10.786	-7.9	90	0.00
53	T	Ethyl methacrylate	10.000	11.049	-10.5	90	0.00
54	T	trans-1,3-Dichloropropene	10.000	10.713	-7.1	85	0.00
55	T	1,1,2-Trichloroethane	10.000	11.013	-10.1	93	0.00
56	T	2-Hexanone	20.000	20.606	-3.0	82	0.00
57	T	1,3-Dichloropropane	10.000	10.775	-7.8	92	0.00
58	T	Tetrachloroethene	10.000	10.474	-4.7	89	0.00
59	T	Dibromochloromethane	10.000	10.819	-8.2	91	0.00
60	T	2-Ethyl-1-butanol	-1.000	0.000	0.0	89	0.00
61	T	1,2-Dibromoethane	10.000	11.095	-11.0	91	0.00
62	T	1-Chlorohexane	10.000	10.826	-8.3	88	0.00
63	P,M	Chlorobenzene	10.000	10.519	-5.2	90	0.00
64	T	1,1,1,2-Tetrachloroethane	10.000	10.767	-7.7	89	0.00
65	C,T	Ethylbenzene	10.000	10.615	-6.2	90	0.00
66	T	m-Xylene & p-Xylene	20.000	20.616	-3.1	89	0.00
67	T	o-Xylene	10.000	10.805	-8.0	89	0.00
68	T	Styrene	10.000	10.923	-9.2	89	0.00
69	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	89	0.00
70	P,T	Bromoform	10.000	10.783	-7.8	94	0.00
71	T	Isopropylbenzene	10.000	10.211	-2.1	91	0.00
72	P,T	1,1,2,2-Tetrachloroethane	10.000	10.527	-5.3	92	0.00
73	S	4-Bromofluorobenzene	10.000	10.109	-1.1	84	0.00
74	T	1,2,3-Trichloropropane	10.000	10.098	-1.0	89	0.00
75	T	trans-1,4-Dichloro-2-butene	10.000	9.923	0.8	87	0.00
76	T	n-Propylbenzene	10.000	10.171	-1.7	89	0.00
77	T	Bromobenzene	10.000	10.501	-5.0	92	0.00
78	T	2-Chlorotoluene	10.000	10.105	-1.1	89	0.00
79	T	1,3,5-Trimethylbenzene	10.000	10.201	-2.0	90	0.00
80	T	4-Chlorotoluene	10.000	10.068	-0.7	89	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G12\RGQ193.D Vial: 3
Acq On : 13 Jul 2006 1:09 am Operator: DN
Sample : CVO05G0616 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T	tert-Butylbenzene	10.000	10.280	-2.8	90	0.00
82	T	1,2,4-Trimethylbenzene	10.000	10.117	-1.2	89	0.00
83	T	sec-Butylbenzene	10.000	10.277	-2.8	90	0.00
84	T	p-Isopropyltoluene	10.000	10.036	-0.4	88	0.00
85	T	1,3-Dichlorobenzene	10.000	10.265	-2.7	90	0.00
86	T	1,4-Dichlorobenzene	10.000	10.053	-0.5	88	0.00
87	T	n-Butylbenzene	10.000	10.169	-1.7	87	0.00
88	T	1,2-Dichlorobenzene	10.000	10.198	-2.0	91	0.00
89	T	1,2-Dibromo-3-chloropropane	10.000	10.853	-8.5	93	0.00
90	T	1,2,4-Trichlorobenzene	10.000	10.024	-0.2	86	0.00
91	T	Hexachlorobutadiene	10.000	10.012	-0.1	88	0.00
92	T	Naphthalene	10.000	9.249	7.5	79	0.00
93	T	1,2,3-Trichlorobenzene	10.000	9.884	1.2	85	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G12\RGQ193.D Vial: 3
Acq On : 13 Jul 2006 1:09 am Operator: DN
Sample : CVO05G0616 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	85	0.00
2	T	Dichlorodifluoromethane	0.506	0.404	20.2#	69	0.00
3	P,T	Chloromethane	0.370	0.349	5.7	81	0.00
4	C,T	Vinyl chloride	0.366	0.363	0.8	85	0.00
5	T	Bromomethane	0.290	0.329	-13.4	105	0.00
6	T	Chloroethane	0.235	0.228	3.0	90	0.00
7	T	Dichlorofluoromethane	0.627	0.644	-2.7	88	0.00
8	T	Trichlorofluoromethane	0.564	0.596	-5.7	91	0.00
9	T	sec-Propyl alcohol	0.000	0.000	0.0	36583#	0.18
10	T	Acrolein	0.014	0.017	-21.4#	99	0.00
11	T	1,1,2-Trichloro-1,2,2-trifl	0.279	0.286	-2.5	88	0.00
12	T	Acetone	0.036	0.033	8.3	86	0.00
13	C,TM	1,1-Dichloroethene	0.491	0.494	-0.6	87	0.00
14	T	tert-Butyl alcohol	0.007	0.006	14.3	77	0.00
15	T	Acetonitrile	0.000	0.000	0.0	97	0.02
16	T	Iodomethane	0.306	0.317	-3.6	74	0.00
17	T	Methyl acetate	0.081	0.069	14.8	82	0.00
18	T	Methylene chloride	0.313	0.315	-0.6	91	0.00
19	T	Carbon disulfide	1.062	1.061	0.1	87	0.00
20	T	Acrylonitrile	0.031	0.035	-12.9	93	0.00
21	T	tert-Butyl methyl ether (MT	0.353	0.312	11.6	74	0.00
22	T	trans-1,2-Dichloroethene	0.418	0.420	-0.5	87	0.00
23	T	Isopropyl ether (DIPE)	0.739	0.764	-3.4	92	0.00
24	P,T	1,1-Dichloroethane	0.552	0.579	-4.9	89	0.00
25	T	Vinyl acetate	0.221	0.241	-9.0	93	0.00
26	T	tert-Butyl ethyl ether (ETB	0.521	0.445	14.6	70	0.00
27	T	2-Butanone	0.040	0.040	0.0	84	0.00
28	T	2,2-Dichloropropane	0.329	0.312	5.2	79	0.00
29	T	cis-1,2-Dichloroethene	0.464	0.476	-2.6	86	0.00
30	T	tert-Butyl formate (TBF)	0.000	0.000	0.0	7#	-0.08
31	C,T	Chloroform	0.535	0.565	-5.6	90	0.00
32	T	Bromochloromethane	0.177	0.194	-9.6	92	0.00
33	T	Tetrahydrofuran	0.000	0.000	0.0	1877#	-0.32
34	T	1,1,1-Trichloroethane	0.481	0.497	-3.3	88	0.00
35	T	Cyclohexane	0.491	0.440	10.4	69	0.00
36	T	tert-Amyl methyl ether (TAM	0.358	0.295	17.6	67	0.00
37	S	1,2-Dichloroethane-d4	0.186	0.196	-5.4	83	0.00
38	I	CHLOROBENZENE-D5	1.000	1.000	0.0	86	0.00
39	T	1,1-Dichloropropene	0.186	0.193	-3.8	88	0.00
40	T	Carbon tetrachloride	0.591	0.597	-1.0	87	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G12\RGQ193.D Vial: 3
Acq On : 13 Jul 2006 1:09 am Operator: DN
Sample : CVO05G0616 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	T	1,2-Dichloroethane	0.322	0.332	-3.1	87	0.00
42	M,T	Benzene	1.486	1.544	-3.9	89	0.00
43	M,T	Trichloroethene	0.481	0.493	-2.5	88	0.00
44	T	Methylcyclohexane	0.629	0.671	-6.7	82	0.00
45	C,T	1,2-Dichloropropane	0.329	0.348	-5.8	90	0.00
46	T	Bromodichloromethane	0.445	0.477	-7.2	90	0.00
47	T	Dibromomethane	0.169	0.176	-4.1	89	0.00
48	T	2-Chloroethyl vinyl ether	0.031	0.004	87.1#	11#	0.23
49	T	4-Methyl-2-pentanone	0.118	0.117	0.8	79	0.00
50	T	cis-1,3-Dichloropropene	0.443	0.461	-4.1	86	0.00
51	S	Toluene-d8	1.231	1.315	-6.8	85	0.00
52	C,TM	Toluene	0.903	0.974	-7.9	90	0.00
53	T	Ethyl methacrylate	0.209	0.231	-10.5	90	0.00
54	T	trans-1,3-Dichloropropene	0.281	0.301	-7.1	85	0.00
55	T	1,1,2-Trichloroethane	0.195	0.214	-9.7	93	0.00
56	T	2-Hexanone	0.073	0.075	-2.7	82	0.00
57	T	1,3-Dichloropropane	0.333	0.359	-7.8	92	0.00
58	T	Tetrachloroethene	0.349	0.366	-4.9	89	0.00
59	T	Dibromochloromethane	0.280	0.303	-8.2	91	0.00
60	T	2-Ethyl-1-butanol	0.000	0.000	0.0	89	0.00
61	T	1,2-Dibromoethane	0.197	0.218	-10.7	91	0.00
62	T	1-Chlorohexane	0.562	0.609	-8.4	88	0.00
63	P,M	Chlorobenzene	1.023	1.076	-5.2	90	0.00
64	T	1,1,1,2-Tetrachloroethane	0.317	0.341	-7.6	89	0.00
65	C,T	Ethylbenzene	1.710	1.815	-6.1	90	0.00
66	T	m-Xylene & p-Xylene	1.333	1.374	-3.1	89	0.00
67	T	o-Xylene	1.237	1.336	-8.0	89	0.00
68	T	Styrene	0.966	1.055	-9.2	89	0.00
69	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	89	0.00
70	P,T	Bromoform	0.399	0.430	-7.8	94	0.00
71	T	Isopropylbenzene	4.549	4.645	-2.1	91	0.00
72	P,T	1,1,2,2-Tetrachloroethane	0.562	0.591	-5.2	92	0.00
73	S	4-Bromofluorobenzene	1.099	1.111	-1.1	84	0.00
74	T	1,2,3-Trichloropropane	0.097	0.097	0.0	89	0.00
75	T	trans-1,4-Dichloro-2-butene	0.104	0.104	0.0	87	0.00
76	T	n-Propylbenzene	5.965	6.067	-1.7	89	0.00
77	T	Bromobenzene	0.971	1.020	-5.0	92	0.00
78	T	2-Chlorotoluene	3.529	3.566	-1.0	89	0.00
79	T	1,3,5-Trimethylbenzene	3.862	3.940	-2.0	90	0.00
80	T	4-Chlorotoluene	3.274	3.297	-0.7	89	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G12\RGQ193.D Vial: 3
Acq On : 13 Jul 2006 1:09 am Operator: DN
Sample : CVO05G0616 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T	tert-Butylbenzene	3.849	3.957	-2.8	90	0.00
82	T	1,2,4-Trimethylbenzene	3.792	3.837	-1.2	89	0.00
83	T	sec-Butylbenzene	5.567	5.722	-2.8	90	0.00
84	T	p-Isopropyltoluene	4.183	4.198	-0.4	88	0.00
85	T	1,3-Dichlorobenzene	1.964	2.016	-2.6	90	0.00
86	T	1,4-Dichlorobenzene	1.921	1.931	-0.5	88	0.00
87	T	n-Butylbenzene	4.082	4.151	-1.7	87	0.00
88	T	1,2-Dichlorobenzene	1.615	1.647	-2.0	91	0.00
89	T	1,2-Dibromo-3-chloropropane	0.081	0.088	-8.6	93	0.00
90	T	1,2,4-Trichlorobenzene	1.094	1.097	-0.3	86	0.00
91	T	Hexachlorobutadiene	0.793	0.794	-0.1	88	0.00
92	T	Naphthalene	1.323	1.224	7.5	79	0.00
93	T	1,2,3-Trichlorobenzene	0.880	0.870	1.1	85	0.00

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RGQ233
Instrument ID: T-005
GC Column:RTX502.2ID:0.32mm (mm)

Contract: OMEGA CHEMICAL
SAS No.: SDG No.: 06G039
BFB Injection Date : 07/14/06
BFB Injection Time : 02:33
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.01
75	30.0 - 60.0% of mass 95	44.19
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.83
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	90.56
175	5.0 - 9.0% of mass 174	6.54(7.2)1
176	95.0 - 101.0% of mass 174	88.17(97.4)1
177	5.0 - 9.0% of mass 176	5.74(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	CV005G0620	CV005G0620	RGQ234	07/14/06	03:10
2	LCS2W	V005G22L	RGQ235	07/14/06	03:47
3	LCD2W	V005G22C	RGQ236	07/14/06	04:24
4	MBLK2W	V005G22Q	RGQ238	07/14/06	05:39
5	OC2-PMW15-5-21DL	G039-04T	RGQ243	07/14/06	08:44
6	OC2-PMW15-1-20DL	G039-05T	RGQ244	07/14/06	09:21
7	OC2-PMW18A-0-22RE	G039-06R	RGQ245	07/14/06	09:59
8	OC2-PMW15-0-17	G039-01	RGQ246	07/14/06	10:36
9	OC2-PMW18B-0-23	G039-07	RGQ248	07/14/06	11:49
10	OC2-00-W-4-18	G039-03	RGQ249	07/14/06	12:26
11	OC2-PMW15-0-17MSD	G039-01S	RGQ251	07/14/06	13:39
12	OC2-PMW15-0-17MS	G039-01U	RGQ252	07/14/06	14:16

FORM V VOA OLM02.0

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGQ022
Instrument ID: T-005
GC Column: RTX502.2 ID: 0.32mm (mm)

Project:OMEGA CHEMICAL
SDG No.: 06G039
Date Analyzed: 07/06/06
Time Analyzed: 20:44
Heated Purge: (Y/N) N

		IS1(DBF)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	1714798	8.52	1317081	14.42	464640	20.72
	UPPER LIMIT	3429596	9.02	2634162	14.92	929280	21.22
	LOWER LIMIT	857399	8.02	658541	13.92	232320	20.22
	SAMPLE ID						
1	VSTD010	1395790	8.53	1094257	14.44	391084	20.73
2	MBLK3W	1568192	8.52	1204677	14.43	412130	20.72
3	LCS3W	1370426	8.53	1071275	14.43	376965	20.72
4	LCD3W	1453262	8.52	1116875	14.43	394718	20.71
5	OC2-PMW18C-0-24	1371605	8.52	1041812	14.43	356070	20.71
6	OC2-PMW15-0-17DL	1319272	8.52	1018058	14.43	336163	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\06G14\RGQ276.D Vial: 3
Acq On : 15 Jul 2006 5:01 am Operator: DN
Sample : CVO05G0624 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	81	0.00
2	T	Dichlorodifluoromethane	10.000	9.513	4.9	78	0.00
3	P,T	Chloromethane	10.000	10.091	-0.9	83	0.00
4	C,T	Vinyl chloride	10.000	10.289	-2.9	84	0.00
5	T	Bromomethane	10.000	12.309	-23.1#	108	0.00
6	T	Chloroethane	10.000	9.794	2.1	87	0.00
7	T	Dichlorofluoromethane	10.000	10.149	-1.5	84	0.00
8	T	Trichlorofluoromethane	10.000	10.293	-2.9	85	0.00
9	T	sec-Propyl alcohol	-1.000	0.000	0.0	28419	0.18
10	T	Acrolein	20.000	23.961	-19.8	96	0.02
11	T	1,1,2-Trichloro-1,2,2-trifl	10.000	10.307	-3.1	85	0.00
12	T	Acetone	20.000	16.127	19.4	71	0.00
13	C,TM	1,1-Dichloroethene	10.000	10.103	-1.0	84	0.00
14	T	tert-Butyl alcohol	50.000	44.424	11.2	73	0.00
15	T	Acetonitrile	-1.000	0.000	0.0	100	0.02
16	T	Iodomethane	10.000	8.983	10.2	71	0.02
17	T	Methyl acetate	10.000	9.649	3.5	77	0.02
18	T	Methylene chloride	10.000	10.204	-2.0	88	0.00
19	T	Carbon disulfide	10.000	9.749	2.5	81	0.00
20	T	Acrylonitrile	20.000	24.037	-20.2#	96	0.00
21	T	tert-Butyl methyl ether (MT	10.000	8.670	13.3	70	0.00
22	T	trans-1,2-Dichloroethene	10.000	10.000	0.0	83	0.00
23	T	Isopropyl ether (DIPE)	10.000	8.401	16.0	72	0.00
24	P,T	1,1-Dichloroethane	10.000	10.271	-2.7	83	0.00
25	T	Vinyl acetate	10.000	10.763	-7.6	88	0.00
26	T	tert-Butyl ethyl ether (ETB	10.000	8.177	18.2	64	0.00
27	T	2-Butanone	20.000	21.225	-6.1	86	0.00
28	T	2,2-Dichloropropane	10.000	9.347	6.5	74	0.00
29	T	cis-1,2-Dichloroethene	10.000	10.316	-3.2	83	0.00
30	T	tert-Butyl formate (TBF)	-1.000	0.000	0.0	73	0.00
31	C,T	Chloroform	10.000	10.671	-6.7	87	0.00
32	T	Bromochloromethane	10.000	11.286	-12.9	90	0.02
33	T	Tetrahydrofuran	-1.000	0.000	0.0	1799	-0.31
34	T	1,1,1-Trichloroethane	10.000	10.375	-3.8	84	0.00
35	T	Cyclohexane	10.000	8.370	16.3	61	0.00
36	T	tert-Amyl methyl ether (TAM	10.000	8.243	17.6	64	0.00
37	S	1,2-Dichloroethane-d4	10.000	10.930	-9.3	82	0.00
38	I	CHLOROBENZENE-D5	10.000	10.000	0.0	83	0.02
39	T	1,1-Dichloropropene	10.000	10.088	-0.9	82	0.00
40	T	Carbon tetrachloride	10.000	9.882	1.2	82	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G14\RGQ276.D Vial: 3
Acq On : 15 Jul 2006 5:01 am Operator: DN
Sample : CVO05G0624 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	T	1,2-Dichloroethane	10.000	10.515	-5.2	86	0.00
42	M,T	Benzene	10.000	10.396	-4.0	86	0.00
43	M,T	Trichloroethene	10.000	10.214	-2.1	85	0.00
44	T	Methylcyclohexane	10.000	9.944	0.6	74	0.00
45	C,T	1,2-Dichloropropane	10.000	10.662	-6.6	88	0.00
46	T	Bromodichloromethane	10.000	10.849	-8.5	88	0.00
47	T	Dibromomethane	10.000	10.849	-8.5	90	0.02
48	T	2-Chloroethyl vinyl ether	10.000	0.869	91.3#	8	0.23
49	T	4-Methyl-2-pentanone	20.000	21.405	-7.0	82	0.00
50	T	cis-1,3-Dichloropropene	10.000	10.354	-3.5	82	0.00
51	S	Toluene-d8	10.000	10.554	-5.5	81	0.02
52	C,TM	Toluene	10.000	10.759	-7.6	87	0.00
53	T	Ethyl methacrylate	10.000	11.002	-10.0	86	0.00
54	T	trans-1,3-Dichloropropene	10.000	10.739	-7.4	82	0.00
55	T	1,1,2-Trichloroethane	10.000	11.286	-12.9	91	0.02
56	T	2-Hexanone	20.000	22.856	-14.3	87	0.00
57	T	1,3-Dichloropropane	10.000	10.861	-8.6	89	0.02
58	T	Tetrachloroethene	10.000	10.613	-6.1	87	0.00
59	T	Dibromochloromethane	10.000	10.953	-9.5	89	0.02
60	T	2-Ethyl-1-butanol	-1.000	0.000	0.0	79	0.00
61	T	1,2-Dibromoethane	10.000	11.331	-13.3	90	0.00
62	T	1-Chlorohexane	10.000	10.496	-5.0	82	0.00
63	P,M	Chlorobenzene	10.000	10.533	-5.3	86	0.00
64	T	1,1,1,2-Tetrachloroethane	10.000	10.812	-8.1	86	0.00
65	C,T	Ethylbenzene	10.000	10.435	-4.4	85	0.00
66	T	m-Xylene & p-Xylene	20.000	20.458	-2.3	85	0.02
67	T	o-Xylene	10.000	10.733	-7.3	85	0.00
68	T	Styrene	10.000	10.964	-9.6	86	0.00
69	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	84	0.00
70	P,T	Bromoform	10.000	11.237	-12.4	92	0.02
71	T	Isopropylbenzene	10.000	10.184	-1.8	86	0.00
72	P,T	1,1,2,2-Tetrachloroethane	10.000	11.094	-10.9	92	0.02
73	S	4-Bromofluorobenzene	10.000	10.092	-0.9	80	0.02
74	T	1,2,3-Trichloropropane	10.000	10.901	-9.0	91	0.00
75	T	trans-1,4-Dichloro-2-butene	10.000	10.032	-0.3	83	0.02
76	T	n-Propylbenzene	10.000	10.247	-2.5	85	0.00
77	T	Bromobenzene	10.000	10.651	-6.5	89	0.02
78	T	2-Chlorotoluene	10.000	10.190	-1.9	85	0.02
79	T	1,3,5-Trimethylbenzene	10.000	10.117	-1.2	85	0.00
80	T	4-Chlorotoluene	10.000	10.042	-0.4	84	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G14\RGQ276.D Vial: 3
Acq On : 15 Jul 2006 5:01 am Operator: DN
Sample : CVO05G0624 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T	tert-Butylbenzene	10.000	10.227	-2.3	85	0.02
82	T	1,2,4-Trimethylbenzene	10.000	10.098	-1.0	84	0.00
83	T	sec-Butylbenzene	10.000	10.254	-2.5	85	0.00
84	T	p-Isopropyltoluene	10.000	9.974	0.3	83	0.00
85	T	1,3-Dichlorobenzene	10.000	10.167	-1.7	84	0.02
86	T	1,4-Dichlorobenzene	10.000	10.055	-0.5	83	0.00
87	T	n-Butylbenzene	10.000	9.857	1.4	80	0.00
88	T	1,2-Dichlorobenzene	10.000	10.315	-3.1	87	0.00
89	T	1,2-Dibromo-3-chloropropane	10.000	10.891	-8.9	89	0.00
90	T	1,2,4-Trichlorobenzene	10.000	9.836	1.6	80	0.02
91	T	Hexachlorobutadiene	10.000	9.975	0.3	83	0.00
92	T	Naphthalene	10.000	9.182	8.2	74	0.00
93	T	1,2,3-Trichlorobenzene	10.000	9.939	0.6	81	0.00

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

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G14\RGQ276.D Vial: 3
Acq On : 15 Jul 2006 5:01 am Operator: DN
Sample : CVO05G0624 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	81	0.00
2	T	Dichlorodifluoromethane	0.506	0.482	4.7	78	0.00
3	P,T	Chloromethane	0.370	0.373	-0.8	83	0.00
4	C,T	Vinyl chloride	0.366	0.376	-2.7	84	0.00
5	T	Bromomethane	0.290	0.356	-22.8#	108	0.00
6	T	Chloroethane	0.235	0.231	1.7	87	0.00
7	T	Dichlorofluoromethane	0.627	0.636	-1.4	84	0.00
8	T	Trichlorofluoromethane	0.564	0.581	-3.0	85	0.00
9	T	sec-Propyl alcohol	0.000	0.000	0.0	28419#	0.18
10	T	Acrolein	0.014	0.017	-21.4#	96	0.02
11	T	1,1,2-Trichloro-1,2,2-trifl	0.279	0.288	-3.2	85	0.00
12	T	Acetone	0.036	0.029	19.4	71	0.00
13	C,TM	1,1-Dichloroethene	0.491	0.496	-1.0	84	0.00
14	T	tert-Butyl alcohol	0.007	0.006	14.3	73	0.00
15	T	Acetonitrile	0.000	0.000	0.0	100	0.02
16	T	Iodomethane	0.306	0.321	-4.9	71	0.02
17	T	Methyl acetate	0.081	0.068	16.0	77	0.02
18	T	Methylene chloride	0.313	0.320	-2.2	88	0.00
19	T	Carbon disulfide	1.062	1.035	2.5	81	0.00
20	T	Acrylonitrile	0.031	0.038	-22.6#	96	0.00
21	T	tert-Butyl methyl ether (MT	0.353	0.306	13.3	70	0.00
22	T	trans-1,2-Dichloroethene	0.418	0.418	0.0	83	0.00
23	T	Isopropyl ether (DIPE)	0.739	0.621	16.0	72	0.00
24	P,T	1,1-Dichloroethane	0.552	0.567	-2.7	83	0.00
25	T	Vinyl acetate	0.221	0.238	-7.7	88	0.00
26	T	tert-Butyl ethyl ether (ETB	0.521	0.426	18.2	64	0.00
27	T	2-Butanone	0.040	0.043	-7.5	86	0.00
28	T	2,2-Dichloropropane	0.329	0.307	6.7	74	0.00
29	T	cis-1,2-Dichloroethene	0.464	0.478	-3.0	83	0.00
30	T	tert-Butyl formate (TBF)	0.000	0.000	0.0	73	0.00
31	C,T	Chloroform	0.535	0.571	-6.7	87	0.00
32	T	Bromochloromethane	0.177	0.199	-12.4	90	0.02
33	T	Tetrahydrofuran	0.000	0.000	0.0	1799#	-0.31
34	T	1,1,1-Trichloroethane	0.481	0.499	-3.7	84	0.00
35	T	Cyclohexane	0.491	0.411	16.3	61	0.00
36	T	tert-Amyl methyl ether (TAM	0.358	0.295	17.6	64	0.00
37	S	1,2-Dichloroethane-d4	0.186	0.203	-9.1	82	0.00
38	I	CHLOROBENZENE-D5	1.000	1.000	0.0	83	0.02
39	T	1,1-Dichloropropene	0.186	0.187	-0.5	82	0.00
40	T	Carbon tetrachloride	0.591	0.584	1.2	82	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G14\RGQ276.D Vial: 3
Acq On : 15 Jul 2006 5:01 am Operator: DN
Sample : CVO05G0624 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	T	1,2-Dichloroethane	0.322	0.339	-5.3	86	0.00
42	M,T	Benzene	1.486	1.545	-4.0	86	0.00
43	M,T	Trichloroethene	0.481	0.491	-2.1	85	0.00
44	T	Methylcyclohexane	0.629	0.626	0.5	74	0.00
45	C,T	1,2-Dichloropropane	0.329	0.351	-6.7	88	0.00
46	T	Bromodichloromethane	0.445	0.483	-8.5	88	0.00
47	T	Dibromomethane	0.169	0.184	-8.9	90	0.02
48	T	2-Chloroethyl vinyl ether	0.031	0.003	90.3#	8#	0.23
49	T	4-Methyl-2-pentanone	0.118	0.126	-6.8	82	0.00
50	T	cis-1,3-Dichloropropene	0.443	0.459	-3.6	82	0.00
51	S	Toluene-d8	1.231	1.300	-5.6	81	0.02
52	C,TM	Toluene	0.903	0.972	-7.6	87	0.00
53	T	Ethyl methacrylate	0.209	0.230	-10.0	86	0.00
54	T	trans-1,3-Dichloropropene	0.281	0.301	-7.1	82	0.00
55	T	1,1,2-Trichloroethane	0.195	0.220	-12.8	91	0.02
56	T	2-Hexanone	0.073	0.083	-13.7	87	0.00
57	T	1,3-Dichloropropane	0.333	0.362	-8.7	89	0.02
58	T	Tetrachloroethene	0.349	0.371	-6.3	87	0.00
59	T	Dibromochloromethane	0.280	0.306	-9.3	89	0.02
60	T	2-Ethyl-1-butanol	0.000	0.000	0.0	79	0.00
61	T	1,2-Dibromoethane	0.197	0.223	-13.2	90	0.00
62	T	1-Chlorohexane	0.562	0.590	-5.0	82	0.00
63	P,M	Chlorobenzene	1.023	1.077	-5.3	86	0.00
64	T	1,1,1,2-Tetrachloroethane	0.317	0.343	-8.2	86	0.00
65	C,T	Ethylbenzene	1.710	1.784	-4.3	85	0.00
66	T	m-Xylene & p-Xylene	1.333	1.363	-2.3	85	0.02
67	T	o-Xylene	1.237	1.327	-7.3	85	0.00
68	T	Styrene	0.966	1.059	-9.6	86	0.00
69	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	84	0.00
70	P,T	Bromoform	0.399	0.448	-12.3	92	0.02
71	T	Isopropylbenzene	4.549	4.633	-1.8	86	0.00
72	P,T	1,1,2,2-Tetrachloroethane	0.562	0.623	-10.9	92	0.02
73	S	4-Bromofluorobenzene	1.099	1.109	-0.9	80	0.02
74	T	1,2,3-Trichloropropane	0.097	0.105	-8.2	91	0.00
75	T	trans-1,4-Dichloro-2-butene	0.104	0.105	-1.0	83	0.02
76	T	n-Propylbenzene	5.965	6.112	-2.5	85	0.00
77	T	Bromobenzene	0.971	1.034	-6.5	89	0.02
78	T	2-Chlorotoluene	3.529	3.596	-1.9	85	0.02
79	T	1,3,5-Trimethylbenzene	3.862	3.907	-1.2	85	0.00
80	T	4-Chlorotoluene	3.274	3.288	-0.4	84	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G14\RGQ276.D Vial: 3
Acq On : 15 Jul 2006 5:01 am Operator: DN
Sample : CVO05G0624 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T	tert-Butylbenzene	3.849	3.936	-2.3	85	0.02
82	T	1,2,4-Trimethylbenzene	3.792	3.829	-1.0	84	0.00
83	T	sec-Butylbenzene	5.567	5.709	-2.6	85	0.00
84	T	p-Isopropyltoluene	4.183	4.172	0.3	83	0.00
85	T	1,3-Dichlorobenzene	1.964	1.997	-1.7	84	0.02
86	T	1,4-Dichlorobenzene	1.921	1.932	-0.6	83	0.00
87	T	n-Butylbenzene	4.082	4.024	1.4	80	0.00
88	T	1,2-Dichlorobenzene	1.615	1.666	-3.2	87	0.00
89	T	1,2-Dibromo-3-chloropropane	0.081	0.088	-8.6	89	0.00
90	T	1,2,4-Trichlorobenzene	1.094	1.076	1.6	80	0.02
91	T	Hexachlorobutadiene	0.793	0.791	0.3	83	0.00
92	T	Naphthalene	1.323	1.215	8.2	74	0.00
93	T	1,2,3-Trichlorobenzene	0.880	0.874	0.7	81	0.00

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RGQ275
Instrument ID: T-005
GC Column:RTX502.2ID:0.32mm (mm)

Contract: OMEGA CHEMICAL
SAS No.: SDG No.: 06G039
BFB Injection Date : 07/15/06
BFB Injection Time : 04:24
Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.58
75	30.0 - 60.0% of mass 95	40.90
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.88
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	88.48
175	5.0 - 9.0% of mass 174	6.46(7.3)1
176	95.0 - 101.0% of mass 174	85.98(97.2)1
177	5.0 - 9.0% of mass 176	5.55(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	CV005G0624	RGQ276	07/15/06	05:01
2	LCS3W	V005G25L	RGQ278	07/15/06	06:15
3	LCD3W	V005G25C	RGQ279	07/15/06	06:52
4	MBLK3W	V005G25Q	RGQ281	07/15/06	08:06
5	OC2-PMW15-0-17DL	G039-01T	RGQ282	07/15/06	08:43
6	OC2-PMW18C-0-24	G039-08R	RGQ283	07/15/06	09:20

FORM V VOA OLM02.0

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGQ022
Instrument ID: T-005
GC Column: RTX502.2 ID: 0.32mm (mm)

Project:OMEGA CHEMICAL
SDG No.: 06G039
Date Analyzed: 07/06/06
Time Analyzed: 20:44
Heated Purge: (Y/N) N

		IS1(DBF)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	1714798	8.52	1317081	14.42	464640	20.72
	UPPER LIMIT	3429596	9.02	2634162	14.92	929280	21.22
	LOWER LIMIT	857399	8.02	658541	13.92	232320	20.22
	SAMPLE ID						
1	VSTD010	1376600	8.52	1082919	14.42	391489	20.71
2	MBLK2W	1472826	8.52	1134141	14.43	385483	20.72
3	LCS2W	1525241	8.52	1170556	14.42	413938	20.72
4	LCD2W	1583098	8.52	1223290	14.43	437519	20.72
5	OC2-PMW15-0-17	1426651	8.52	1121395	14.43	368657	20.72
6	OC2-PMW15-0-17MS	1486282	8.53	1132159	14.45	381415	20.74
7	OC2-PMW15-0-17MSD	1406334	8.53	1111058	14.44	394262	20.73
8	OC2-00-W-4-18	1382359	8.53	1064974	14.43	355449	20.72
9	OC2-PMW18A-0-22RE	1394760	8.52	1081885	14.43	369311	20.72
10	OC2-PMW18B-0-23	1342364	8.53	1037347	14.44	352954	20.72
11	OC2-PMW15-5-21DL	1248547	8.52	950366	14.43	319037	20.71
12	OC2-PMW15-1-20DL	1286114	8.52	981463	14.43	328876	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\06G13\RGQ234.D Vial: 4
Acq On : 14 Jul 2006 3:10 am Operator: DN
Sample : CVO05G0621 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	80	0.00
2	T	Dichlorodifluoromethane	10.000	9.948	0.5	81	0.00
3	P,T	Chloromethane	10.000	10.418	-4.2	84	0.00
4	C,T	Vinyl chloride	10.000	10.522	-5.2	85	0.00
5	T	Bromomethane	10.000	12.701	-27.0#	110	0.00
6	T	Chloroethane	10.000	9.828	1.7	86	0.00
7	T	Dichlorofluoromethane	10.000	10.674	-6.7	87	0.00
8	T	Trichlorofluoromethane	10.000	10.629	-6.3	86	0.00
9	T	sec-Propyl alcohol	-1.000	0.000	0.0	43	-0.02
10	T	Acrolein	20.000	21.888	-9.4	86	0.00
11	T	1,1,2-Trichloro-1,2,2-trifl	10.000	10.742	-7.4	87	0.00
12	T	Acetone	20.000	16.388	18.1	72	0.00
13	C,TM	1,1-Dichloroethene	10.000	10.621	-6.2	87	0.00
14	T	tert-Butyl alcohol	50.000	50.858	-1.7	83	0.00
15	T	Acetonitrile	-1.000	0.000	0.0	98	0.02
16	T	Iodomethane	10.000	9.026	9.7	71	0.00
17	T	Methyl acetate	10.000	9.050	9.5	71	0.00
18	T	Methylene chloride	10.000	10.536	-5.4	90	0.00
19	T	Carbon disulfide	10.000	10.136	-1.4	83	0.00
20	T	Acrylonitrile	20.000	22.992	-15.0	90	0.00
21	T	tert-Butyl methyl ether (MT	10.000	9.864	1.4	78	0.00
22	T	trans-1,2-Dichloroethene	10.000	10.474	-4.7	86	0.00
23	T	Isopropyl ether (DIPE)	10.000	9.052	9.5	76	-0.01
24	P,T	1,1-Dichloroethane	10.000	10.086	-0.9	80	0.00
25	T	Vinyl acetate	10.000	11.827	-18.3	96	0.00
26	T	tert-Butyl ethyl ether (ETB	10.000	9.500	5.0	73	0.00
27	T	2-Butanone	20.000	22.110	-10.5	88	0.00
28	T	2,2-Dichloropropane	10.000	10.219	-2.2	80	0.00
29	T	cis-1,2-Dichloroethene	10.000	10.850	-8.5	86	0.00
30	T	tert-Butyl formate (TBF)	-1.000	0.000	0.0	79	-0.02
31	C,T	Chloroform	10.000	11.058	-10.6	89	0.00
32	T	Bromochloromethane	10.000	11.592	-15.9	91	0.00
33	T	Tetrahydrofuran	-1.000	0.000	0.0	1804	-0.33
34	T	1,1,1-Trichloroethane	10.000	10.899	-9.0	87	0.00
35	T	Cyclohexane	10.000	6.880	31.2#	50	0.00
36	T	tert-Amyl methyl ether (TAM	10.000	9.308	6.9	71	0.00
37	S	1,2-Dichloroethane-d4	10.000	10.993	-9.9	82	0.00
38	I	CHLOROBENZENE-D5	10.000	10.000	0.0	82	0.00
39	T	1,1-Dichloropropene	10.000	10.540	-5.4	85	0.00
40	T	Carbon tetrachloride	10.000	10.355	-3.6	85	-0.01

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\06G13\RGQ234.D Vial: 4
Acq On : 14 Jul 2006 3:10 am Operator: DN
Sample : CVO05G0621 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	T	1,2-Dichloroethane	10.000	11.015	-10.2	89	0.00
42	M,T	Benzene	10.000	10.736	-7.4	88	0.00
43	M,T	Trichloroethene	10.000	10.650	-6.5	87	0.00
44	T	Methylcyclohexane	10.000	7.545	24.6#	56	0.00
45	C,T	1,2-Dichloropropane	10.000	11.058	-10.6	90	-0.01
46	T	Bromodichloromethane	10.000	11.306	-13.1	90	0.00
47	T	Dibromomethane	10.000	10.972	-9.7	90	0.00
48	T	2-Chloroethyl vinyl ether	10.000	1.268	87.3#	11	0.23
49	T	4-Methyl-2-pentanone	20.000	22.167	-10.8	84	0.00
50	T	cis-1,3-Dichloropropene	10.000	11.107	-11.1	87	0.00
51	S	Toluene-d8	10.000	10.639	-6.4	80	0.00
52	C,TM	Toluene	10.000	11.255	-12.6	90	0.00
53	T	Ethyl methacrylate	10.000	11.858	-18.6	91	0.00
54	T	trans-1,3-Dichloropropene	10.000	11.477	-14.8	87	0.00
55	T	1,1,2-Trichloroethane	10.000	11.968	-19.7	96	0.00
56	T	2-Hexanone	20.000	23.948	-19.7	90	0.00
57	T	1,3-Dichloropropane	10.000	11.389	-13.9	93	0.00
58	T	Tetrachloroethene	10.000	11.110	-11.1	90	0.00
59	T	Dibromochloromethane	10.000	11.426	-14.3	92	0.00
60	T	2-Ethyl-1-butanol	-1.000	0.000	0.0	85	0.00
61	T	1,2-Dibromoethane	10.000	11.761	-17.6	92	0.00
62	T	1-Chlorohexane	10.000	11.191	-11.9	87	0.00
63	P,M	Chlorobenzene	10.000	11.001	-10.0	89	0.00
64	T	1,1,1,2-Tetrachloroethane	10.000	11.375	-13.8	90	0.00
65	C,T	Ethylbenzene	10.000	10.975	-9.7	89	0.00
66	T	m-Xylene & p-Xylene	20.000	21.618	-8.1	88	0.00
67	T	o-Xylene	10.000	11.180	-11.8	88	0.00
68	T	Styrene	10.000	11.475	-14.7	89	0.00
69	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	84	-0.01
70	P,T	Bromoform	10.000	11.750	-17.5	97	0.00
71	T	Isopropylbenzene	10.000	10.656	-6.6	90	0.00
72	P,T	1,1,2,2-Tetrachloroethane	10.000	11.727	-17.3	97	0.00
73	S	4-Bromofluorobenzene	10.000	10.067	-0.7	80	0.00
74	T	1,2,3-Trichloropropane	10.000	10.957	-9.6	91	0.00
75	T	trans-1,4-Dichloro-2-butene	10.000	10.616	-6.2	88	0.00
76	T	n-Propylbenzene	10.000	10.653	-6.5	89	0.00
77	T	Bromobenzene	10.000	11.009	-10.1	92	0.00
78	T	2-Chlorotoluene	10.000	10.382	-3.8	86	0.00
79	T	1,3,5-Trimethylbenzene	10.000	10.476	-4.8	88	0.00
80	T	4-Chlorotoluene	10.000	10.642	-6.4	90	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G13\RGQ234.D Vial: 4
Acq On : 14 Jul 2006 3:10 am Operator: DN
Sample : CVO05G0621 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T	tert-Butylbenzene	10.000	10.559	-5.6	88	0.00
82	T	1,2,4-Trimethylbenzene	10.000	10.543	-5.4	88	-0.01
83	T	sec-Butylbenzene	10.000	10.561	-5.6	88	0.00
84	T	p-Isopropyltoluene	10.000	10.400	-4.0	87	0.00
85	T	1,3-Dichlorobenzene	10.000	10.659	-6.6	89	0.00
86	T	1,4-Dichlorobenzene	10.000	10.637	-6.4	88	0.00
87	T	n-Butylbenzene	10.000	10.525	-5.3	85	-0.01
88	T	1,2-Dichlorobenzene	10.000	10.845	-8.5	92	0.00
89	T	1,2-Dibromo-3-chloropropane	10.000	11.786	-17.9	96	0.00
90	T	1,2,4-Trichlorobenzene	10.000	10.903	-9.0	88	0.00
91	T	Hexachlorobutadiene	10.000	10.409	-4.1	87	-0.01
92	T	Naphthalene	10.000	11.161	-11.6	90	0.00
93	T	1,2,3-Trichlorobenzene	10.000	11.143	-11.4	91	0.00

Data File : D:\HPCHEM\1\DATA\06G13\RGQ234.D Vial: 4
Acq On : 14 Jul 2006 3:10 am Operator: DN
Sample : CVO05G0621 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	80	0.00
2	T	Dichlorodifluoromethane	0.506	0.504	0.4	81	0.00
3	P,T	Chloromethane	0.370	0.385	-4.1	84	0.00
4	C,T	Vinyl chloride	0.366	0.385	-5.2	85	0.00
5	T	Bromomethane	0.290	0.368	-26.9#	110	0.00
6	T	Chloroethane	0.235	0.231	1.7	86	0.00
7	T	Dichlorofluoromethane	0.627	0.669	-6.7	87	0.00
8	T	Trichlorofluoromethane	0.564	0.600	-6.4	86	0.00
9	T	sec-Propyl alcohol	0.000	0.000	0.0	43#	-0.02
10	T	Acrolein	0.014	0.016	-14.3	86	0.00
11	T	1,1,2-Trichloro-1,2,2-trifl	0.279	0.300	-7.5	87	0.00
12	T	Acetone	0.036	0.029	19.4	72	0.00
13	C,TM	1,1-Dichloroethene	0.491	0.522	-6.3	87	0.00
14	T	tert-Butyl alcohol	0.007	0.007	0.0	83	0.00
15	T	Acetonitrile	0.000	0.000	0.0	98	0.02
16	T	Iodomethane	0.306	0.323	-5.6	71	0.00
17	T	Methyl acetate	0.081	0.064	21.0#	71	0.00
18	T	Methylene chloride	0.313	0.330	-5.4	90	0.00
19	T	Carbon disulfide	1.062	1.076	-1.3	83	0.00
20	T	Acrylonitrile	0.031	0.036	-16.1	90	0.00
21	T	tert-Butyl methyl ether (MT	0.353	0.349	1.1	78	0.00
22	T	trans-1,2-Dichloroethene	0.418	0.438	-4.8	86	0.00
23	T	Isopropyl ether (DIPE)	0.739	0.669	9.5	76	-0.01
24	P,T	1,1-Dichloroethane	0.552	0.556	-0.7	80	0.00
25	T	Vinyl acetate	0.221	0.262	-18.6	96	0.00
26	T	tert-Butyl ethyl ether (ETB	0.521	0.495	5.0	73	0.00
27	T	2-Butanone	0.040	0.045	-12.5	88	0.00
28	T	2,2-Dichloropropane	0.329	0.336	-2.1	80	0.00
29	T	cis-1,2-Dichloroethene	0.464	0.503	-8.4	86	0.00
30	T	tert-Butyl formate (TBF)	0.000	0.000	0.0	79	-0.02
31	C,T	Chloroform	0.535	0.592	-10.7	89	0.00
32	T	Bromochloromethane	0.177	0.205	-15.8	91	0.00
33	T	Tetrahydrofuran	0.000	0.000	0.0	1804#	-0.33
34	T	1,1,1-Trichloroethane	0.481	0.524	-8.9	87	0.00
35	T	Cyclohexane	0.491	0.338	31.2#	50#	0.00
36	T	tert-Amyl methyl ether (TAM	0.358	0.333	7.0	71	0.00
37	S	1,2-Dichloroethane-d4	0.186	0.205	-10.2	82	0.00
38	I	CHLOROBENZENE-D5	1.000	1.000	0.0	82	0.00
39	T	1,1-Dichloropropene	0.186	0.196	-5.4	85	0.00
40	T	Carbon tetrachloride	0.591	0.612	-3.6	85	-0.01

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\06G13\RGQ234.D Vial: 4
Acq On : 14 Jul 2006 3:10 am Operator: DN
Sample : CVO05G0621 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	T	1,2-Dichloroethane	0.322	0.355	-10.2	89	0.00
42	M,T	Benzene	1.486	1.596	-7.4	88	0.00
43	M,T	Trichloroethene	0.481	0.512	-6.4	87	0.00
44	T	Methylcyclohexane	0.629	0.475	24.5#	56	0.00
45	C,T	1,2-Dichloropropane	0.329	0.364	-10.6	90	-0.01
46	T	Bromodichloromethane	0.445	0.503	-13.0	90	0.00
47	T	Dibromomethane	0.169	0.186	-10.1	90	0.00
48	T	2-Chloroethyl vinyl ether	0.031	0.004	87.1#	11#	0.23
49	T	4-Methyl-2-pentanone	0.118	0.130	-10.2	84	0.00
50	T	cis-1,3-Dichloropropene	0.443	0.492	-11.1	87	0.00
51	S	Toluene-d8	1.231	1.310	-6.4	80	0.00
52	C,TM	Toluene	0.903	1.017	-12.6	90	0.00
53	T	Ethyl methacrylate	0.209	0.247	-18.2	91	0.00
54	T	trans-1,3-Dichloropropene	0.281	0.322	-14.6	87	0.00
55	T	1,1,2-Trichloroethane	0.195	0.233	-19.5	96	0.00
56	T	2-Hexanone	0.073	0.087	-19.2	90	0.00
57	T	1,3-Dichloropropane	0.333	0.379	-13.8	93	0.00
58	T	Tetrachloroethene	0.349	0.388	-11.2	90	0.00
59	T	Dibromochloromethane	0.280	0.320	-14.3	92	0.00
60	T	2-Ethyl-1-butanol	0.000	0.000	0.0	85	0.00
61	T	1,2-Dibromoethane	0.197	0.231	-17.3	92	0.00
62	T	1-Chlorohexane	0.562	0.629	-11.9	87	0.00
63	P,M	Chlorobenzene	1.023	1.125	-10.0	89	0.00
64	T	1,1,1,2-Tetrachloroethane	0.317	0.361	-13.9	90	0.00
65	C,T	Ethylbenzene	1.710	1.876	-9.7	89	0.00
66	T	m-Xylene & p-Xylene	1.333	1.441	-8.1	88	0.00
67	T	o-Xylene	1.237	1.383	-11.8	88	0.00
68	T	Styrene	0.966	1.108	-14.7	89	0.00
69	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	84	-0.01
70	P,T	Bromoform	0.399	0.469	-17.5	97	0.00
71	T	Isopropylbenzene	4.549	4.848	-6.6	90	0.00
72	P,T	1,1,2,2-Tetrachloroethane	0.562	0.659	-17.3	97	0.00
73	S	4-Bromofluorobenzene	1.099	1.106	-0.6	80	0.00
74	T	1,2,3-Trichloropropane	0.097	0.106	-9.3	91	0.00
75	T	trans-1,4-Dichloro-2-butene	0.104	0.111	-6.7	88	0.00
76	T	n-Propylbenzene	5.965	6.354	-6.5	89	0.00
77	T	Bromobenzene	0.971	1.069	-10.1	92	0.00
78	T	2-Chlorotoluene	3.529	3.663	-3.8	86	0.00
79	T	1,3,5-Trimethylbenzene	3.862	4.046	-4.8	88	0.00
80	T	4-Chlorotoluene	3.274	3.485	-6.4	90	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G13\RGQ234.D Vial: 4
Acq On : 14 Jul 2006 3:10 am Operator: DN
Sample : CVO05G0621 Inst : TO05
Misc : 10.0ppb/20.0ppbKET-AA/50.0ppbTBA Multiplr: 1.00
MS Integration Params: 524TAIL.P

Method : D:\HPCHEM\1\METHODS\VO05G06.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jul 07 09:30:05 2006
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T	tert-Butylbenzene	3.849	4.064	-5.6	88	0.00
82	T	1,2,4-Trimethylbenzene	3.792	3.998	-5.4	88	-0.01
83	T	sec-Butylbenzene	5.567	5.880	-5.6	88	0.00
84	T	p-Isopropyltoluene	4.183	4.350	-4.0	87	0.00
85	T	1,3-Dichlorobenzene	1.964	2.094	-6.6	89	0.00
86	T	1,4-Dichlorobenzene	1.921	2.043	-6.4	88	0.00
87	T	n-Butylbenzene	4.082	4.296	-5.2	85	-0.01
88	T	1,2-Dichlorobenzene	1.615	1.751	-8.4	92	0.00
89	T	1,2-Dibromo-3-chloropropane	0.081	0.095	-17.3	96	0.00
90	T	1,2,4-Trichlorobenzene	1.094	1.193	-9.0	88	0.00
91	T	Hexachlorobutadiene	0.793	0.826	-4.2	87	-0.01
92	T	Naphthalene	1.323	1.477	-11.6	90	0.00
93	T	1,2,3-Trichlorobenzene	0.880	0.980	-11.4	91	0.00

ANALYTICAL LOGS

ANALYSIS LOG FOR VOLATILES

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

Start Date: 7.6.06 ☐ 5-ml Purge ☑ 25-ml Purge **Book # A05 -031**

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RGQ 015	BFB05602	5ml				
02	016	↓ 03 ✓	↓				4:51 pm
03	017	V0056061 ✓	.03/.06 .15ml				8260, Gases/Ket-AA/TBA .3/.6/1.5ppb
04	018	2 ✓	.05/.1 .25ml				.5/1/2.5
05	019	3 ✓	.1/.2/.5ml				1/2/5
06	020	4 ✓	.2/.4/1ml				2/4/10
07	021	5 ✓	.5/1/2.5ml				5/10/25
08	022	6 ✓	1/2/5ml				10/20/50
09	023	7 ✓	2/4/10ml				20/40/100
10	024	8 ✓	3/6/15ml				30/60/150
11	025	9 ✓	4/8/20ml				40/80/200
12	026	↓ 10 ✓	5/10/25ml				50/100/250
13	027	IS/SS	25ml				
14	028	V005603B	↓				
15	029	IV0056061 ✓	1/2/5/25ml				10/20/50 ppb
16	030	2 ✓	1/2/5/25ml				
17	031	3	5ml				Record only
18	032	↓ 4 ✓	↓				10ppb for 8260 emphasis 2:52 am
19	033	RINSE	25ml				
20	034	↓	↓				
21							
22							
23							
24							
25							DN 6.7.06

BATCH V0056061

Instrument No.	05
INITIAL CALIBRATION REFERENCE	
DATE	7/6/06
ICAL ID	V0056061

STANDARDS

NAME	ID	CONC. (mg/L)
DCC 8260	SVIC.11.17.1	50/250
DCC Ket-AA	.17.3	250
DCC Gases	.17.2	250
DCC 3 ch.l	.19.1	250
BFB	.02.3	50
IS/SURR IS	.16.1	250
IS/SURR SS	.16.2	250
LCS 8260	.18.1	50/250
LCS Ket-AA	.18.3	250
LCS Gases	SVIC.11 .18.2 73	250
LCS dichlorofluoromethane	SVIA.11.75 DN 7.13.06	100
LCS CLP	SVIC.11.12.3	50

SOLVENT	ID
METHANOL	
DATA FILE	06G06

Electronic Data Archival

Location	Date
HPCHEM_VOA/TO05	

Comments:

Analyzed By: DN

Date Disposed: 7.7.06

Disposed By: DN

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

2059

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: 7.12.06 ☐ 5-ml Purge ☑ 25-ml Purge

Book # A05 -031

BATCH 060706K

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RGQ 191	BFB 05618	2µl				
02	192	19					12:32am
03	193	CV005 06616	1/1/5µl				
04	194	17					
05	195	V005 619L	1/2/5/25µl				
06	196	C					
07	197	B	25ml				
08	198	Q					
09	199	06 6027-04	25ml	1	<2		
10	200	-06					
11	201	-10					
12	202	-05					50x
13	203	-07					c/o → 1x
14	204	-08					10x
15	205	-09					
16	206	06 6039-02	5ml	1	<2		
17	207	-04					100x
18	208	06F313-06T	0.5ml	50	<2		
19	209	-05	25ml	1			
20	210	06 6039-05	25ml	1	<2		
21	211	-06					
22							
23							
24							DN 7.13.06
25							

Instrument No.	05
INITIAL CALIBRATION REFERENCE	
DATE	7/6/06
ICAL ID	V005606

STANDARDS

NAME	ID	CONC. (mg/L)
DCC	SVIC.11.17.1	
DCC	.17.2 .17.3	
DCC	.19.1	
BFB	.2.3	
IS/SURR.	.16.3	5/20/100
LCS	.18.1	
LCS	.18.2 .18.3	
LCS	SVIA.11.7573	
SOLVENT	ID DN 7.13.06	
METHANOL		
DATA FILE	06612	

Electronic Data Archival

Location	Date
HPCHEM_VOA/T005	

Comments:

Analyzed By: DN

Date Disposed: 7/13/06

Disposed By: DN

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

2857

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: 7.14.08 ☐ 5-ml Purge ☑ 25-ml Purge

Book # A05 -031

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RGB231	BFB055621	2µl				
02	232	22					Passed
03	233	CV055656 20	1/2/5µl				Used as BFB (2:33 pm)
04	234	21					
05	235	V055622L	1/2/5/25µl				
06	236	C					
07	237	B	25ml				
08	238	D					
09	239	060627-03T	0.5ml	50	<2		
10	240	-05T	0.5ml	50			
11	241	-07R	25ml	1			
12	242	-08T	2.5ml	10			
13	243	060629-04T	250µl	100	<2		
14	244	-05T					
15	245	-06R	25ml	10			
16	246	-01					100x
17	247	~~-03~~ 08					1x
18	248	-07					
19	249	~~-08~~ 03					
20	250	-01M					
21	251	-01S					
22	252	-01V					
23							
24							
25							DN 7.14.08

Instrument No.	05
INITIAL CALIBRATION REFERENCE	
DATE	7/6/08
ICAL ID	V055656

STANDARDS		
NAME	ID	CONC. (mg/L)
DCC	SVIC.11.17.1	
DCC	.17.2 -17.3	
DCC	.19.1	
BFB	.2.3	50/25/100
IS/SURR.	.16.3	
LCS	.18.1	
LCS	.18.2 -18.3	
LCS	SVIA .11.7573	

SOLVENT	ID DN 7.13.08
METHANOL	
DATA FILE	06613

Electronic Data Archival	
Location	Date
HPCHEM_VOA/TO05	

Comments:

Analyzed By: DN

Date Disposed:

Disposed By:

BATCH 080627

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

22058

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: 7.15.06 ☐ 5-ml Purge ☑ 25-ml Purge

Book # A05 -031

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RGA274	BFB15694	2ml				passed
02	275	↓ 25	↓				4:24am
03	276	CV0056062	1/2/5ml				
04	277	↓ 25	↓				
05	278	V005625L	1/2/5/25ml				
06	279	C	↓				
07	280	B	25ml				
08	281	Q	↓				
09	282	06 6039-017	25ml	100	<2		
10	283	↓ -08R	25ml	1	↓		
11	284	06 6048-01	25ml	1	<2		
12	285	-02					
13	286	-04					
14	287	-05					
15	288	-06					
16	289	-07					
17	290	-08					
18	291	-09					2:15pm
19							
20							
21							
22							
23							DN 7.14.06
24							
25							

BATCH 06 VOA 67 M

Instrument No.	05
INITIAL CALIBRATION REFERENCE	
DATE	7/6/06
ICAL ID	V005606
STANDARDS	
NAME	ID / CONC. (mg/L)
DCC	SVIC.11.17.1
DCC	.17.2 .17.3
DCC	.19.1
BFB	.2.3 50/50/100
IS/SURR.	.16.3
LCS	.18.1
LCS	.18.2 .18.3
LCS	SVA.11.73
SOLVENT	ID
METHANOL	
DATA FILE	06614
Electronic Data Archival	
Location	Date
HPCHEM_VOA/TO05	

Comments:

Analyzed By: DN

Date Disposed: 7/17/06

Disposed By: DN

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

LABORATORY REPORT FOR

ARCADIS

OMEGA CHEMICAL

METHOD 5030B/8260B
1,2,3-TRICHLOROPROPANE BY 8260/SIM

SDG#: 06G039

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

METHOD 5030B/8260B
1, 2, 3-TRICHLOROPROPANE BY 8260/SIM

Six (6) water samples were received on 07/10/06 for 1, 2, 3-Trichloropropane by 8260/SIM 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

Sample G039-08 was spiked. All recoveries were within QC limit.

7. Sample Analysis

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

LAB CHRONICLE
1,2,3-Trichloropropane by 8260/SIM

Client : ARCADIS
Project : OMEGA CHEMICAL

SDG NO. : 06G039
Instrument ID : T-002

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	V002G06Q	1	NA	07/17/0612:05	07/17/0612:05	RGP053	RAP020	V002G06	Method Blank
LCS1W	V002G06L	1	NA	07/17/0610:44	07/17/0610:44	RGP050	RAP020	V002G06	Lab Control Sample (LCS)
LCD1W	V002G06C	1	NA	07/17/0611:10	07/17/0611:10	RGP051	RAP020	V002G06	LCS Duplicate
OC2-PMW15-0-17	G039-01	1	NA	07/17/0614:50	07/17/0614:50	RGP059	RAP020	V002G06	Field Sample
OC2-PMW15-5-21	G039-04	1	NA	07/17/0615:18	07/17/0615:18	RGP060	RAP020	V002G06	Field Sample
OC2-PMW15-1-20	G039-05	1	NA	07/17/0615:46	07/17/0615:46	RGP061	RAP020	V002G06	Field Sample
OC2-PMW18A-0-22	G039-06	1	NA	07/17/0616:14	07/17/0616:14	RGP062	RAP020	V002G06	Field Sample
OC2-PMW18B-0-23	G039-07	1	NA	07/17/0616:42	07/17/0616:42	RGP063	RAP020	V002G06	Field Sample
OC2-PMW18C-0-24	G039-08	1	NA	07/17/0617:10	07/17/0617:10	RGP064	RAP020	V002G06	Field Sample
OC2-PMW18C-0-24MS	G039-08M	1	NA	07/17/0619:58	07/17/0619:58	RGP070	RAP020	V002G06	Matrix Spike Sample (MS)
OC2-PMW18C-0-24MSD	G039-08S	1	NA	07/17/0620:26	07/17/0620:26	RGP071	RAP020	V002G06	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

SW 5030B/8260B
1,2,3-Trichloropropane by 8260/SIM

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/17/06 14:50
Sample ID:	OC2-PMW15-0-17	Date Analyzed:	07/17/06 14:50
Lab Samp ID:	G039-01	Dilution Factor:	1
Lab File ID:	RGP059	Matrix :	WATER
Ext Btch ID:	VO02G06	% Moisture :	NA
Calib. Ref.:	RAP020	Instrument ID :	T-002

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	ND	.005	.0025

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TOLUENE-D8	81	50-150

RL: Reporting Limit

SW 5030B/8260B
1,2,3-Trichloropropane by 8260/SIM

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/17/06 15:18
Sample ID:	OC2-PMW15-5-21	Date Analyzed:	07/17/06 15:18
Lab Samp ID:	G039-04	Dilution Factor:	1
Lab File ID:	RGP060	Matrix :	WATER
Ext Btch ID:	VOO2G06	% Moisture :	NA
Calib. Ref.:	RAP020	Instrument ID :	T-002

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	ND	.005	.0025

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TOLUENE-D8	81	50-150

RL: Reporting Limit

SW 5030B/8260B
1,2,3-Trichloropropane by 8260/SIM

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/17/06 15:46
Sample ID:	OC2-PMW15-1-20	Date Analyzed:	07/17/06 15:46
Lab Samp ID:	G039-05	Dilution Factor:	1
Lab File ID:	RGP061	Matrix :	WATER
Ext Btch ID:	VO02G06	% Moisture :	NA
Calib. Ref.:	RAP020	Instrument ID :	T-002

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	ND	.005	.0025

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TOLUENE-D8	73	50-150

RL: Reporting Limit

SW 5030B/8260B
1,2,3-Trichloropropane by 8260/SIM

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/17/06 16:14
Sample ID:	OC2-PMW18A-0-22	Date Analyzed:	07/17/06 16:14
Lab Samp ID:	G039-06	Dilution Factor:	1
Lab File ID:	RGP062	Matrix :	WATER
Ext Btch ID:	VOO2G06	% Moisture :	NA
Calib. Ref.:	RAP020	Instrument ID :	T-002

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	ND	.005	.0025

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TOLUENE-D8	58	50-150

RL: Reporting Limit

2057

SW 5030B/8260B
1,2,3-Trichloropropane by 8260/SIM

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/17/06 16:42
Sample ID:	OC2-PMW18B-0-23	Date Analyzed:	07/17/06 16:42
Lab Samp ID:	G039-07	Dilution Factor:	1
Lab File ID:	RGP063	Matrix :	WATER
Ext Btch ID:	VOO2G06	% Moisture :	NA
Calib. Ref.:	RAP020	Instrument ID :	T-002

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	ND	.005	.0025

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TOLUENE-D8	60	50-150

RL: Reporting Limit

SW 5030B/8260B
1,2,3-Trichloropropane by 8260/SIM

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/17/06 17:10
Sample ID:	OC2-PMW18C-0-24	Date Analyzed:	07/17/06 17:10
Lab Samp ID:	G039-08	Dilution Factor:	1
Lab File ID:	RGP064	Matrix :	WATER
Ext Btch ID:	VOO2G06	% Moisture :	NA
Calib. Ref.:	RAP020	Instrument ID :	T-002

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	ND	.005	.0025

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TOLUENE-D8	63	50-150

RL: Reporting Limit

QC SUMMARIES

SW 5030B/8260B
1,2,3-Trichloropropane by 8260/SIM

Client	: ARCADIS	Date Collected:	NA
Project	: OMEGA CHEMICAL	Date Received:	07/17/06
Batch No.	: 06G039	Date Extracted:	07/17/06 12:05
Sample ID:	MBLK1W	Date Analyzed:	07/17/06 12:05
Lab Samp ID:	VO02G06Q	Dilution Factor:	1
Lab File ID:	RGP053	Matrix :	WATER
Ext Btch ID:	VO02G06	% Moisture :	NA
Calib. Ref.:	RAP020	Instrument ID :	T-002

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,3-TRICHLOROPROPANE	ND	.005	.0025

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TOLUENE-D8	68	50-150

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: SW 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	V002G06Q	V002G06L	V002G06C		
LAB FILE ID:	RGP053	RGP050	RGP051		
DATE EXTRACTED:	07/17/0612:05	07/17/0610:44	07/17/0611:10	DATE COLLECTED:	NA
DATE ANALYZED:	07/17/0612:05	07/17/0610:44	07/17/0611:10	DATE RECEIVED:	07/17/06
PREP. BATCH:	V002G06	V002G06	V002G06		
CALIB. REF:	RAP020	RAP020	RAP020		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,3-Trichloropropane	ND	.05	.046	92	.05	.044	88	4	50-150	20

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
Toluene-d8	.05	.0314	63	.05	.0296	59	50-150

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: SW 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	OC2-PMW18C-0-24				
LAB SAMP ID:	G039-08	G039-08M	G039-08S		
LAB FILE ID:	RGP064	RGP070	RGP071		
DATE EXTRACTED:	07/17/0617:10	07/17/0619:58	07/17/0620:26	DATE COLLECTED:	07/10/06
DATE ANALYZED:	07/17/0617:10	07/17/0619:58	07/17/0620:26	DATE RECEIVED:	07/10/06
PREP. BATCH:	VOO2G06	VOO2G06	VOO2G06		
CALIB. REF:	RAP020	RAP020	RAP020		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,3-Trichloropropane	ND	.05	.0432	86	.05	.0484	97	11	50-150	20

SURROGATE PARAMETER	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	QC LIMIT (%)
Toluene-d8	.05	.0303	61	.05	.0344	69	50-150

INITIAL CALIBRATIONS

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RAP015
Instrument ID: T-002
GC Column:RTX502.2ID:0.32mm (mm)

Contract: OMEGA CHEMICAL
SAS No.: SDG No.: 06G039
BFB Injection Date : 01/06/06
BFB Injection Time : 09:36
Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	27.88
75	30.0 - 60.0% of mass 95	56.62
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.60
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	88.08
175	5.0 - 9.0% of mass 174	6.18(7.0)1
176	95.0 - 101.0% of mass 174	85.92(97.6)1
177	5.0 - 9.0% of mass 176	5.64(6.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD05	VO02A061	RAP016	01/06/06	11:48
2	VSTD010	VO02A063	RAP018	01/06/06	12:43
3	VSTD020	VO02A064	RAP019	01/06/06	13:11
4	VSTD050	VO02A065	RAP020	01/06/06	13:38
5	VSTD080	VO02A066	RAP021	01/06/06	14:06
6	VSTD100	VO02A067	RAP022	01/06/06	14:34
7	VSTD200	VO02A068	RAP023	01/06/06	15:01
8	VSTD050	IVO02A061	RAP026	01/06/06	16:24

Response Factor Report TO02

Method : D:\HPCHEM\1\METHODS\VO02A06B.M (RTE Integrator)
Title : METHOD 8260 25ml
Last Update : Tue May 23 13:47:58 2006
Response via : Initial Calibration

Calibration Files

5	=RAP016.D	10	=RAP018.D	20	=RAP019.D
50	=RAP020.D	80	=RAP021.D	100	=RAP022.D

		Compound	5	10	20	50	80	100	Avg	%RSD
1)	I	1,2,3-Trichloropropan	----------	----------	----------	ISTD	----------	----------	----------	
2)	S	Toluene-d8			1.198	0.945	0.919	0.976	1.010	10.97
3)	T	1,2,3-Trichloroprop	1.122	0.955	0.802	0.803	0.781	0.814	0.876	14.07

5-24-06

(#) = Out of Range ### Number of calibration levels exceeded format ###

DAILY CALIBRATION

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RGP047
Instrument ID: T-002
GC Column:RTX502.2ID:0.32mm (mm)

Contract: OMEGA CHEMICAL
SAS No.: SDG No.: 06G039
BFB Injection Date : 07/17/06
BFB Injection Time : 09:19
Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	26.89
75	30.0 - 60.0% of mass 95	54.46
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	8.25
173	Less than 2.0% of mass 174	0.00(0.0)1
174	Greater than 50% of mass 95	90.67
175	5.0 - 9.0% of mass 174	7.49(8.3)1
176	95.0 - 101.0% of mass 174	88.93(98.1)1
177	5.0 - 9.0% of mass 176	6.49(7.3)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	CV002A0650	RGP048	07/17/06	09:49
2	MBLK1W	V002G06Q	RGP053	07/17/06	12:05
3	LCS1W	V002G06L	RGP050	07/17/06	10:44
4	LCD1W	V002G06C	RGP051	07/17/06	11:10
5	OC2-PMW15-0-17	G039-01	RGP059	07/17/06	14:50
6	OC2-PMW15-5-21	G039-04	RGP060	07/17/06	15:18
7	OC2-PMW15-1-20	G039-05	RGP061	07/17/06	15:46
8	OC2-PMW18A-0-22	G039-06	RGP062	07/17/06	16:14
9	OC2-PMW18B-0-23	G039-07	RGP063	07/17/06	16:42
10	OC2-PMW18C-0-24	G039-08	RGP064	07/17/06	17:10
11	OC2-PMW18C-0-24MS	G039-08M	RGP070	07/17/06	19:58
12	OC2-PMW18C-0-24MSD	G039-08S	RGP071	07/17/06	20:26

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RAP020
Instrument ID: T-002
GC Column: RTX502.2 ID: 0.32mm (mm)

Project: OMEGA CHEMICAL
SDG No.: 06G039
Date Analyzed: 01/06/06
Time Analyzed: 13:38
Heated Purge: (Y/N) Y

		IS1(TCP)	
		AREA #	RT #
	12 HOUR STD	150243	14.87
	UPPER LIMIT	300486	15.37
	LOWER LIMIT	75122	14.37
	SAMPLE ID		
1	VSTD050	124567	14.96
2	MBLK1W	125147	14.96
3	LCS1W	129382	14.96
4	LCD1W	135746	14.96
5	OC2-PMW15-0-17	129631	14.96
6	OC2-PMW15-5-21	146956	14.94
7	OC2-PMW15-1-20	152318	14.96
8	OC2-PMW18A-0-22	180094	14.94
9	OC2-PMW18B-0-23	171150	14.94
10	OC2-PMW18C-0-24	154112	14.94
11	OC2-PMW18C-0-24MS	164595	14.96
12	OC2-PMW18C-0-24MSD	158181	14.94

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

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.

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\06G17\RGP048.D
Acq On : 17 Jul 2006 9:49 am
Sample : CVO02A0650
Misc : 50PPT 1,2,3-TCP
MS Integration Params: LSCINT.P

Vial: 3
Operator: CR
Inst : TO02
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO02A06B.M (RTE Integrator)
Title : METHOD 8260 25ml
Last Update : Tue May 23 13:54:24 2006
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	1,2,3-Trichloropropane-d5	1.000	1.000	0.0	83	0.02
2	S	Toluene-d8	1.010	0.659	34.8#	58	0.01
3	T	1,2,3-Trichloropropane	0.876	0.718	18.0 /	74	0.02

(#) = 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: 1/6/06 ☐ 5-ml Purge ☑ 25-ml Purge

Book # A02 -012

BATCH VD02A065

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RAP015	BFB02A03 ✓	.5µl				9:26am
02	16	VD02A061 ✓	.5µl				5 ppt
03	17	2 ✗	1µl				bad spike, rx
04	18	3 ✓	1µl				10 ppt
05	19	4 ✓	2µl				20 ppt
06	20	5 ✓	5µl				50 ppt
07	21	6 ✓	8µl				80 ppt
08	22	7 ✓	10µl				100 ppt
09	23	8 ✓	20µl				200 ppt
10	24	9 ✗	5µl				
11	25	10 ✗	10µl				} not use, wrong spiked
12	26	IVD02AD61	5µl				50 ppt
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

JW 1/6/06

Instrument No.	02
INITIAL CALIBRATION REFERENCE	
DATE	1/6/06
ICAL ID	VD02A06 & VD02A06A 1,2,5-TCP
STANDARDS	VD02A06B 5/23/06

NAME	ID	CONC. (mg/L)
DCC		
DCC		
DCC	SVIC-10, 31.1	250 ppt
BFB	26.3	50 ppm
IS/SURR.	29.3	250 ppt
LCS	30.2	
LCS	31.3	
LCS		
LCS		

SOLVENT	ID
METHANOL	
DATA FILE	06A06

Electronic Data Archival	
Location	Date
HPCHEM_VOA/TO02	

Comments:

* Manual Integrate for lower points are used for VD02A06A.m

Analyzed By: RW

Date Disposed: 12/27 & 12/28/15

Disposed By: RT

This page is checked during data review.

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

2082

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: 7/17/06 ☐ 5-ml Purge ☑ 25-ml Purge

Book # A02 -012

BATCH CV002A0650

Sample Prep. ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix pH-W	Matrix S	Notes
01	RGP046	BFB02605	2ml				
02	047	BFB02606	2ml				9:19 AM
03	048	CV002A0650	5ml				
04	049	CV002A0651	5ml				
05	050	V002606L	5ml				
06	051	C	5ml				
07	052	B	25ml				
08	053	D	25ml				
09	054	066027-01	25ml	1	12.0		CN
10	055	-03		1			7/17/06
11	056	-05		1			
12	057	-07		1			
13	058	-08		1			
14	059	066039-01		1			
15	060	-04		1			
16	061	-05		1			
17	062	-06		1			
18	063	-07		1			
19	064	-08		1			
20	065	066064-01		1			
21	066	-02		1			
22	067	-03		1			
23	068	-04		1			
24	069	-05		1			
25	070	066039-08M		1			
	071	066039-08S		1			8:26 PM

Instrument No.	02
INITIAL CALIBRATION REFERENCE	
DATE	1/06/06
ICAL ID	V002A06B

STANDARDS		
NAME	ID	CONC. (mg/L)
DCC		
DCC		
DCC	SV1C-11-15-2	250 ppb
BFB	SV1C-11-2-3	50 ppm
~~IS/SURR~~ IS	SV1C-11-14-3	250 ppb
~~LCS~~ SS	SV1C-11-15-1	
LCS	SV1C-11-15-3	
LCS		

SOLVENT	ID
METHANOL	
DATA FILE	06617

Electronic Data Archival	
Location	Date
HPCHEM_VOA/T002 page 93-98	7/18/06

Comments:

Analyzed By: CN

Date Disposed: 7/18/06

Disposed By: CN

This page is checked during data review.

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

LABORATORY REPORT FOR

ARCADIS

OMEGA CHEMICAL

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

SDG#: 06G039

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

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

Six (6) water samples were received on 07/10/06 for Semi Volatile Organic analysis by Method 3520C/8270C 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**

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

LAB CHRONICLE
SEMI VOLATILE ORGANICS BY GC/MS

Client : ARCADIS
Project : OMEGA CHEMICAL

SDG NO. : 06G039
Instrument ID : T-042

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	SVG012WB	1	NA	07/17/0613:41	07/12/0616:30	RGX073	REX298	SVG012W	Method Blank
LCS1W	SVG012WL	1	NA	07/17/0614:07	07/12/0616:30	RGX074	REX298	SVG012W	Lab Control Sample (LCS)
LCD1W	SVG012WC	1	NA	07/17/0614:33	07/12/0616:30	RGX075	REX298	SVG012W	LCS Duplicate
OC2-PMW15-0-17	G039-01	.94	NA	07/17/0618:23	07/12/0616:30	RGX084	REX298	SVG012W	Field Sample
OC2-PMW15-5-21	G039-04	.94	NA	07/17/0618:49	07/12/0616:30	RGX085	REX298	SVG012W	Field Sample
OC2-PMW15-1-20	G039-05	.94	NA	07/17/0619:14	07/12/0616:30	RGX086	REX298	SVG012W	Field Sample
OC2-PMW18A-0-22	G039-06	.94	NA	07/17/0619:40	07/12/0616:30	RGX087	REX298	SVG012W	Field Sample
OC2-PMW18B-0-23	G039-07	.94	NA	07/17/0620:05	07/12/0616:30	RGX088	REX298	SVG012W	Field Sample
OC2-PMW18C-0-24	G039-08	.94	NA	07/17/0620:31	07/12/0616:30	RGX089	REX298	SVG012W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

Client : ARCADIS	Date Collected: 07/10/06
Project : OMEGA CHEMICAL	Date Received: 07/10/06
Batch No. : 06G039	Date Extracted: 07/12/06 16:30
Sample ID: OC2-PMW15-0-17	Date Analyzed: 07/17/06 18:23
Lab Samp ID: G039-01	Dilution Factor: .94
Lab File ID: RGX084	Matrix : WATER
Ext Btch ID: SVG012W	% Moisture : NA
Calib. Ref.: REX298	Instrument ID : T-042

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
2,4,5-TRICHLOROPHENOL	ND	9.4	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	19	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	9.4	4.7
3,3'-DICHLOROBENZIDINE	ND	9.4	4.7
3-NITROANILINE	ND	9.4	4.7
4,6-DINITRO-2-METHYLPHENOL	ND	19	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	9.4	4.7
4-NITROPHENOL	ND	19	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(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
BUTYLBENZYLPHTHALATE	ND	9.4	4.7
CHRYSENE	ND	9.4	4.7
DI-N-BUTYLPHTHALATE	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
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
PHENANTHRENE	ND	9.4	4.7
PHENOL	ND	9.4	4.7
PYRENE	ND	9.4	4.7
ANILINE	ND	19	4.7
BENZOIC ACID	ND	19	4.7
BENZYL ALCOHOL	ND	9.4	4.7
CARBAZOLE	ND	9.4	4.7
PYRIDINE	ND	38	4.7
ACETOPHENONE	ND	9.4	4.7
BENZALDEHYDE	ND	9.4	4.7
1,1-BIPHENYL	ND	9.4	4.7
CAPROLACTAM	ND	9.4	4.7

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	70	30-150
2-FLUOROBIPHENYL	61	30-130
2-FLUOROPHENOL	50	20-130
NITROBENZENE-D5	51	30-130
PHENOL-D5	52	30-130
TERPHENYL-D14	94	30-130

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

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/12/06 16:30
Sample ID:	OC2-PMW15-5-21	Date Analyzed:	07/17/06 18:49
Lab Samp ID:	G039-04	Dilution Factor:	.94
Lab File ID:	RGX085	Matrix :	WATER
Ext Btch ID:	SVG012W	% Moisture :	NA
Calib. Ref.:	REX298	Instrument ID :	T-042

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
2,4,5-TRICHLOROPHENOL	ND	9.4	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	19	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	9.4	4.7
3,3'-DICHLOROBENZIDINE	ND	9.4	4.7
3-NITROANILINE	ND	9.4	4.7
4,6-DINITRO-2-METHYLPHENOL	ND	19	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	9.4	4.7
4-NITROPHENOL	ND	19	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(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
BUTYLBENZYLPHTHALATE	ND	9.4	4.7
CHRYSENE	ND	9.4	4.7
DI-N-BUTYLPHTHALATE	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
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
PHENANTHRENE	ND	9.4	4.7
PHENOL	ND	9.4	4.7
PYRENE	ND	9.4	4.7
ANILINE	ND	19	4.7
BENZOIC ACID	ND	19	4.7
BENZYL ALCOHOL	ND	9.4	4.7
CARBAZOLE	ND	9.4	4.7
PYRIDINE	ND	38	4.7
ACETOPHENONE	ND	9.4	4.7
BENZALDEHYDE	ND	9.4	4.7
1,1-BIPHENYL	ND	9.4	4.7
CAPROLACTAM	ND	9.4	4.7

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	59	30-150
2-FLUOROBIPHENYL	51	30-130
2-FLUOROPHENOL	42	20-130
NITROBENZENE-D5	43	30-130
PHENOL-D5	45	30-130
TERPHENYL-D14	87	30-130

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

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/12/06 16:30
Sample ID:	OC2-PMW15-1-20	Date Analyzed:	07/17/06 19:14
Lab Samp ID:	G039-05	Dilution Factor:	.94
Lab File ID:	RGX086	Matrix :	WATER
Ext Btch ID:	SVG012W	% Moisture :	NA
Calib. Ref.:	REX298	Instrument ID :	T-042

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
2,4,5-TRICHLOROPHENOL	ND	9.4	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	19	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	9.4	4.7
3,3'-DICHLOROBENZIDINE	ND	9.4	4.7
3-NITROANILINE	ND	9.4	4.7
4,6-DINITRO-2-METHYLPHENOL	ND	19	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	9.4	4.7
4-NITROPHENOL	ND	19	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(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
BUTYLBENZYLPHTHALATE	ND	9.4	4.7
CHRYSENE	ND	9.4	4.7
DI-N-BUTYLPHTHALATE	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
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
PHENANTHRENE	ND	9.4	4.7
PHENOL	ND	9.4	4.7
PYRENE	ND	9.4	4.7
ANILINE	ND	19	4.7
BENZOIC ACID	ND	19	4.7
BENZYL ALCOHOL	ND	9.4	4.7
CARBAZOLE	ND	9.4	4.7
PYRIDINE	ND	38	4.7
ACETOPHENONE	ND	9.4	4.7
BENZALDEHYDE	ND	9.4	4.7
1,1-BIPHENYL	ND	9.4	4.7
CAPROLACTAM	ND	9.4	4.7

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	64	30-150
2-FLUOROBIPHENYL	58	30-130
2-FLUOROPHENOL	48	20-130
NITROBENZENE-D5	48	30-130
PHENOL-D5	51	30-130
TERPHENYL-D14	95	30-130

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

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/12/06 16:30
Sample ID:	OC2-PMW18A-0-22	Date Analyzed:	07/17/06 19:40
Lab Samp ID:	G039-06	Dilution Factor:	.94
Lab File ID:	RGX087	Matrix :	WATER
Ext Btch ID:	SVG012W	% Moisture :	NA
Calib. Ref.:	REX298	Instrument ID :	T-042

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
2,4,5-TRICHLOROPHENOL	ND	9.4	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	19	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	9.4	4.7
3,3'-DICHLOROBENZIDINE	ND	9.4	4.7
3-NITROANILINE	ND	9.4	4.7
4,6-DINITRO-2-METHYLPHENOL	ND	19	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	9.4	4.7
4-NITROPHENOL	ND	19	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(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
BUTYLBENZYLPHTHALATE	ND	9.4	4.7
CHRYSENE	ND	9.4	4.7
DI-N-BUTYLPHTHALATE	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
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
PHENANTHRENE	ND	9.4	4.7
PHENOL	ND	9.4	4.7
PYRENE	ND	9.4	4.7
ANILINE	ND	19	4.7
BENZOIC ACID	ND	19	4.7
BENZYL ALCOHOL	ND	9.4	4.7
CARBAZOLE	ND	9.4	4.7
PYRIDINE	ND	38	4.7
ACETOPHENONE	ND	9.4	4.7
BENZALDEHYDE	ND	9.4	4.7
1,1-BIPHENYL	ND	9.4	4.7
CAPROLACTAM	ND	9.4	4.7

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	66	30-150
2-FLUOROBIPHENYL	65	30-130
2-FLUOROPHENOL	53	20-130
NITROBENZENE-D5	55	30-130
PHENOL-D5	55	30-130
TERPHENYL-D14	77	30-130

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

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/12/06 16:30
Sample ID:	OC2-PMW18B-0-23	Date Analyzed:	07/17/06 20:05
Lab Samp ID:	G039-07	Dilution Factor:	.94
Lab File ID:	RGX088	Matrix :	WATER
Ext Btch ID:	SVG012W	% Moisture :	NA
Calib. Ref.:	REX298	Instrument ID :	T-042

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
2,4,5-TRICHLOROPHENOL	ND	9.4	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	19	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	9.4	4.7
3,3'-DICHLOROBENZIDINE	ND	9.4	4.7
3-NITROANILINE	ND	9.4	4.7
4,6-DINITRO-2-METHYLPHENOL	ND	19	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	9.4	4.7
4-NITROPHENOL	ND	19	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(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
BUTYLBENZYLPHTHALATE	ND	9.4	4.7
CHRYSENE	ND	9.4	4.7
DI-N-BUTYLPHTHALATE	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
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
PHENANTHRENE	ND	9.4	4.7
PHENOL	ND	9.4	4.7
PYRENE	ND	9.4	4.7
ANILINE	ND	19	4.7
BENZOIC ACID	ND	19	4.7
BENZYL ALCOHOL	ND	9.4	4.7
CARBAZOLE	ND	9.4	4.7
PYRIDINE	ND	38	4.7
ACETOPHENONE	ND	9.4	4.7
BENZALDEHYDE	ND	9.4	4.7
1,1-BIPHENYL	ND	9.4	4.7
CAPROLACTAM	ND	9.4	4.7

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	68	30-150
2-FLUOROBIPHENYL	61	30-130
2-FLUOROPHENOL	52	20-130
NITROBENZENE-D5	52	30-130
PHENOL-D5	56	30-130
TERPHENYL-D14	91	30-130

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

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/12/06 16:30
Sample ID:	OC2-PMW18C-0-24	Date Analyzed:	07/17/06 20:31
Lab Samp ID:	G039-08	Dilution Factor:	.94
Lab File ID:	RGX089	Matrix :	WATER
Ext Btch ID:	SVG012W	% Moisture :	NA
Calib. Ref.:	REX298	Instrument ID :	T-042

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
2,4,5-TRICHLOROPHENOL	ND	9.4	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	19	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	9.4	4.7
3,3'-DICHLOROBENZIDINE	ND	9.4	4.7
3-NITROANILINE	ND	9.4	4.7
4,6-DINITRO-2-METHYLPHENOL	ND	19	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	9.4	4.7
4-NITROPHENOL	ND	19	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(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
BUTYLBENZYLPHTHALATE	ND	9.4	4.7
CHRYSENE	ND	9.4	4.7
DI-N-BUTYLPHTHALATE	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
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
PHENANTHRENE	ND	9.4	4.7
PHENOL	ND	9.4	4.7
PYRENE	ND	9.4	4.7
ANILINE	ND	19	4.7
BENZOIC ACID	ND	19	4.7
BENZYL ALCOHOL	ND	9.4	4.7
CARBAZOLE	ND	9.4	4.7
PYRIDINE	ND	38	4.7
ACETOPHENONE	ND	9.4	4.7
BENZALDEHYDE	ND	9.4	4.7
1,1-BIPHENYL	ND	9.4	4.7
CAPROLACTAM	ND	9.4	4.7

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	49	30-150
2-FLUOROBIPHENYL	46	30-130
2-FLUOROPHENOL	38	20-130
NITROBENZENE-D5	38	30-130
PHENOL-D5	40	30-130
TERPHENYL-D14	92	30-130

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

QC SUMMARY

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

Client	: ARCADIS	Date Collected:	NA
Project	: OMEGA CHEMICAL	Date Received:	07/12/06
Batch No.	: 06G039	Date Extracted:	07/12/06 16:30
Sample ID:	MBLK1W	Date Analyzed:	07/17/06 13:41
Lab Samp ID:	SVG012WB	Dilution Factor:	1
Lab File ID:	RGX073	Matrix :	WATER
Ext Btch ID:	SVG012W	% Moisture :	NA
Calib. Ref.:	REX298	Instrument ID :	T-042

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
2,4,5-TRICHLOROPHENOL	ND	10	5
2,4,6-TRICHLOROPHENOL	ND	10	5
2,4-DICHLOROPHENOL	ND	10	5
2,4-DIMETHYLPHENOL	ND	10	5
2,4-DINITROPHENOL	ND	20	5
2,4-DINITROTOLUENE	ND	10	5
2,6-DINITROTOLUENE	ND	10	5
2-CHLORONAPHTHALENE	ND	10	5
2-CHLOROPHENOL	ND	10	5
2-METHYLNAPHTHALENE	ND	10	5
2-METHYLPHENOL	ND	10	5
2-NITROANILINE	ND	10	5
3,3'-DICHLOROBENZIDINE	ND	10	5
3-NITROANILINE	ND	10	5
4,6-DINITRO-2-METHYLPHENOL	ND	20	5
4-BROMOPHENYL-PHENYL ETHER	ND	10	5
4-CHLORO-3-METHYLPHENOL	ND	10	5
4-CHLOROANILINE	ND	10	5
4-CHLOROPHENYL-PHENYL ETHER	ND	10	5
4-METHYLPHENOL (1)	ND	10	5
4-NITROANILINE	ND	10	5
4-NITROPHENOL	ND	20	5
ACENAPHTHENE	ND	10	5
ACENAPHTHYLENE	ND	10	5
ANTHRACENE	ND	10	5
BENZO(A)ANTHRACENE	ND	10	5
BENZO(B)FLUORANTHENE	ND	10	5
BENZO(K)FLUORANTHENE	ND	10	5
BENZO(G,H,I)PERYLENE	ND	10	5
BIS(2-CHLOROETHOXY)METHANE	ND	10	5
BIS(2-CHLOROETHYL)ETHER	ND	10	5
BIS(2-CHLOROISOPROPYL)ETHER	ND	10	5
BUTYLBENZYLPHTHALATE	ND	10	5
CHRYSENE	ND	10	5
DI-N-BUTYLPHTHALATE	ND	10	5
DIBENZO(A,H)ANTHRACENE	ND	10	5
DIBENZOFURAN	ND	10	5
DIETHYLPHTHALATE	ND	10	5
DIMETHYLPHTHALATE	ND	10	5
FLUORANTHENE	ND	10	5
FLUORENE	ND	10	5
HEXACHLOROCYCLOPENTADIENE	ND	10	5
HEXACHLOROETHANE	ND	10	5
INDENO(1,2,3-CD)PYRENE	ND	10	5
ISOPHORONE	ND	10	5
PHENANTHRENE	ND	10	5
PHENOL	ND	10	5
PYRENE	ND	10	5
ANILINE	ND	20	5
BENZOIC ACID	ND	20	5
BENZYL ALCOHOL	ND	10	5
CARBAZOLE	ND	10	5
PYRIDINE	ND	40	5
ACETOPHENONE	ND	10	5
BENZALDEHYDE	ND	10	5
1,1-BIPHENYL	ND	10	5
CAPROLACTAM	ND	10	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	50	40-140
2-FLUOROBIPHENYL	54	40-130
2-FLUOROPHENOL	47	30-130
NITROBENZENE-D5	46	40-130
PHENOL-D5	49	30-130
TERPHENYL-D14	87	50-130

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

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 3520C/8270C

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	SVG012WB	SVG012WL	SVG012WC		
LAB FILE ID:	RGX073	RGX074	RGX075		
DATE EXTRACTED:	07/12/0616:30	07/12/0616:30	07/12/0616:30	DATE COLLECTED:	NA
DATE ANALYZED:	07/17/0613:41	07/17/0614:07	07/17/0614:33	DATE RECEIVED:	07/12/06
PREP. BATCH:	SVG012W	SVG012W	SVG012W		
CALIB. REF:	REX298	REX298	REX298		

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 (%)
2,4-Dinitrotoluene	ND	80	54.8	69	80	56.1	70	2	40-130	30
2-Chlorophenol	ND	80	39.9	50	80	40.6	51	2	30-130	30
4-Chloro-3-Methylphenol	ND	80	46.3	58	80	48.2	60	4	40-130	30
4-Nitrophenol	ND	80	50.6	63	80	52.8	66	4	30-130	30
Acenaphthene	ND	80	45.5	57	80	48.5	61	7	40-130	30
Phenol	ND	80	38.8	49	80	39.6	50	2	20-130	30
Pyrene	ND	80	57.1	71	80	58.9	74	3	50-130	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	93.5	62	150	105	70	40-140
2-Fluorobiphenyl	50	30.7	61	50	34.4	69	40-130
2-Fluorophenol	150	71.6	48	150	78	52	30-130
Nitrobenzene-d5	50	26.2	52	50	30.3	61	40-130
Phenol-d5	150	75	50	150	81.9	55	30-130
Terphenyl-d14	50	45.2	90	50	49.3	99	50-130

INITIAL CALIBRATIONS

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: REX293
Instrument ID: T-042

Project: OMEGA CHEMICAL
SDG No.: 06G039
DFTPP Injection Date: 05/29/06
DFTPP Injection Time: 11:25

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.58
68	Less than 2% of mass 69	0.00(0.0)1
69	Relative abundance of mass 198	70.21
70	Less than 2.0% of mass 69	0.23(0.3)1
127	40.0 - 60.0% of mass 198	46.42
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	7.40
275	10.0 - 30.0% of mass 198	23.13
365	Greater than 1.00% of mass 198	2.63
441	Present, but less than mass 443	12.16
442	Greater than 40.0% of mass 198	75.86
443	17.0 - 23.0% of mass 442	15.30(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	SSTD005	SV42E291	REX294	05/29/06	12:29
2	SSTD010	SV42E292	REX295	05/29/06	13:30
3	SSTD020	SV42E293	REX296	05/29/06	13:55
4	SSTD040	SV42E294	REX297	05/29/06	14:20
5	SSTD050	SV42E295	REX298	05/29/06	14:45
6	SSTD080	SV42E296	REX299	05/29/06	15:10
7	SSTD100	SV42E297	REX300	05/29/06	15:35
8	SSTD120	SV42E298	REX301	05/29/06	16:00
9	SSTD160	SV42E299	REX302	05/29/06	16:26
10	SSTD050	ISV42E291	REX303	05/29/06	16:51

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :T042
Beginning DateTime :05/29/06 12:29
Spike Units :PPM
IC File :REX298

Column Spec :ZB-5MS ID :0.18MM
Ending DateTime :05/29/06 16:26
HPChem Method :SV42E29

IDX	Parameters	5 12:29 REX294	10 13:30 REX295	20 13:55 REX296	40 14:20 REX297	50 14:45 REX298	80 15:10 REX299	100 15:35 REX300	120 16:00 REX301	160 16:26 REX302	Av_RRF	%_RSD	Av_Rt_M
1	1,4-Dichlorobenzene-d4	1	1	1	1	1	1	1	1	1	1	0	3.3953
2	N-Nitrosodimethylamine	0.829	0.871	0.872	0.859	0.885	0.853	0.861	0.855	0.843	0.859	1.93	1.5858
3	Pyridine	1.433	1.449	1.434	1.414	1.499	1.438	1.436	1.447	1.440	1.443	1.60	1.5948
4	2-Fluorophenol	1.135	1.202	1.229	1.232	1.298	1.259	1.263	1.272	1.256	1.238	3.85	2.3218
5	Phenol	1.752	1.828	1.805	1.777	1.830	1.753	1.702	1.678	1.581	1.745	4.63	3.0915
6	Aniline	1.916	1.990	1.949	1.966	2.020	1.879	1.938	1.899	2.127	1.965	3.81	3.1151
7	Bis(2-chloroethyl)ether	1.567	1.642	1.582	1.420	1.500	1.444	1.300	1.323	------	1.472	8.37	3.1655
8	Phenol-d5	1.541	1.610	1.632	1.596	1.671	1.596	1.563	1.565	1.515	1.588	3.00	3.0791
9	2-Chlorophenol	1.332	1.382	1.375	1.310	1.371	1.286	1.261	1.250	1.186	1.306	5.10	3.2085
10	1,3-Dichlorobenzene	1.480	1.567	1.482	1.445	1.522	1.445	1.422	1.405	1.361	1.459	4.25	3.3368
11	1,4-Dichlorobenzene	1.548	1.566	1.503	1.460	1.484	1.434	1.401	1.393	1.333	1.458	5.22	3.4145
12	Benzyl alcohol	0.776	0.843	0.887	0.840	0.870	0.818	0.791	0.798	0.772	0.822	5.00	3.5585
13	1,2-Dichlorobenzene-d4	0.992	0.987	0.945	0.885	0.903	0.846	0.826	0.799	0.762	0.883	9.25	3.5439
14	1,2-Dichlorobenzene	1.475	1.487	1.414	1.328	1.338	1.224	1.171	1.138	1.071	1.294	11.64	3.5630
15	2-Methylphenol	1.059	1.151	1.144	1.128	1.168	1.074	1.040	1.019	0.967	1.083	6.34	3.6722
16	Bis(2-chloroisopropyl)ether	2.769	2.857	2.725	2.639	2.717	2.531	2.528	2.498	2.418	2.631	5.53	3.6868
17	4-Methylphenol	1.516	1.621	1.622	1.554	1.665	1.548	1.564	1.540	1.521	1.572	3.28	3.8500
18	N-Nitroso-di-n-propylamine	1.109	1.141	1.154	1.148	1.208	1.126	1.108	1.103	1.058	1.128	3.70	3.8489
19	Hexachloroethane	0.732	0.762	0.718	0.682	0.712	0.677	0.659	0.648	0.562	0.683	8.54	3.9018
20	Naphthalene-d8	1	1	1	1	1	1	1	1	1	1	0	4.8054
21	Nitrobenzene-d5	0.383	0.435	0.444	0.426	0.436	0.426	0.425	0.419	0.415	0.423	4.12	3.9907
22	Nitrobenzene	0.424	0.444	0.460	0.433	0.442	0.436	0.405	0.428	0.425	0.433	3.59	4.0109
23	Isophorone	0.799	0.842	0.839	0.792	0.800	0.799	0.807	0.799	0.772	0.805	2.74	4.2968
24	2-Nitrophenol	0.182	0.224	0.234	0.221	0.238	0.222	0.225	0.216	0.216	0.220	7.33	4.3632
25	2,4-Dimethylphenol	0.306	0.336	0.335	0.306	0.323	0.316	0.309	0.303	0.320	0.317	3.92	4.4476
26	bis(2-Chloroethoxy)methane	0.503	0.516	0.530	0.490	0.506	0.477	0.464	0.472	0.474	0.492	4.59	4.5545
27	Benzoic Acid	0.066	0.131	0.171	0.203	0.219	0.229	0.231	0.241	0.248	0.193	31.29	4.6873
28	2,4-Dichlorophenol	0.290	0.322	0.330	0.309	0.314	0.305	0.297	0.298	0.282	0.305	5.05	4.6614
29	1,2,4-Trichlorobenzene	0.352	0.368	0.356	0.324	0.330	0.313	0.306	0.299	0.289	0.326	8.39	4.7413
30	Naphthalene	1.090	1.122	1.079	0.968	0.970	0.922	0.865	0.884	0.806	0.967	11.39	4.8313
31	4-Chloroaniline	0.438	0.475	0.495	0.461	0.474	0.452	0.432	0.443	0.423	0.455	5.13	4.9304
32	Hexachlorobutadiene	0.219	0.215	0.211	0.186	0.193	0.185	0.174	0.170	0.166	0.191	10.40	4.9866
33	4-Chloro-3-methylphenol	0.342	0.384	0.403	0.379	0.390	0.365	0.372	0.363	0.361	0.373	4.80	5.5876
34	2-Methylnaphthalene	0.738	0.766	0.743	0.668	0.669	0.639	0.605	0.604	0.555	0.665	10.85	5.7237
35	Acenaphthene-d10	1	1	1	1	1	1	1	1	1	1	0	7.0708
36	Hexachlorocyclopentadiene	0.055	0.124	0.179	0.220	0.236	0.247	0.247	0.244	0.235	0.199	33.99	5.9173
37	2,4,6-Trichlorophenol	0.378	0.415	0.432	0.422	0.424	0.406	0.387	0.380	0.365	0.401	5.99	6.1075
38	2,4,5-Trichlorophenol	0.407	0.445	0.488	0.482	0.481	0.442	0.437	0.420	0.388	0.443	7.93	6.1604
39	2-Fluorobiphenyl	1.448	1.433	1.403	1.328	1.297	1.176	1.140	1.069	1.026	1.258	12.71	6.2178
40	2-Chloronaphthalene	1.196	1.284	1.275	1.165	1.205	1.072	1.070	1.007	0.951	1.136	10.31	6.3472
41	2-Nitroaniline	0.390	0.486	0.551	0.545	0.563	0.558	0.565	0.537	0.517	0.524	10.71	6.5227
42	Dimethylphthalate	1.540	1.590	1.569	1.482	1.525	1.436	1.408	1.380	1.319	1.472	6.27	6.7883
43	2,6-Dinitrotoluene	0.279	0.359	0.396	0.380	0.365	0.342	0.312	0.335	0.273	0.338	12.64	6.8705
44	Acenaphthylene	1.931	1.987	1.968	1.772	1.831	1.563	1.574	1.408	1.351	1.710	14.19	6.8840
45	3-Nitroaniline	0.303	0.372	0.411	0.403	0.417	0.422	0.423	0.387	0.379	0.391	9.67	7.0854
46	Acenaphthene	1.246	1.219	1.190	1.102	1.065	0.992	0.999	0.955	0.890	1.073	11.65	7.1214
47	2,4-Dinitrophenol	------	0.065	0.140	0.214	0.234	0.252	0.263	0.275	0.263	0.213	34.53	7.2406
48	4-Nitrophenol	------	0.099	0.158	0.182	0.199	0.201	0.209	0.207	0.199	0.182	20.50	7.3913
49	Dibenzofuran	1.801	1.851	1.796	1.644	1.698	1.551	1.470	1.460	1.379	1.628	10.50	7.3589
50	2,4-Dinitrotoluene	0.372	0.493	0.528	0.526	0.532	0.526	0.512	0.482	0.480	0.494	10.14	7.4095
51	Diethylphthalate	1.596	1.618	1.638	1.517	1.602	1.388	1.363	1.358	1.334	1.491	8.58	7.7685
52	Fluorene	1.419	1.464	1.444	1.342	1.321	1.244	1.193	1.182	1.060	1.297	10.55	7.8293
53	4-Chlorophenyl-phenylether	0.705	0.733	0.717	0.679	0.652	0.628	0.575	0.586	0.521	0.644	11.26	7.8597
54	4-Nitroaniline	0.315	0.424	0.460	0.460	0.476	0.455	0.458	0.430	0.400	0.431	11.45	7.9576
55	4,6-Dinitro-2-methylphenol	0.105	0.210	0.292	0.320	0.341	0.336	0.332	0.337	0.324	0.288	27.77	7.9790
56	N-Nitrosodiphenylamine	1.013	1.028	1.017	0.949	0.976	0.880	0.880	0.830	0.741	0.924	10.61	8.0499
57	Azobenzene	1.995	1.907	2.077	1.956	1.973	1.846	1.777	1.706	1.489	1.858	9.67	8.0814
58	2,4,6-Tribromophenol	0.222	0.244	0.249	0.245	0.255	0.246	0.247	0.240	0.221	0.241	4.84	8.4748

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59	Phenanthrene-d10	1	1	1	1	1	1	1	1	1	1	0	9.1325
60	4-Bromophenyl-phenyl ether	0.263	0.281	0.277	0.252	0.252	0.241	0.237	0.223	0.222	0.250	8.49	8.5394
61	Hexachlorobenzene	0.331	0.330	0.319	0.290	0.292	0.274	0.268	0.261	0.261	0.292	9.85	8.5810
62	Pentachlorophenol	0.058	0.104	0.143	0.161	0.177	0.182	0.182	0.182	0.185	0.153	28.95	8.8905
63	Phenanthrene	1.337	1.308	1.257	1.133	1.163	1.059	1.027	0.997	0.949	1.137	12.33	9.1685
64	Anthracene	1.325	1.351	1.308	1.165	1.220	1.125	1.036	1.035	0.954	1.169	12.21	9.2439
65	Carbazole	1.210	1.224	1.221	1.112	1.186	1.097	1.042	1.038	1.018	1.128	7.46	9.5050
66	Di-n-butylphthalate	1.709	1.729	1.801	1.604	1.656	1.570	1.481	1.487	1.399	1.604	8.27	10.0688
67	Fluoranthene	1.330	1.342	1.335	1.260	1.261	1.176	1.160	1.108	1.064	1.226	8.43	10.8588
68	Chrysene-d12	1	1	1	1	1	1	1	1	1	1	0	12.6436
69	Benzidine	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
70	Pyrene	1.753	1.829	1.784	1.724	1.883	1.860	1.823	1.920	1.941	1.835	4.01	11.1694
71	Terphenyl-d14	1.016	1.051	1.041	0.988	1.069	1.046	1.077	1.135	1.078	1.056	3.96	11.4068
72	Butylbenzylphthalate	0.853	0.883	0.945	0.949	1.023	0.947	1.070	1.065	1.091	0.981	8.72	12.0190
73	3,3'-Dichlorobenzidine	0.410	0.463	0.501	0.508	0.554	0.532	0.572	0.538	0.570	0.516	10.30	12.6414
74	Benzo(a)anthracene	1.318	1.329	1.271	1.276	1.335	1.345	1.368	1.366	1.422	1.337	3.51	12.6256
75	Chrysene	1.427	1.355	1.477	1.387	1.426	1.333	1.464	1.382	1.378	1.403	3.46	12.6819
76	bis(2-Ethylhexyl)phthalate	1.152	1.171	1.294	1.276	1.368	1.268	1.357	1.365	1.300	1.283	6.16	12.7584
77	Perylene-d12	1	1	1	1	1	1	1	1	1	1	0	14.3958
78	Di-n-octylphthalate	1.922	2.030	2.488	2.432	2.516	2.435	2.417	2.464	2.476	2.353	9.25	13.5810
79	Benzo(b)fluoranthene	1.291	1.292	1.418	1.411	1.424	1.439	1.591	1.728	------	1.449	10.13	13.9522
80	Benzo(k)fluoranthene	1.644	1.647	1.598	1.367	1.511	1.392	1.325	1.004	------	1.436	15.02	13.9901
81	Benzo(a)pyrene	1.426	1.500	1.522	1.352	1.402	1.343	1.354	1.319	1.325	1.394	5.38	14.3339
82	Indeno(1,2,3-cd)pyrene	1.343	1.408	1.517	1.404	1.477	1.406	1.388	1.342	1.255	1.393	5.50	15.6168
83	Dibenzo(a,h)anthracene	1.053	1.100	1.247	1.148	1.188	1.128	1.089	1.072	0.992	1.113	6.79	15.6427
84	Benzo(g,h,i)perylene	1.165	1.239	1.298	1.109	1.155	1.080	1.062	1.005	0.931	1.116	10.15	15.9353

Ave_%RSD : 9.3 Max_%RSD : 34.5

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
27	Benzoic Acid	-0.02761	0.24617	0.9991
36	Hexachlorocyclopentadiene	-0.02740	0.25123	0.9992
47	2,4-Dinitrophenol	-0.06092	0.28382	0.9992
48	4-Nitrophenol	-0.02724	0.21328	0.9993
55	4,6-Dinitro-2-methylphenol	-0.02859	0.34341	0.9994
62	Pentachlorophenol	-0.01874	0.18865	0.9997

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

Quantitation Limit from Lowest Initial Calibration Concentration

Instrument ID :T042 Column Spec :ZB-5MS ID :0.18MM
Beginning DateTime :05/29/06 12:29 Ending DateTime :05/29/06 16:26
IC File :REX298 HPChem Method :SV42E29

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	REX294
3	Pyridine	5	5	.1667	REX294
4	2-Fluorophenol	5	5	.1667	REX294
5	Phenol	5	5	.1667	REX294
6	Aniline	5	5	.1667	REX294
7	Bis(2-chloroethyl)ether	5	5	.1667	REX294
8	Phenol-d5	5	5	.1667	REX294
9	2-Chlorophenol	5	5	.1667	REX294
10	1,3-Dichlorobenzene	5	5	.1667	REX294
11	1,4-Dichlorobenzene	5	5	.1667	REX294
12	Benzyl alcohol	5	5	.1667	REX294
13	1,2-Dichlorobenzene-d4	5	5	.1667	REX294
14	1,2-Dichlorobenzene	5	5	.1667	REX294
15	2-Methylphenol	5	5	.1667	REX294
16	Bis(2-chloroisopropyl)ether	5	5	.1667	REX294
17	4-Methylphenol	5	5	.1667	REX294
18	N-Nitroso-di-n-propylamine	5	5	.1667	REX294
19	Hexachloroethane	5	5	.1667	REX294
20	Naphthalene-d8	IntSTD	IntSTD	IntSTD	IntSTD
21	Nitrobenzene-d5	5	5	.1667	REX294
22	Nitrobenzene	5	5	.1667	REX294
23	Isophorone	5	5	.1667	REX294
24	2-Nitrophenol	5	5	.1667	REX294
25	2,4-Dimethylphenol	5	5	.1667	REX294
26	bis(2-Chloroethoxy)methane	5	5	.1667	REX294
27	Benzoic Acid	5	5	.1667	REX294
28	2,4-Dichlorophenol	5	5	.1667	REX294
29	1,2,4-Trichlorobenzene	5	5	.1667	REX294
30	Naphthalene	5	5	.1667	REX294
31	4-Chloroaniline	5	5	.1667	REX294
32	Hexachlorobutadiene	5	5	.1667	REX294
33	4-Chloro-3-methylphenol	5	5	.1667	REX294
34	2-Methylnaphthalene	5	5	.1667	REX294
35	Acenaphthene-d10	IntSTD	IntSTD	IntSTD	IntSTD
36	Hexachlorocyclopentadiene	5	5	.1667	REX294
37	2,4,6-Trichlorophenol	5	5	.1667	REX294
38	2,4,5-Trichlorophenol	5	5	.1667	REX294
39	2-Fluorobiphenyl	5	5	.1667	REX294
40	2-Chloronaphthalene	5	5	.1667	REX294
41	2-Nitroaniline	5	5	.1667	REX294
42	Dimethylphthalate	5	5	.1667	REX294
43	2,6-Dinitrotoluene	5	5	.1667	REX294
44	Acenaphthylene	5	5	.1667	REX294
45	3-Nitroaniline	5	5	.1667	REX294
46	Acenaphthene	5	5	.1667	REX294
47	2,4-Dinitrophenol	10	10	.3333	REX295
48	4-Nitrophenol	10	10	.3333	REX295
49	Dibenzofuran	5	5	.1667	REX294
50	2,4-Dinitrotoluene	5	5	.1667	REX294
51	Diethylphthalate	5	5	.1667	REX294
52	Fluorene	5	5	.1667	REX294
53	4-Chlorophenyl-phenylether	5	5	.1667	REX294
54	4-Nitroaniline	5	5	.1667	REX294
55	4,6-Dinitro-2-methylphenol	5	5	.1667	REX294
56	N-Nitrosodiphenylamine	5	5	.1667	REX294
57	Azobenzene	5	5	.1667	REX294
58	2,4,6-Tribromophenol	5	5	.1667	REX294
59	Phenanthrene-d10	IntSTD	IntSTD	IntSTD	IntSTD
60	4-Bromophenyl-phenylether	5	5	.1667	REX294
61	Hexachlorobenzene	5	5	.1667	REX294
62	Pentachlorophenol	5	5	.1667	REX294
63	Phenanthrene	5	5	.1667	REX294
64	Anthracene	5	5	.1667	REX294
65	Carbazole	5	5	.1667	REX294
66	Di-n-butylphthalate	5	5	.1667	REX294
67	Fluoranthene	5	5	.1667	REX294
68	Chrysene-d12	IntSTD	IntSTD	IntSTD	IntSTD
69	Benzidine	NA	NA	NA	NA
70	Pyrene	5	5	.1667	REX294
71	Terphenyl-d14	5	5	.1667	REX294
72	Butylbenzylphthalate	5	5	.1667	REX294
73	3,3'-Dichlorobenzidine	5	5	.1667	REX294
74	Benzo(a)anthracene	5	5	.1667	REX294
75	Chrysene	5	5	.1667	REX294
76	bis(2-Ethylhexyl)phthalate	5	5	.1667	REX294
77	Perylene-d12	IntSTD	IntSTD	IntSTD	IntSTD
78	Di-n-octylphthalate	5	5	.1667	REX294
79	Benzo(b)fluoranthene	5	5	.1667	REX294
80	Benzo(k)fluoranthene	5	5	.1667	REX294
81	Benzo(a)pyrene	5	5	.1667	REX294
82	Indeno(1,2,3-cd)pyrene	5	5	.1667	REX294
83	Dibenzo(a,h)anthracene	5	5	.1667	REX294
84	Benzo(g,h,i)perylene	5	5	.1667	REX294

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFX202
Instrument ID: T-042

Project: OMEGA CHEMICAL
SDG No.: 06G039
DFTPP Injection Date: 06/19/06
DFTPP Injection Time: 11:22

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	48.25
68	Less than 2% of mass 69	0.00(0.0)1
69	Relative abundance of mass 198	61.11
70	Less than 2.0% of mass 69	0.30(0.5)1
127	40.0 - 60.0% of mass 198	45.82
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	7.11
275	10.0 - 30.0% of mass 198	22.42
365	Greater than 1.00% of mass 198	2.36
441	Present, but less than mass 443	10.73
442	Greater than 40.0% of mass 198	66.94
443	17.0 - 23.0% of mass 442	13.49(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	SSTD010	SV42F191	RFX203	06/19/06	12:35
2	SSTD040	SV42F192	RFX204	06/19/06	13:00
3	SSTD050	SV42F193	RFX205	06/19/06	13:26
4	SSTD080	SV42F194	RFX206	06/19/06	13:51
5	SSTD120	SV42F195	RFX207	06/19/06	14:17
6	SSTD160	SV42F196	RFX208	06/19/06	14:42
7	SSTD050	ISV42F191	RFX209	06/19/06	15:08

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :T042
Beginning DateTime :06/19/06 12:35
Spike Units :PPM
IC File :RFX205

Column Spec :ZB-5MS ID :0.18MM
Ending DateTime :06/19/06 14:42
HPChem Method :SV42F19

IDX	Parameters	10 12:35 RFX203	40 13:00 RFX204	50 13:26 RFX205	80 13:51 RFX206	120 14:17 RFX207	160 14:42 RFX208	Av_RRF	%_RSD	Av_Rt_M
1	1,4-Dichlorobenzene-d4	1	1	1	1	1	1	1	0	3.4110
2	Benzaldehyde	1.135	1.167	1.128	1.129	1.134	1.087	1.130	2.23	3.0262
3	Acetophenone	1.660	1.699	1.644	1.613	1.636	1.539	1.632	3.31	3.8296
4	Naphthalene-d8	1	1	1	1	1	1	1	0	4.8067
5	Caprolactam	0.103	0.128	0.131	0.130	0.136	0.137	0.127	9.73	5.4008
6	Acenaphthene-d10	1	1	1	1	1	1	1	0	7.0666
7	1,1'-Biphenyl	1.500	1.445	1.402	1.318	1.277	1.223	1.361	7.79	6.3358
8	Phenanthrene-d10	1	1	1	1	1	1	1	0	9.1205
9	Atrazine	0.180	0.220	0.217	0.227	0.230	0.219	0.215	8.27	8.8336
10	Chrysene-d12	1	1	1	1	1	1	1	0	12.6056
11	Perylene-d12	1	1	1	1	1	1	1	0	14.3473

Ave_%RSD : 6.3 Max_%RSD : 9.7

KMP 6/20/06

Quantitation Limit from Lowest Initial Calibration Concentration

Instrument ID :T042 Column Spec :ZB-5MS ID :0.18MM
Beginning DateTime :06/19/06 12:35 Ending DateTime :06/19/06 14:42
IC File :RFX205 HPChem Method :SV42F19

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	Benzaldehyde	10	10	.3333	RFX203
3	Acetophenone	10	10	.3333	RFX203
4	Naphthalene-d8	IntSTD	IntSTD	IntSTD	IntSTD
5	Caprolactam	10	10	.3333	RFX203
6	Acenaphthene-d10	IntSTD	IntSTD	IntSTD	IntSTD
7	1,1'-Biphenyl	10	10	.3333	RFX203
8	Phenanthrene-d10	IntSTD	IntSTD	IntSTD	IntSTD
9	Atrazine	10	10	.3333	RFX203
10	Chrysene-d12	IntSTD	IntSTD	IntSTD	IntSTD
11	Perylene-d12	IntSTD	IntSTD	IntSTD	IntSTD

KAP
6/20/06

SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :T042
IC_Beginning DateTime :05/29/06 12:29
Spike Amount :50 PPM
CC/CV File :REX303
IC File :REX298

Column Spec :ZB-5MS ID :0.18MM
IC_Ending DateTime :05/29/06 16:26
HPChem Method :SV42E29
Date_Time :05/29/06 16:51

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	217674	1	1	3.390	3.395	0				
2	N-Nitrosodimethylamine	50.316	0.6	235095	0.864	0.859	1.577	1.586	1.93				
3	Pyridine	49.693	-0.6	390295	1.434	1.443	1.587	1.595	1.60				
4	2-Fluorophenol												
5	Phenol	51.771	3.5	491659	1.807	1.745	3.086	3.092	4.63				
6	Aniline	52.391	4.8	560225	2.059	1.965	3.097	3.115	3.81				
7	Bis(2-chloroethyl)ether	50.125	0.3	401544	1.476	1.472	3.157	3.165	8.37				
8	Phenol-d5												
9	2-Chlorophenol	52.367	4.7	372141	1.368	1.306	3.198	3.208	5.10				
10	1,3-Dichlorobenzene	52.075	4.2	413379	1.519	1.459	3.329	3.337	4.25				
11	1,4-Dichlorobenzene	51.172	2.3	406025	1.492	1.458	3.411	3.414	5.22				
12	Benzyl alcohol	54.604	9.2	244111	0.897	0.822	3.552	3.559	5.00				
13	1,2-Dichlorobenzene-d4												
14	1,2-Dichlorobenzene	53.204	6.4	374679	1.377	1.294	3.563	3.563	11.64				
15	2-Methylphenol	54.143	8.3	319176	1.173	1.083	3.664	3.672	6.34				
16	Bis(2-chloroisopropyl)ether	50.840	1.7	728014	2.676	2.631	3.684	3.687	5.53				
17	4-Methylphenol	53.129	6.3	454586	1.671	1.572	3.846	3.850	3.28				
18	N-Nitroso-di-n-propylamine	53.745	7.5	330053	1.213	1.128	3.836	3.849	3.70				
19	Hexachloroethane	52.255	4.5	194346	0.714	0.683	3.897	3.902	8.54				
20	Naphthalene-d8	40.000	0	795763	1	1	4.808	4.805	0				
21	Nitrobenzene-d5												
22	Nitrobenzene	52.635	5.3	453293	0.456	0.433	4.008	4.011	3.59				
23	Isophorone	50.329	0.7	806338	0.811	0.805	4.292	4.297	2.74				
24	2-Nitrophenol	53.402	6.8	233362	0.235	0.220	4.363	4.363	7.33				
25	2,4-Dimethylphenol	51.241	2.5	323362	0.325	0.317	4.444	4.448	3.92				
26	bis(2-Chloroethoxy)methane	51.229	2.5	501845	0.505	0.492	4.555	4.555	4.59				
27	Benzoic Acid	49.748	-0.5	221663	0.223	0.193	4.687	4.687	31.29	-0.0276	0.2462		0.9991
28	2,4-Dichlorophenol	51.816	3.6	314760	0.316	0.305	4.656	4.661	5.05				
29	1,2,4-Trichlorobenzene	52.265	4.5	339259	0.341	0.326	4.737	4.741	8.39				
30	Naphthalene	50.515	1.0	972072	0.977	0.967	4.828	4.831	11.39				
31	4-Chloroaniline	52.599	5.2	475906	0.478	0.455	4.930	4.930	5.13				
32	Hexachlorobutadiene	51.620	3.2	196016	0.197	0.191	4.980	4.987	10.40				
33	4-Chloro-3-methylphenol	52.934	5.9	393233	0.395	0.373	5.588	5.588	4.80				
34	2-Methylnaphthalene	51.156	2.3	676777	0.680	0.665	5.720	5.724	10.85				
35	Acenaphthene-d10	40.000	0	437004	1	1	7.067	7.071	0				
36	Hexachlorocyclopentadiene	48.782	-2.4	121917	0.223	0.199	5.912	5.917	33.99	-0.0274	0.2512		0.9992
37	2,4,6-Trichlorophenol	51.752	3.5	226653	0.415	0.401	6.105	6.108	5.99				
38	2,4,5-Trichlorophenol	54.100	8.2	262054	0.480	0.443	6.155	6.160	7.93				
39	2-Fluorobiphenyl												
40	2-Chloronaphthalene	52.569	5.1	652491	1.194	1.136	6.348	6.347	10.31				
41	2-Nitroaniline	53.345	6.7	305235	0.559	0.524	6.520	6.523	10.71				
42	Dimethylphthalate	51.312	2.6	825138	1.511	1.472	6.793	6.788	6.27				
43	2,6-Dinitrotoluene	55.357	10.7	204394	0.374	0.338	6.864	6.871	12.64				
44	Acenaphthylene	52.350	4.7	977747	1.790	1.710	6.885	6.884	14.19				
45	3-Nitroaniline	53.904	7.8	230133	0.421	0.391	7.087	7.085	9.67				
46	Acenaphthene	49.878	-0.2	584803	1.071	1.073	7.117	7.121	11.65				
47	2,4-Dinitrophenol	49.523	-1.0	126934	0.232	0.213	7.229	7.241	34.53	-0.0609	0.2838		0.9992
48	4-Nitrophenol	51.841	3.7	108889	0.199	0.182	7.381	7.391	20.50	-0.0272	0.2133		0.9993
49	Dibenzofuran	50.907	1.8	905299	1.657	1.628	7.361	7.359	10.50				
50	2,4-Dinitrotoluene	55.346	10.7	299006	0.547	0.494	7.401	7.410	10.14				
51	Diethylphthalate	54.017	8.0	879640	1.610	1.491	7.766	7.768	8.58				
52	Fluorene	50.256	0.5	711875	1.303	1.297	7.826	7.829	10.55				
53	4-Chlorophenyl-phenylether	50.229	0.5	353422	0.647	0.644	7.857	7.860	11.26				
54	4-Nitroaniline	54.019	8.0	254318	0.466	0.431	7.948	7.958	11.45				
55	4,6-Dinitro-2-methylphenol	50.821	1.6	178176	0.326	0.288	7.968	7.979	27.77	-0.0286	0.3434		0.9994
56	N-Nitrosodiphenylamine	52.881	5.8	533695	0.977	0.924	8.049	8.050	10.61				
57	Azobenzene	52.167	4.3	1059181	1.939	1.858	8.080	8.081	9.67				
58	2,4,6-Tribromophenol												
59	Phenanthrene-d10	40.000	0	720514	1	1	9.133	9.132	0				
60	4-Bromophenyl-phenylether	49.741	-0.5	223762	0.248	0.250	8.535	8.539	8.49				
61	Hexachlorobenzene	49.966	-0.1	262572	0.292	0.292	8.576	8.581	9.85				
62	Pentachlorophenol	47.870	-4.3	149171	0.166	0.153	8.890	8.891	28.95	-0.0187	0.1886		0.9997
63	Phenanthrene	50.689	1.4	1037821	1.152	1.137	9.163	9.168	12.33				
64	Anthracene	50.675	1.3	1066793	1.184	1.169	9.245	9.244	12.21				
65	Carbazole	51.047	2.1	1036846	1.151	1.128	9.508	9.505	7.46				
66	Di-n-butylphthalate	51.741	3.5	1494877	1.660	1.604	10.065	10.069	8.27				
67	Fluoranthene	51.647	3.3	1140750	1.267	1.226	10.855	10.859	8.43				
68	Chrysene-d12	40.000	0	511784	1	1	12.648	12.644	0				
69	Benzidine												
70	Pyrene	47.819	-4.4	1122841	1.755	1.835	11.169	11.169	4.01				
71	Terphenyl-d14												
72	Butylbenzylphthalate	50.023	0.0	627569	0.981	0.981	12.020	12.019	8.72				
73	3,3'-Dichlorobenzidine	48.891	-2.2	323087	0.505	0.516	12.637	12.641	10.30				
74	Benzo(a)anthracene	47.785	-4.4	817341	1.278	1.337	12.627	12.626	3.51				
75	Chrysene	47.621	-4.8	854933	1.336	1.403	12.678	12.682	3.46				
76	bis(2-Ethylhexyl)phthalate	51.634	3.3	847786	1.325	1.283	12.759	12.758	6.16				
77	Perylene-d12	40.000	0	451608	1	1	14.400	14.396	0				
78	Di-n-octylphthalate	53.954	7.9	1433556	2.539	2.353	13.579	13.581	9.25				
79	Benzo(b)fluoranthene	56.353	12.7	922188	1.634	1.449	13.954	13.952	10.13				
80	Benzo(k)fluoranthene	44.924	-10.2	728345	1.290	1.436	13.995	13.990	15.02				
81	Benzo(a)pyrene	50.703	1.4	797773	1.413	1.394	14.329	14.334	5.38				
82	Indeno(1,2,3-cd)pyrene	50.636	1.3	796544	1.411	1.393	15.605	15.617	5.50				
83	Dibenzo(a,h)anthracene	51.071	2.1	641856	1.137	1.113	15.635	15.643	6.79				
84	Benzo(g,h,i)perylene	48.820	-2.4	615054	1.090	1.116	15.929	15.935	10.15				

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :T042
IC_Beginning DateTime :06/19/06 12:35
Spike Amount :50 PPM
CC/CV File :RFX209
IC File :RFX205

Column Spec :ZB-5MS ID :0.18MM
IC_Ending DateTime :06/19/06 14:42
HPChem Method :SV42F19
Date_Time :06/19/06 15:08

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	249319	1	1	3.411	3.411	0				
2	Benzaldehyde	50.848	1.7	358136	1.149	1.130	3.026	3.026	2.23				
3	Acetophenone	50.726	1.5	515965	1.656	1.632	3.826	3.830	3.31				
4	Naphthalene-d8	40.000	0	872282	1	1	4.808	4.807	0				
5	Caprolactam	51.108	2.2	142078	0.130	0.127	5.385	5.401	9.73				
6	Acenaphthene-d10	40.000	0	468439	1	1	7.066	7.067	0				
7	1,1'-Biphenyl	52.193	4.4	831813	1.421	1.361	6.337	6.336	7.79				
8	Phenanthrene-d10	40.000	0	698513	1	1	9.122	9.120	0				
9	Atrazine	49.639	-0.7	186732	0.214	0.215	8.828	8.834	8.27				
10	Chrysene-d12	40.000	0	429510	1	1	12.606	12.606	0				
11	Perylene-d12	40.000	0	228159	1	1	14.347	14.347	0				

6/20/06

3023

DAILY CALIBRATIONS

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGX069
Instrument ID: T-042

Project: OMEGA CHEMICAL
SDG No.: 06G039
DFTPP Injection Date: 07/17/06
DFTPP Injection Time: 11:28

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	59.02
68	Less than 2% of mass 69	0.00(0.0)1
69	Relative abundance of mass 198	72.01
70	Less than 2.0% of mass 69	0.15(0.2)1
127	40.0 - 60.0% of mass 198	49.25
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	7.40
275	10.0 - 30.0% of mass 198	21.59
365	Greater than 1.00% of mass 198	2.40
441	Present, but less than mass 443	11.05
442	Greater than 40.0% of mass 198	71.46
443	17.0 - 23.0% of mass 442	14.32(20.0)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	CSV42E2924	RGX070	07/17/06	12:20
2	SSTD050	CSV42F1905	RGX071	07/17/06	12:46
3	MBLK1W	SVG012WB	RGX073	07/17/06	13:41
4	LCS1W	SVG012WL	RGX074	07/17/06	14:07
5	LCD1W	SVG012WC	RGX075	07/17/06	14:33
6	OC2-PMW15-0-17	G039-01	RGX084	07/17/06	18:23
7	OC2-PMW15-5-21	G039-04	RGX085	07/17/06	18:49
8	OC2-PMW15-1-20	G039-05	RGX086	07/17/06	19:14
9	OC2-PMW18A-0-22	G039-06	RGX087	07/17/06	19:40
10	OC2-PMW18B-0-23	G039-07	RGX088	07/17/06	20:05
11	OC2-PMW18C-0-24	G039-08	RGX089	07/17/06	20:31

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: REX298
Instrument ID: T-042

Project:OMEGA CHEMICAL
SDG No.: 06G039
Date Analyzed: 05/29/06
Time Analyzed: 14:45

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	225634	3.39	835798	4.81	446392	7.07
	UPPER LIMIT	451268	3.89	1671596	5.31	892784	7.57
	LOWER LIMIT	112817	2.89	417899	4.31	223196	6.57
	SAMPLE ID						
1	SSTD050	248052	3.41	905580	4.80	490741	7.07
2	MBLK1W	286051	3.40	1050573	4.80	584808	7.07
3	LCS1W	294738	3.41	1073289	4.81	577905	7.07
4	LCD1W	282055	3.40	1005843	4.80	543373	7.07
5	OC2-PMW15-0-17	245652	3.40	880041	4.80	502834	7.07
6	OC2-PMW15-5-21	252065	3.41	903798	4.80	510844	7.06
7	OC2-PMW15-1-20	242648	3.41	884288	4.80	508450	7.06
8	OC2-PMW18A-0-22	247538	3.41	889656	4.80	501481	7.06
9	OC2-PMW18B-0-23	238997	3.40	874235	4.80	506612	7.06
10	OC2-PMW18C-0-24	249765	3.40	895905	4.80	512473	7.06

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.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: REX298
Instrument ID: T-042

Project:OMEGA CHEMICAL
SDG No.: 06G039
Date Analyzed: 05/29/06
Time Analyzed: 14:45

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	730152	9.13	496614	12.64	463941	14.39
	UPPER LIMIT	1460304	9.63	993228	13.14	927882	14.89
	LOWER LIMIT	365076	8.63	248307	12.14	231971	13.89
	SAMPLE ID						
1	SSTD050	754429	9.12	499798	12.62	373752	14.37
2	MBLK1W	976395	9.12	667327	12.61	525332	14.37
3	LCS1W	872342	9.12	555875	12.63	407376	14.37
4	LCD1W	823171	9.12	524341	12.62	378787	14.37
5	OC2-PMW15-0-17	829596	9.12	540628	12.61	380661	14.37
6	OC2-PMW15-5-21	837205	9.12	534018	12.61	368546	14.36
7	OC2-PMW15-1-20	841229	9.12	544279	12.61	376610	14.36
8	OC2-PMW18A-0-22	820106	9.12	520223	12.61	355293	14.36
9	OC2-PMW18B-0-23	821480	9.11	516208	12.61	352980	14.36
10	OC2-PMW18C-0-24	827403	9.11	532449	12.61	364607	14.36

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\06G17\RGX070.D Vial: 3
Acq On : 17 Jul 06 12:20 Operator: SG
Sample : CSV42E2924 Inst : TO42
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV42E29.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Tue Jun 06 11:17:13 2006
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	110	0.02
2	T	N-Nitrosodimethylamine	50.000	52.844	-5.7	113	0.05
3	T	Pyridine	50.000	52.837	-5.7	112	0.07
4	S	2-Fluorophenol	50.000	52.665	-5.3	110	0.04
5	C	Phenol	50.000	52.703	-5.4	110	0.00
6	T	Aniline	50.000	47.244	5.5	101	0.00
7	T	Bis(2-chloroethyl)ether	50.000	52.265	-4.5	113	0.00
8	S	Phenol-d5	50.000	52.676	-5.4	110	0.02
9	T	2-Chlorophenol	50.000	53.337	-6.7	112	0.00
10	T	1,3-Dichlorobenzene	50.000	51.589	-3.2	109	0.00
11	C	1,4-Dichlorobenzene	50.000	51.965	-3.9	112	0.00
12	T	Benzyl alcohol	50.000	54.044	-8.1	112	0.00
13	S	1,2-Dichlorobenzene-d4	50.000	52.431	-4.9	113	0.00
14	T	1,2-Dichlorobenzene	50.000	54.078	-8.2	115	0.00
15	T	2-Methylphenol	50.000	52.865	-5.7	108	0.00
16	T	Bis(2-chloroisopropyl)ether	50.000	45.901	8.2	98	0.00
17	T	4-Methylphenol	50.000	51.622	-3.2	107	-0.01
18	P	N-Nitroso-di-n-propylamine	50.000	49.541	0.9	102	0.00
19	T	Hexachloroethane	50.000	49.707	0.6	105	0.00
20	I	Naphthalene-d8	40.000	40.000	0.0	108	-0.01
21	S	Nitrobenzene-d5	50.000	51.386	-2.8	108	0.00
22	T	Nitrobenzene	50.000	51.627	-3.3	110	0.00
23	T	Isophorone	50.000	48.573	2.9	106	-0.01
24	C	2-Nitrophenol	50.000	51.045	-2.1	102	0.00
25	T	2,4-Dimethylphenol	50.000	50.602	-1.2	108	-0.01
26	T	bis(2-Chloroethoxy)methane	50.000	48.334	3.3	102	-0.01
27	T	Benzoic Acid	50.000	47.670	4.7	105	-0.01
28	C	2,4-Dichlorophenol	50.000	52.085	-4.2	110	0.00
29	T	1,2,4-Trichlorobenzene	50.000	51.406	-2.8	110	0.00
30	T	Naphthalene	50.000	50.570	-1.1	109	0.00
31	T	4-Chloroaniline	50.000	52.004	-4.0	108	0.00
32	C	Hexachlorobutadiene	50.000	47.864	4.3	103	0.00
33	C	4-Chloro-3-methylphenol	50.000	52.934	-5.9	110	0.00
34	T	2-Methylnaphthalene	50.000	52.181	-4.4	112	0.00
35	I	Acenaphthene-d10	40.000	40.000	0.0	110	0.00
36	P	Hexachlorocyclopentadiene	50.000	34.699	30.6#	71	0.00
37	C	2,4,6-Trichlorophenol	50.000	51.723	-3.4	108	0.00
38	T	2,4,5-Trichlorophenol	50.000	51.347	-2.7	104	0.00
39	S	2-Fluorobiphenyl	50.000	53.521	-7.0	114	0.00
40	T	2-Chloronaphthalene	50.000	52.139	-4.3	108	-0.01
41	T	2-Nitroaniline	50.000	52.181	-4.4	107	0.00
42	T	Dimethylphthalate	50.000	51.279	-2.6	109	0.00
43	T	2,6-Dinitrotoluene	50.000	57.131	-14.3	116	0.00
44	T	Acenaphthylene	50.000	54.283	-8.6	111	-0.01
45	T	3-Nitroaniline	50.000	51.839	-3.7	107	0.00
46	C	Acenaphthene	50.000	51.619	-3.2	114	-0.01
47	P	2,4-Dinitrophenol	50.000	45.948	8.1	100	0.00
48	P	4-Nitrophenol	50.000	46.342	7.3	97	0.00
49	T	Dibenzofuran	50.000	51.699	-3.4	109	-0.01
50	T	2,4-Dinitrotoluene	50.000	51.228	-2.5	105	0.00
51	T	Diethylphthalate	50.000	49.762	0.5	102	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\06G17\RGX070.D Vial: 3
Acq On : 17 Jul 06 12:20 Operator: SG
Sample : CSV42E2924 Inst : TO42
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV42E29.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Tue Jun 06 11:17:13 2006
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	T	Fluorene	50.000	50.577	-1.2	109	-0.01
53	T	4-Chlorophenyl-phenylether	50.000	50.254	-0.5	109	-0.01
54	T	4-Nitroaniline	50.000	48.634	2.7	97	-0.02
55	T	4,6-Dinitro-2-methylphenol	50.000	46.599	6.8	96	0.00
56	C	N-Nitrosodiphenylamine	50.000	51.248	-2.5	107	-0.01
57	T	Azobenzene	50.000	49.472	1.1	102	-0.01
58	S	2,4,6-Tribromophenol	50.000	44.812	10.4	93	-0.01
59	I	Phenanthrene-d10	40.000	40.000	0.0	103	-0.01
60	T	4-Bromophenyl-phenylether	50.000	51.515	-3.0	105	-0.01
61	T	Hexachlorobenzene	50.000	48.662	2.7	100	0.00
62	C	Pentachlorophenol	50.000	44.594	10.8	89	0.00
63	T	Phenanthrene	50.000	51.978	-4.0	105	0.00
64	T	Anthracene	50.000	51.969	-3.9	103	-0.01
65	T	Carbazole	50.000	51.049	-2.1	100	0.00
66	T	Di-n-butylphthalate	50.000	47.607	4.8	95	-0.01
67	C	Fluoranthene	50.000	49.527	0.9	100	-0.01
68	I	Chrysene-d12	40.000	40.000	0.0	101	-0.02
69	T	Benzidine	-1.000	0.000	0.0	0	0.00
70	T	Pyrene	50.000	50.573	-1.1	99	-0.01
71	S	Terphenyl-d14	50.000	51.115	-2.2	102	0.00
72	T	Butylbenzylphthalate	50.000	49.528	0.9	96	-0.02
73	T	3,3'-Dichlorobenzidine	50.000	47.589	4.8	89	-0.02
74	T	Benzo(a)anthracene	50.000	47.864	4.3	96	-0.01
75	T	Chrysene	50.000	49.703	0.6	98	-0.02
76	T	bis(2-Ethylhexyl)phthalate	50.000	45.848	8.3	87	-0.03
77	I	Perylene-d12	40.000	40.000	0.0	81	-0.02
78	C	Di-n-octylphthalate	50.000	54.700	-9.4	82	-0.03
79	T	Benzo(b)fluoranthene	50.000	51.825	-3.7	85	-0.03
80	T	Benzo(k)fluoranthene	50.000	55.836	-11.7	85	-0.03
81	C	Benzo(a)pyrene	50.000	52.728	-5.5	84	-0.02
82	T	Indeno(1,2,3-cd)pyrene	50.000	47.396	5.2	72	-0.02
83	T	Dibenzo(a,h)anthracene	50.000	48.551	2.9	73	-0.03
84	T	Benzo(g,h,i)perylene	50.000	44.843	10.3	70	-0.03

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

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\06G17\RGX070.D Vial: 3
Acq On : 17 Jul 06 12:20 Operator: SG
Sample : CSV42E2924 Inst : TO42
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV42E29.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Tue Jun 06 11:17:13 2006
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	0.02
2	T	N-Nitrosodimethylamine	0.859	0.907	-5.6	113	0.05
3	T	Pyridine	1.443	1.525	-5.7	112	0.07
4	S	2-Fluorophenol	1.238	1.304	-5.3	110	0.04
5	C	Phenol	1.745	1.839	-5.4	110	0.00
6	T	Aniline	1.965	1.857	5.5	101	0.00
7	T	Bis(2-chloroethyl)ether	1.472	1.539	-4.6	113	0.00
8	S	Phenol-d5	1.588	1.673	-5.4	110	0.02
9	T	2-Chlorophenol	1.306	1.393	-6.7	112	0.00
10	T	1,3-Dichlorobenzene	1.459	1.505	-3.2	109	0.00
11	C	1,4-Dichlorobenzene	1.458	1.515	-3.9	112	0.00
12	T	Benzyl alcohol	0.822	0.888	-8.0	112	0.00
13	S	1,2-Dichlorobenzene-d4	0.883	0.926	-4.9	113	0.00
14	T	1,2-Dichlorobenzene	1.294	1.400	-8.2	115	0.00
15	T	2-Methylphenol	1.083	1.145	-5.7	108	0.00
16	T	Bis(2-chloroisopropyl)ether	2.631	2.416	8.2	98	0.00
17	T	4-Methylphenol	1.572	1.623	-3.2	107	-0.01
18	P	N-Nitroso-di-n-propylamine	1.128	1.118	0.9	102	0.00
19	T	Hexachloroethane	0.683	0.679	0.6	105	0.00
20	I	Naphthalene-d8	1.000	1.000	0.0	108	-0.01
21	S	Nitrobenzene-d5	0.423	0.435	-2.8	108	0.00
22	T	Nitrobenzene	0.433	0.447	-3.2	110	0.00
23	T	Isophorone	0.805	0.782	2.9	106	-0.01
24	C	2-Nitrophenol	0.220	0.224	-1.8	102	0.00
25	T	2,4-Dimethylphenol	0.317	0.321	-1.3	108	-0.01
26	T	bis(2-Chloroethoxy)methane	0.492	0.476	3.3	102	-0.01
27	T	Benzoic Acid	0.193	0.213	-10.4	105	-0.01
28	C	2,4-Dichlorophenol	0.305	0.318	-4.3	110	0.00
29	T	1,2,4-Trichlorobenzene	0.326	0.335	-2.8	110	0.00
30	T	Naphthalene	0.967	0.978	-1.1	109	0.00
31	T	4-Chloroaniline	0.455	0.473	-4.0	108	0.00
32	C	Hexachlorobutadiene	0.191	0.183	4.2	103	0.00
33	C	4-Chloro-3-methylphenol	0.373	0.395	-5.9	110	0.00
34	T	2-Methylnaphthalene	0.665	0.694	-4.4	112	0.00
35	I	Acenaphthene-d10	1.000	1.000	0.0	110	0.00
36	P	Hexachlorocyclopentadiene	0.199	0.152	23.6	71	0.00
37	C	2,4,6-Trichlorophenol	0.401	0.415	-3.5	108	0.00
38	T	2,4,5-Trichlorophenol	0.443	0.455	-2.7	104	0.00
39	S	2-Fluorobiphenyl	1.258	1.346	-7.0	114	0.00
40	T	2-Chloronaphthalene	1.136	1.185	-4.3	108	-0.01
41	T	2-Nitroaniline	0.524	0.547	-4.4	107	0.00
42	T	Dimethylphthalate	1.472	1.510	-2.6	109	0.00
43	T	2,6-Dinitrotoluene	0.338	0.386	-14.2	116	0.00
44	T	Acenaphthylene	1.710	1.856	-8.5	111	-0.01
45	T	3-Nitroaniline	0.391	0.405	-3.6	107	0.00
46	C	Acenaphthene	1.073	1.108	-3.3	114	-0.01
47	P	2,4-Dinitrophenol	0.213	0.212	0.5	100	0.00
48	P	4-Nitrophenol	0.182	0.176	3.3	97	0.00
49	T	Dibenzofuran	1.628	1.683	-3.4	109	-0.01
50	T	2,4-Dinitrotoluene	0.494	0.507	-2.6	105	0.00
51	T	Diethylphthalate	1.491	1.483	0.5	102	-0.02

(#) = Out of Range

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Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\06G17\RGX070.D Vial: 3
Acq On : 17 Jul 06 12:20 Operator: SG
Sample : CSV42E2924 Inst : TO42
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV42E29.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Tue Jun 06 11:17:13 2006
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
52	T	Fluorene	1.297	1.312	-1.2	109	-0.01
53	T	4-Chlorophenyl-phenylether	0.644	0.647	-0.5	109	-0.01
54	T	4-Nitroaniline	0.431	0.419	2.8	97	-0.02
55	T	4,6-Dinitro-2-methylphenol	0.288	0.297	-3.1	96	0.00
56	C	N-Nitrosodiphenylamine	0.924	0.947	-2.5	107	-0.01
57	T	Azobenzene	1.858	1.839	1.0	102	-0.01
58	S	2,4,6-Tribromophenol	0.241	0.216	10.4	93	-0.01
59	I	Phenanthrene-d10	1.000	1.000	0.0	103	-0.01
60	T	4-Bromophenyl-phenylether	0.250	0.257	-2.8	105	-0.01
61	T	Hexachlorobenzene	0.292	0.284	2.7	100	0.00
62	C	Pentachlorophenol	0.153	0.153	0.0	89	0.00
63	T	Phenanthrene	1.137	1.182	-4.0	105	0.00
64	T	Anthracene	1.169	1.215	-3.9	103	-0.01
65	T	Carbazole	1.128	1.151	-2.0	100	0.00
66	T	Di-n-butylphthalate	1.604	1.527	4.8	95	-0.01
67	C	Fluoranthene	1.226	1.215	0.9	100	-0.01
68	I	Chrysene-d12	1.000	1.000	0.0	101	-0.02
69	T	Benzidine	0.000	0.000#	0.0	0#	0.00
70	T	Pyrene	1.835	1.856	-1.1	99	-0.01
71	S	Terphenyl-d14	1.056	1.079	-2.2	102	0.00
72	T	Butylbenzylphthalate	0.981	0.971	1.0	96	-0.02
73	T	3,3'-Dichlorobenzidine	0.516	0.492	4.7	89	-0.02
74	T	Benzo(a)anthracene	1.337	1.280	4.3	96	-0.01
75	T	Chrysene	1.403	1.395	0.6	98	-0.02
76	T	bis(2-Ethylhexyl)phthalate	1.283	1.177	8.3	87	-0.03
77	I	Perylene-d12	1.000	1.000	0.0	81	-0.02
78	C	Di-n-octylphthalate	2.353	2.575	-9.4	82	-0.03
79	T	Benzo(b)fluoranthene	1.449	1.502	-3.7	85	-0.03
80	T	Benzo(k)fluoranthene	1.436	1.604	-11.7	85	-0.03
81	C	Benzo(a)pyrene	1.394	1.470	-5.5	84	-0.02
82	T	Indeno(1,2,3-cd)pyrene	1.393	1.321	5.2	72	-0.02
83	T	Dibenzo(a,h)anthracene	1.113	1.081	2.9	73	-0.03
84	T	Benzo(g,h,i)perylene	1.116	1.001	10.3	70	-0.03

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

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\06G17\RGX071.D Vial: 4
Acq On : 17 Jul 06 12:46 Operator: SG
Sample : CSV42F1905 Inst : TO42
Misc : CLP OLM04 ADD.-50PPM Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV42F19.M (RTE Integrator)
Title : CLP SVOA ADDITIONAL
Last Update : Mon Jun 19 15:07:53 2006
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	96	-0.01
2	T	Benzaldehyde	50.000	53.667	-7.3	103	0.00
3	T	Acetophenone	50.000	54.711	-9.4	104	0.00
4	I	Naphthalene-d8	40.000	40.000	0.0	99	-0.01
5	T	Caprolactam	50.000	56.105	-12.2	108	0.00
6	I	Acenaphthene-d10	40.000	40.000	0.0	103	0.00
7	P	1,1'-Biphenyl	50.000	51.427	-2.9	103	-0.01
8	I	Phenanthrene-d10	40.000	40.000	0.0	117	0.00
9	T	Atrazine	50.000	50.496	-1.0	118	0.00
10	I	Chrysene-d12	40.000	40.000	0.0	138	0.00
11	I	Perylene-d12	40.000	40.000	0.0	168	0.02

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

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\06G17\RGX071.D Vial: 4
Acq On : 17 Jul 06 12:46 Operator: SG
Sample : CSV42F1905 Inst : TO42
Misc : CLP OLM04 ADD.-50PPM Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV42F19.M (RTE Integrator)
Title : CLP SVOA ADDITIONAL
Last Update : Mon Jun 19 15:07:53 2006
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	96	-0.01
2	T	Benzaldehyde	1.130	1.213	-7.3	103	0.00
3	T	Acetophenone	1.632	1.786	-9.4	104	0.00
4	I	Naphthalene-d8	1.000	1.000	0.0	99	-0.01
5	T	Caprolactam	0.127	0.143	-12.6	108	0.00
6	I	Acenaphthene-d10	1.000	1.000	0.0	103	0.00
7	P	1,1'-Biphenyl	1.361	1.400	-2.9	103	-0.01
8	I	Phenanthrene-d10	1.000	1.000	0.0	117	0.00
9	T	Atrazine	0.215	0.218	-1.4	118	0.00
10	I	Chrysene-d12	1.000	1.000	0.0	138	0.00
11	I	Perylene-d12	1.000	1.000	0.0	168	0.02

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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 ☒ CIP01M04. additional Book #A42- 012

Method File: SV42F19 Tune File: DFTPP Start Date/Time: 6/19/06 11:22 End Date/Time: 6/19/06 15:33

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RFX 201	IB42F1901				
	202	DFT42F1901				
NA	203	SV42F19 1	NA			10 ppm, 01M04. add
	204	2				40ppm
	205	3				50 ppm
	206	4				80 ppm
	207	5				120ppm
	208	6				160ppm
	209	ISV42F19 1				2nd Source 50
	210	SS2B-04-38-2				80ppm check ppm
						SU
						6/19/06

ANALYTICAL BATCH SV42F19

Instrument No:	42

INITIAL CALIBRATION REFERENCE	
Date	6/19/06
ICAL ID	SV42F19

Standards		
Name	ID	Conc. (mg/L)
DFTPP	SS2B-04-29-2	50
DCC	SS2C-04-85-1	50
INT. STD.	SS2B-04-33-2	2000
ICV	SS2C-04-91-2	50

Solvent	ID
CH_2Cl_2	45342

DATA FILE	06F19

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T042	

Comments:

Analyzed By: Su

Date Disposed: NA

Disposed by: NA

This page is checked during data review.

EMAX LABORATORIES, INC. 1835 W. 139th St. Torrance, CA 90501

ANALYSIS RUN LOG FOR SEMIVOLATILES

SOP ☒ EMAX-8270 Rev. No. 2 ☐ EMAX-8270SIM Rev. No. 0 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #A42- 012

Method File: SV42E29 Tune File: DFTPP Start Date/Time: 7/17/06 11:28 End Date/Time: 7/17/06 20:31

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RGX 068	IB 42 E29 24				
	069	DFT42E29 24				
	070	CSV 42 E29 24				8270C, DCC
	071	CSV42 F19 05				C1P01M04. 50ppm
	072	CSV 42 E29A24				benzidine, 50ppm
SVG012W	073	SVG012WB	NA		X	
	074	WL				
	075	WC				
	076	06G019-01				
	077	-05				
	078	-06				
	079	06G027-01				
	080	-03				
	081	-05				
	082	-07				
	083	-08				
	084	06G039-01				
	085	-04				
	086	-05				
	087	-06				
	088	-07				
	089	-08				

Sa 7/17/06

Instrument No:	42

INITIAL CALIBRATION REFERENCE

Date	5/29/06 — 6/19/06
ICAL ID	SV42E29 - SV42E29A - SV42F19

8270/ benzidine / C1P01M04.adf

Standards

Name	ID	Conc. (mg/L)
DFTPP	SS2B-04-29-2	50
DCC	SS2C-04-87-2	50
INT. STD.	SS2B-04-33-2	2000
DCC benzidine	SS2C-04-87-3	50

Solvent	ID	
CH_2Cl_2	45342	

DATA FILE	06G17

Electronic Data Archival

Location	Date
HPCHEM_SVOA/T042	

Comments: C1P01M04 add. DCC (SS2C-04-85-1) 5g ppm

Analyzed By: Sa

Date Disposed: 5/18/06

Disposed by: Sa

This page is checked during data review.

ANALYTICAL BATCH CSV42E29 24

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

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ANALYSIS RUN LOG FOR SEMIVOLATILES

SOP ☒ EMAX-8270 Rev. No. 2 ☐ EMAX-8270SIM Rev. No. 0 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #42- 011

Method File: SV42E29 Tune File: DFTPP Start Date/Time: 5/29/06 11:25 End Date/Time: 5/29/06 19:46

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	REX 292	JB42E2901				
	293	DFT42E2901				
NA	294	SV42E29 1	NA			5ppm, 8270C
	295	2				10ppm, 8270C
	296	3				20ppm, 8270C
	297	4				40ppm, 8270C
	298	5				50ppm, 8270C
	299	6				80ppm, 8270C
	300	7				100ppm, 8270C
	301	8				120ppm, 8270C
	302	9				160ppm, 8270C
	303	JSV42E291				2nd Source - 50 ppm
NA	304	SV42E29A1	NA			5ppm, benzidine
	305	2				10ppm, benzidine
	306	3				~~20ppm~~ 50ppm, benzidine
	307	4				50 5/29/06 100ppm, benzidine
	308	5				120ppm, benzidine
	309	6				160ppm, benzidine
	310	JSV42E29A1				2nd Source - 50 ppm
						SU 5/29/06

Instrument No:	42

INITIAL CALIBRATION REFERENCE

Date	5/29/06
ICAL ID	SV42E29 (8270) – SV42E29A – benzidine

Standards

Name	ID	Conc. (mg/L)
DFTPP	SS2B-04-29-2	50
DCC	SS2C-04-87-2	50
INT. STD.	SS2B-04-33-2	2000
ICV	SS2C-04-87-1	50

Solvent	ID
CH_2Cl_2	45342

DATA FILE	06E29

Electronic Data Archival

Location	Date
HPCHEM_SVOA/T042	

Comments:

DCC, benzidine (SS2C-04-87-2) 50 ppm
ICV, benzidine (SS2C-04-88-1) 50 ppm

Analyzed By: SG /KV
Date Disposed: NA
Disposed by: NA

This page is checked during data review.

ANALYTICAL BATCH SV42E29

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

EXTRACTION LOG

EXTRACTION LOG FOR SEMIVOLATILES

SOP ☐ EMAX-3540 Rev. No.: 0 ☐ EMAX-3510 Rev. No.: 1 ☐ EMAX-3550 Rev. No.: 1 ☒ EMAX-3520 Rev. No.: 2 ☐ EMAX-CLP-SVOA ☐ Book # ESV-031

Matrix WATER Init.Start Date/Time: 7/12/06 16:30 End Date/Time: 7/13/06 10:30 Final Start Date/Time: 7/14/06 11:00 End Date/Time: 7/15/06 5:00

PREPARATION BATCH: # SVG012A

Sample Prep ID	Lab Sample ID	Sonicator Number	Sample Amount (g/ml)	pH	Extract Volume (ml)	Extract Vol. Used (ml)	Notes
*01	SVG012 – WB	N/A	1000	–	2	1	
*02	– WL		1000	–	2	1	
*03	– WC		1000	–	2	1	
*04	06G019 – 01		1060	7	2	1	
*05	– 05		1060	7	2	1	
*06	– 06		1060	7	2	1	
*07	06G027 – 01		1060	7	2	1	
*08	– 03		1060	7	2	1	
*09	– 05		1060	7	2	1	
*10	– 07		1060	7	2	1	
*11	– 08		1060	7	2	1	
*12	06G028 – 01		1030	8	1	1	
*13	06G039 – 01		1060	7	2	1	
*14	– 04		1060	7	2	1	
*15	– 05		1060	7	2	1	
*16	– 06		1060	7	2	1	
*17	– 07		1060	7	2	1	
*18	– 08		1060	6	2	1	
*19	06G042 – 01		1040	8	1	1	Yellow soln
*20							
*21	7/15/06 JM						
*22							
*23							
*24							
*25							
*26							
*27							
*28							

7/15/06 JM

Standards	ID	Amount Added (ml)
Surrogate	SP2B-04-341	1.0
LCS/MS FALL 4ST	SP2B-04-38-3	0.4

Reagent	Lot# / ID
CH_2Cl_2	45342
Na_2SO_4	45045
H_2SO_4	45318
NaOH	SP1B-01-341
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 Witnessed By: JM

Standard Added By: ML

Checked By: ML

Extract Received by: SA 7/14/06 Location: SE03-3

Disposed by: Disposed on:

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

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

LABORATORY REPORT FOR

ARCADIS

OMEGA CHEMICAL

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

SDG#: 06G039

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

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

Six (6) water samples were received on 07/10/06 for Semi Volatile analysis by Method 3520C/8270C SIM 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. RPDs of two analytes were above QC.

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 CHRONICLE

SEMI VOLATILE ORGANICS BY GC/MS

Client : ARCADIS
Project : OMEGA CHEMICAL

SDG NO. : 06G039
Instrument ID : T-048

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	SVG012WB	1	NA	07/17/0614:34	07/12/0616:30	RGZ071	RFZ008	SVG012W	Method Blank
LCS1W	SVG012WL	8	NA	07/17/0614:54	07/12/0616:30	RGZ072	RFZ008	SVG012W	Lab Control Sample (LCS)
LCD1W	SVG012WC	8	NA	07/17/0615:13	07/12/0616:30	RGZ073	RFZ008	SVG012W	LCS Duplicate
OC2-PMW15-0-17	G039-01	.94	NA	07/17/0618:06	07/12/0616:30	RGZ082	RFZ008	SVG012W	Field Sample
OC2-PMW15-5-21	G039-04	.94	NA	07/17/0618:25	07/12/0616:30	RGZ083	RFZ008	SVG012W	Field Sample
OC2-PMW18A-0-22	G039-06	.94	NA	07/17/0619:04	07/12/0616:30	RGZ085	RFZ008	SVG012W	Field Sample
OC2-PMW18B-0-23	G039-07	.94	NA	07/17/0619:24	07/12/0616:30	RGZ086	RFZ008	SVG012W	Field Sample
OC2-PMW18C-0-24	G039-08	.94	NA	07/17/0619:43	07/12/0616:30	RGZ087	RFZ008	SVG012W	Field Sample
OC2-PMW15-1-20	G039-05W	.94	NA	07/25/0619:09	07/12/0616:30	RGZ154	RFZ008	SVG012W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 3520C/8270C SIM

SEMI VOLATILE ORGANICS BY GC/MS

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/12/06 16:30
Sample ID:	OC2-PMW15-0-17	Date Analyzed:	07/17/06 18:06
Lab Samp ID:	G039-01	Dilution Factor:	.94
Lab File ID:	RGZ082	Matrix :	WATER
Ext Btch ID:	SVG012W	% Moisture :	NA
Calib. Ref.:	RFZ008	Instrument ID :	T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
BENZO(A)PYRENE	ND	.19	.094
BIS(2-ETHYLHEXYL)PHTHALATE	ND	1.9	.94
HEXACHLOROBENZENE	ND	.94	.47
PENTACHLOROPHENOL	ND	.94	.47

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	100	30-130
PHENOL-D5	65	30-130

METHOD 3520C/8270C SIM

SEMI VOLATILE ORGANICS BY GC/MS

Client : ARCADIS	Date Collected: 07/10/06
Project : OMEGA CHEMICAL	Date Received: 07/10/06
Batch No. : 06G039	Date Extracted: 07/12/06 16:30
Sample ID: OC2-PMW15-5-21	Date Analyzed: 07/17/06 18:25
Lab Samp ID: G039-04	Dilution Factor: .94
Lab File ID: RGZ083	Matrix : WATER
Ext Btch ID: SVG012W	% Moisture : NA
Calib. Ref.: RFZ008	Instrument ID : T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
BENZO(A)PYRENE	ND	.19	.094
BIS(2-ETHYLHEXYL)PHTHALATE	1.2J	1.9	.94
HEXACHLOROBENZENE	ND	.94	.47
PENTACHLOROPHENOL	ND	.94	.47

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	88	30-130
PHENOL-D5	50	30-130

METHOD 3520C/8270C SIM

SEMI VOLATILE ORGANICS BY GC/MS

Client : ARCADIS	Date Collected: 07/10/06
Project : OMEGA CHEMICAL	Date Received: 07/10/06
Batch No. : 06G039	Date Extracted: 07/12/06 16:30
Sample ID: OC2-PMW15-1-20	Date Analyzed: 07/25/06 19:09
Lab Samp ID: G039-05W	Dilution Factor: .94
Lab File ID: RGZ154	Matrix : WATER
Ext Btch ID: SVG012W	% Moisture : NA
Calib. Ref.: RFZ008	Instrument ID : T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
BENZO(A)PYRENE	ND	.19	.094
BIS(2-ETHYLHEXYL)PHTHALATE	3.6	1.9	.94
HEXACHLOROBENZENE	ND	.94	.47
PENTACHLOROPHENOL	ND	.94	.47

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	90	30-130
PHENOL-D5	71	30-130

METHOD 3520C/8270C SIM

SEMI VOLATILE ORGANICS BY GC/MS

Client : ARCADIS	Date Collected: 07/10/06
Project : OMEGA CHEMICAL	Date Received: 07/10/06
Batch No. : 06G039	Date Extracted: 07/12/06 16:30
Sample ID: OC2-PMW18A-0-22	Date Analyzed: 07/17/06 19:04
Lab Samp ID: G039-06	Dilution Factor: .94
Lab File ID: RGZ085	Matrix : WATER
Ext Btch ID: SVG012W	% Moisture : NA
Calib. Ref.: RFZ008	Instrument ID : T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
BENZO(A)PYRENE	ND	.19	.094
BIS(2-ETHYLHEXYL)PHTHALATE	2	1.9	.94
HEXACHLOROBENZENE	ND	.94	.47
PENTACHLOROPHENOL	ND	.94	.47

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	80	30-130
PHENOL-D5	62	30-130

METHOD 3520C/8270C SIM

SEMI VOLATILE ORGANICS BY GC/MS

Client : ARCADIS	Date Collected: 07/10/06
Project : OMEGA CHEMICAL	Date Received: 07/10/06
Batch No. : 06G039	Date Extracted: 07/12/06 16:30
Sample ID: OC2-PMW18B-0-23	Date Analyzed: 07/17/06 19:24
Lab Samp ID: G039-07	Dilution Factor: .94
Lab File ID: RGZ086	Matrix : WATER
Ext Btch ID: SVG012W	% Moisture : NA
Calib. Ref.: RFZ008	Instrument ID : T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
BENZO(A)PYRENE	ND	.19	.094
BIS(2-ETHYLHEXYL)PHTHALATE	2.1	1.9	.94
HEXACHLOROBENZENE	ND	.94	.47
PENTACHLOROPHENOL	ND	.94	.47

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	98	30-130
PHENOL-D5	71	30-130

METHOD 3520C/8270C SIM

SEMI VOLATILE ORGANICS BY GC/MS

Client : ARCADIS	Date Collected: 07/10/06
Project : OMEGA CHEMICAL	Date Received: 07/10/06
Batch No. : 06G039	Date Extracted: 07/12/06 16:30
Sample ID: OC2-PMW18C-0-24	Date Analyzed: 07/17/06 19:43
Lab Samp ID: G039-08	Dilution Factor: .94
Lab File ID: RGZ087	Matrix : WATER
Ext Btch ID: SVG012W	% Moisture : NA
Calib. Ref.: RFZ008	Instrument ID : T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
BENZO(A)PYRENE	ND	.19	.094
BIS(2-ETHYLHEXYL)PHTHALATE	2.6	1.9	.94
HEXACHLOROBENZENE	ND	.94	.47
PENTACHLOROPHENOL	ND	.94	.47

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	94	30-130
PHENOL-D5	45	30-130

QC SUMMARY

METHOD 3520C/8270C SIM

SEMI VOLATILE ORGANICS BY GC/MS

Client : ARCADIS	Date Collected: NA
Project : OMEGA CHEMICAL	Date Received: 07/12/06
Batch No. : 06G039	Date Extracted: 07/12/06 16:30
Sample ID: MBLK1W	Date Analyzed: 07/17/06 14:34
Lab Samp ID: SVG012WB	Dilution Factor: 1
Lab File ID: RGZ071	Matrix : WATER
Ext Btch ID: SVG012W	% Moisture : NA
Calib. Ref.: RFZ008	Instrument ID : T-048

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
BENZO(A)PYRENE	ND	.2	.1
BIS(2-ETHYLHEXYL)PHTHALATE	1.1J	2	1
HEXACHLOROBENZENE	ND	1	.5
PENTACHLOROPHENOL	ND	1	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	77	30-130
PHENOL-D5	54	30-130

EMAX QUALITY CONTROL DATA

LCS/LCD ANALYSIS

CLIENT: ARCADIS

PROJECT: OMEGA CHEMICAL

BATCH NO.: 06G039

METHOD: METHOD 3520C/8270C SIM

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	8	8		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	SVG012WB	SVG012WL	SVG012WC		
LAB FILE ID:	RGZ071	RGZ072	RGZ073		
DATE EXTRACTED:	07/12/0616:30	07/12/0616:30	07/12/0616:30	DATE COLLECTED:	NA
DATE ANALYZED:	07/17/0614:34	07/17/0614:54	07/17/0615:13	DATE RECEIVED:	07/12/06
PREP. BATCH:	SVG012W	SVG012W	SVG012W		
CALIB. REF:	RFZ008	RFZ008	RFZ008		

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 (%)
Benzo(a)pyrene	ND	80	45.1	56	80	61.3	77	30	50-130	30
bis(2-Ethylhexyl)phthalate	1.12J	80	53.1	65	80	72.3	89	31*	30-150	30
Hexachlorobenzene	ND	80	34.7	43	80	47.1	59	30	20-130	30
Pentachlorophenol	ND	80	32.7	41	80	46.4	58	34*	10-140	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
Terphenyl-d14	50	34.7	69	50	48.4	97	30-130
Phenol-d5	150	73.1	49	150	110	74	30-130

INITIAL CALIBRATIONS

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFZ002
Instrument ID: T-048

Project: OMEGA CHEMICAL
SDG No.: 06G039
DFTPP Injection Date: 06/02/06
DFTPP Injection Time: 11:58

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	34.49
68	Less than 2% of mass 69	0.06(0.2)1
69	Relative abundance of mass 198	36.50
70	Less than 2.0% of mass 69	0.14(0.4)1
127	40.0 - 60.0% of mass 198	46.18
197	Less than 1.0% of mass 198	0.21
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	7.00
275	10.0 - 30.0% of mass 198	20.17
365	Greater than 1.00% of mass 198	1.16
441	Present, but less than mass 443	15.20
442	Greater than 40.0% of mass 198	97.93
443	17.0 - 23.0% of mass 442	18.07(18.5)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	SSTD0.15	SV48F021	RFZ003	06/02/06	12:12
2	SSTD0.5	SV48F022	RFZ004	06/02/06	12:30
3	SSTD01	SV48F023	RFZ005	06/02/06	12:49
4	SSTD02	SV48F024	RFZ006	06/02/06	13:09
5	SSTD05	SV48F025	RFZ007	06/02/06	13:28
6	SSTD010	SV48F026	RFZ008	06/02/06	13:47
7	SSTD020	SV48F027	RFZ009	06/02/06	14:06
8	SSTD040	SV48F028	RFZ010	06/02/06	14:25
9	SSTD080	SV48F029	RFZ011	06/02/06	14:44
10	SSTD100	SV48F0210	RFZ012	06/02/06	15:03
11	SSTD160	SV48F0211	RFZ013	06/02/06	15:23

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :T048
Beginning DateTime :06/02/06 12:12
Spike Units :PPM
IC File :RFZ008

Column Spec :ZB-5MS ID :0.18MM
Ending DateTime :06/02/06 15:23
HPChem Method :SV48F02

IDX	Parameters	.15 12:12 RFZ003	.5 12:30 RFZ004	1 12:49 RFZ005	2 13:09 RFZ006	5 13:28 RFZ007	10 13:47 RFZ008	20 14:06 RFZ009	40 14:25 RFZ010	80 14:44 RFZ011	100 15:03 RFZ012	160 15:23 RFZ013	Av_RRF	%_RSD	Av_Rt_M
1	1,4-Dichlorobenzene-d4	1	1	1	1	1	1	1	1	1	1	1	1	0	2.9485
2	N-Nitrosodimethylamine	1.312	1.322	1.502	1.327	1.194	1.279	1.207	------	------	------	------	1.306	7.79	1.4143
3	Phenol-d5	1.600	1.485	1.373	1.415	1.467	1.389	1.413	1.350	1.370	1.376	1.245	1.408	6.37	2.6553
4	Phenol	1.707	1.619	1.497	1.530	1.581	1.510	1.584	------	------	------	------	1.575	4.62	2.6691
5	Bis(2-chloroethyl)ether	1.256	1.295	1.204	1.232	1.303	1.178	1.173	------	------	------	------	1.234	4.25	2.7524
6	2-Chlorophenol	1.499	1.526	1.380	1.398	1.490	1.468	1.465	------	------	------	------	1.461	3.65	2.7881
7	N-Nitroso-di-n-propylamine	0.856	0.582	0.599	0.612	0.635	0.605	0.602	------	------	------	------	0.642	14.96	3.2679
8	2,4-Dimethylphenol	1.297	1.037	0.854	0.859	0.905	0.942	0.932	------	------	------	------	0.975	15.85	3.7143
9	2,4-Dichlorophenol	1.064	0.974	0.929	0.960	1.053	1.015	0.998	------	------	------	------	0.999	4.91	3.8750
10	Naphthalene	3.771	3.505	3.128	3.195	3.382	3.220	3.185	------	------	------	------	3.341	6.91	4.0262
11	4-Chloro-3-methylphenol	1.030	0.800	0.799	0.790	0.880	0.899	0.925	------	------	------	------	0.875	9.97	4.5226
12	2-Methylnaphthalene	2.256	1.943	1.840	1.858	1.960	1.919	1.893	------	------	------	------	1.953	7.20	4.6559
13	1-Methylnaphthalene	2.036	1.937	1.811	1.818	1.796	1.831	1.935	------	------	------	------	1.881	4.79	4.7464
14	2,4,6-Trichlorophenol	0.514	0.416	0.420	0.426	0.475	0.470	0.501	------	------	------	------	0.460	8.76	4.9143
15	2,4,5-Trichlorophenol	0.492	0.452	0.415	0.441	0.492	0.490	0.525	------	------	------	------	0.472	8.00	4.9405
16	Acenaphthylene	3.438	2.750	2.558	2.576	2.766	2.686	2.789	------	------	------	------	2.795	10.66	5.4893
17	Acenaphthene	2.190	1.658	1.484	1.450	1.539	1.524	1.506	------	------	------	------	1.622	15.98	5.6559
18	Fluorene	2.312	1.778	1.573	1.577	1.708	1.680	1.715	------	------	------	------	1.763	14.34	6.1441
19	Azobenzene	2.083	1.722	1.602	1.637	1.871	1.774	1.825	------	------	------	------	1.788	9.06	6.3107
20	Phenanthrene-d10	1	1	1	1	1	1	1	1	1	1	1	1	0	7.0310
21	Hexachlorobenzene	0.498	0.352	0.376	0.346	0.344	0.385	0.377	------	------	------	------	0.383	13.99	6.6607
22	Pentachlorophenol	------	0.706	0.576	0.576	0.631	0.662	0.664	------	------	------	------	0.636	8.20	6.8514
23	Phenanthrene	1.852	1.501	1.370	1.364	1.442	1.367	1.312	------	------	------	------	1.458	12.61	7.0559
24	Anthracene	1.817	1.506	1.370	1.379	1.434	1.391	1.388	------	------	------	------	1.469	10.90	7.1059
25	Fluoranthene	1.584	1.358	1.213	1.221	1.306	1.245	1.199	------	------	------	------	1.304	10.44	8.1917
26	Pyrene	1.686	1.386	1.245	1.249	1.364	1.297	1.273	------	------	------	------	1.357	11.42	8.4047
27	Terphenyl-d14	0.670	0.530	0.494	0.473	0.515	0.532	0.519	0.590	0.659	0.734	0.657	0.579	15.02	8.5886
28	Perylene-d12	1	1	1	1	1	1	1	1	1	1	1	1	0	10.8318
29	Benzo(a)anthracene	2.201	1.890	1.752	1.767	1.781	1.725	1.730	------	------	------	------	1.835	9.29	9.5631
30	Chrysene	2.327	2.066	1.791	1.813	1.937	1.814	1.738	------	------	------	------	1.927	10.79	9.5953
31	bis(2-Ethylhexyl)phthalate	2.366	1.913	1.736	1.931	1.984	2.202	2.151	------	------	------	------	2.040	10.37	9.6631
32	Benzo(b)fluoranthene	1.822	1.891	1.559	1.625	1.735	1.669	1.662	------	------	------	------	1.709	6.76	10.5226
33	Benzo(k)fluoranthene	2.152	1.685	1.742	1.760	1.853	1.916	1.828	------	------	------	------	1.848	8.36	10.5453
34	Benzo(a)pyrene	1.830	1.635	1.652	1.658	1.737	1.716	1.690	------	------	------	------	1.703	3.94	10.7893
35	Indeno(1,2,3-cd)pyrene	2.231	1.887	1.825	1.883	1.957	2.013	2.052	------	------	------	------	1.978	6.90	11.6559
36	Dibenzo(a,h)anthracene	1.819	1.478	1.372	1.478	1.506	1.572	1.618	------	------	------	------	1.549	9.19	11.6738
37	Benzo(g,h,i)perylene	1.849	1.563	1.530	1.602	1.657	1.684	1.745	------	------	------	------	1.662	6.63	11.8679

Ave_%RSD : 9.2 Max_%RSD : 16

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
8	2,4-Dimethylphenol	0.00356	0.92160	0.9994
17	Acenaphthene	0.00798	1.50169	0.9998
27	Terphenyl-d14	-0.00827	0.65867	0.9960

KMP
6/8/06

Quantitation Limit from Lowest Initial Calibration Concentration

Instrument ID :T048 Column Spec :ZB-5MS ID :0.18MM
Beginning DateTime :06/02/06 12:12 Ending DateTime :06/02/06 15:23
IC File :RFZ008 HPChem Method :SV48F02

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	.15	.15	.005	RFZ003
3	Phenol-d5	.15	.15	.005	RFZ003
4	Phenol	.15	.15	.005	RFZ003
5	Bis(2-chloroethyl)ether	.15	.15	.005	RFZ003
6	2-Chlorophenol	.15	.15	.005	RFZ003
7	N-Nitroso-di-n-propylamine	.15	.15	.005	RFZ003
8	2,4-Dimethylphenol	.15	.15	.005	RFZ003
9	2,4-Dichlorophenol	.15	.15	.005	RFZ003
10	Naphthalene	.15	.15	.005	RFZ003
11	4-Chloro-3-methylphenol	.15	.15	.005	RFZ003
12	2-Methylnaphthalene	.15	.15	.005	RFZ003
13	1-Methylnaphthalene	.15	.15	.005	RFZ003
14	2,4,6-Trichlorophenol	.15	.15	.005	RFZ003
15	2,4,5-Trichlorophenol	.15	.15	.005	RFZ003
16	Acenaphthylene	.15	.15	.005	RFZ003
17	Acenaphthene	.15	.15	.005	RFZ003
18	Fluorene	.15	.15	.005	RFZ003
19	Azobenzene	.15	.15	.005	RFZ003
20	Phenanthrene-d10	IntSTD	IntSTD	IntSTD	IntSTD
21	Hexachlorobenzene	.15	.15	.005	RFZ003
22	Pentachlorophenol	.5	.5	.01667	RFZ004
23	Phenanthrene	.15	.15	.005	RFZ003
24	Anthracene	.15	.15	.005	RFZ003
25	Fluoranthene	.15	.15	.005	RFZ003
26	Pyrene	.15	.15	.005	RFZ003
27	Terphenyl-d14	.15	.15	.005	RFZ003
28	Perylene-d12	IntSTD	IntSTD	IntSTD	IntSTD
29	Benzo(a)anthracene	.15	.15	.005	RFZ003
30	Chrysene	.15	.15	.005	RFZ003
31	bis(2-Ethylhexyl)phthalate	.15	.15	.005	RFZ003
32	Benzo(b)fluoranthene	.15	.15	.005	RFZ003
33	Benzo(k)fluoranthene	.15	.15	.005	RFZ003
34	Benzo(a)pyrene	.15	.15	.005	RFZ003
35	Indeno(1,2,3-cd)pyrene	.15	.15	.005	RFZ003
36	Dibenzo(a,h)anthracene	.15	.15	.005	RFZ003
37	Benzo(g,h,i)perylene	.15	.15	.005	RFZ003

KMT
6/6/06

3056

SECOND SOURCE VERIFICATION

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFZ132
Instrument ID: T-048

Project: OMEGA CHEMICAL
SDG No.: 06G039
DFTPP Injection Date: 06/07/06
DFTPP Injection Time: 16:15

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	34.71
68	Less than 2% of mass 69	0.00(0.0)1
69	Relative abundance of mass 198	36.48
70	Less than 2.0% of mass 69	0.21(0.6)1
127	40.0 - 60.0% of mass 198	44.50
197	Less than 1.0% of mass 198	0.62
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.67
275	10.0 - 30.0% of mass 198	19.73
365	Greater than 1.00% of mass 198	1.42
441	Present, but less than mass 443	15.26
442	Greater than 40.0% of mass 198	97.95
443	17.0 - 23.0% of mass 442	17.50(17.9)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	SSTD010	ISV48F023	RFZ133	06/07/06	16:49

FORM V SV OLM02.0

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :T048
IC_Beginning DateTime :06/02/06 12:12
Spike Amount :10 PPM
CC/CV File :RFZ133
IC File :RFZ008

Column Spec :ZB-5MS ID :0.18MM
IC_Ending DateTime :06/02/06 15:23
HPChem Method :SV48F02
Date_Time :06/07/06 16:49

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	10.000	0	186112	1	1	2.958	2.948	0				
2	N-Nitrosodimethylamine	12.869	28.7	312868	1.681	1.306	1.458	1.414	7.79				
3	Phenol-d5												
4	Phenol	8.987	-10.1	263521	1.416	1.575	2.692	2.669	4.62				
5	Bis(2-chloroethyl)ether	9.619	-3.8	220982	1.187	1.234	2.767	2.752	4.25				
6	2-Chlorophenol	9.940	-0.6	270249	1.452	1.461	2.808	2.788	3.65				
7	N-Nitroso-di-n-propylamine	9.236	-7.6	110300	0.593	0.642	3.283	3.268	14.96				
8	2,4-Dimethylphenol	9.741	-2.6	167741	0.901	0.975	3.725	3.714	15.85				
9	2,4-Dichlorophenol	9.601	-4.0	178488	0.959	0.999	3.892	3.875	4.91				
10	Naphthalene	9.722	-2.8	604498	3.248	3.341	4.033	4.026	6.91				
11	4-Chloro-3-methylphenol	10.071	0.7	163987	0.881	0.875	4.533	4.523	9.97				
12	2-Methylnaphthalene	9.976	-0.2	362592	1.948	1.953	4.667	4.656	7.20				
13	1-Methylnaphthalene	9.779	-2.2	342298	1.839	1.881	4.750	4.746	4.79				
14	2,4,6-Trichlorophenol	9.099	-9.0	77961	0.419	0.460	4.925	4.914	8.76				
15	2,4,5-Trichlorophenol	8.916	-10.8	78396	0.421	0.472	4.950	4.940	8.00				
16	Acenaphthylene	9.637	-3.6	501243	2.693	2.795	5.500	5.489	10.66				
17	Acenaphthene	10.236	2.4	287569	1.545	1.622	5.667	5.656	15.98				
18	Fluorene	9.913	-0.9	325359	1.748	1.763	6.150	6.144	14.34				
19	Azobenzene	9.915	-0.9	329938	1.773	1.788	6.317	6.311	9.06				
20	Phenanthrene-d10	10.000	0	324306	1	1	7.042	7.031	0				
21	Hexachlorobenzene	8.700	-13.0	107951	0.333	0.383	6.667	6.661	13.99				
22	Pentachlorophenol	8.570	-14.3	176726	0.545	0.636	6.867	6.851	8.20				
23	Phenanthrene	8.784	-12.2	415446	1.281	1.458	7.067	7.056	12.61				
24	Anthracene	8.869	-11.3	422586	1.303	1.469	7.117	7.106	10.90				
25	Fluoranthene	8.358	-16.4	353450	1.090	1.304	8.200	8.192	10.44				
26	Pyrene	8.597	-14.0	378363	1.167	1.357	8.417	8.405	11.42				
27	Terphenyl-d14												
28	Perylene-d12	10.000	0	188707	1	1	10.842	10.832	0				
29	Benzo(a)anthracene	8.234	-17.7	285182	1.511	1.835	9.575	9.563	9.29				
30	Chrysene	7.621	-23.8	277091	1.468	1.927	9.608	9.595	10.79				
31	bis(2-Ethylhexyl)phthalate	9.019	-9.8	347295	1.840	2.040	9.667	9.663	10.37				
32	Benzo(b)fluoranthene	8.774	-12.3	283005	1.500	1.709	10.533	10.523	6.76				
33	Benzo(k)fluoranthene	8.255	-17.4	287890	1.526	1.848	10.558	10.545	8.36				
34	Benzo(a)pyrene	8.475	-15.2	272309	1.443	1.703	10.800	10.789	3.94				
35	Indeno(1,2,3-cd)pyrene	8.974	-10.3	335026	1.775	1.978	11.667	11.656	6.90				
36	Dibenzo(a,h)anthracene	8.748	-12.5	255756	1.355	1.549	11.683	11.674	9.19				
37	Benzo(g,h,i)perylene	8.839	-11.6	277179	1.469	1.662	11.883	11.868	6.63				

CMC 6/12/06

DAILY CALIBRATIONS

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGZ069
Instrument ID: T-048

Project: OMEGA CHEMICAL
SDG No.: 06G039
DFTPP Injection Date: 07/17/06
DFTPP Injection Time: 13:34

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	46.86
68	Less than 2% of mass 69	0.34(0.7)1
69	Relative abundance of mass 198	47.74
70	Less than 2.0% of mass 69	0.35(0.7)1
127	40.0 - 60.0% of mass 198	50.28
197	Less than 1.0% of mass 198	0.91
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.76
275	10.0 - 30.0% of mass 198	19.16
365	Greater than 1.00% of mass 198	1.92
441	Present, but less than mass 443	14.46
442	Greater than 40.0% of mass 198	94.59
443	17.0 - 23.0% of mass 442	18.59(19.7)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	SSTD010	CSV48F0227	RGZ070	07/17/06	13:50
2	MBLK1W	SVG012WB	RGZ071	07/17/06	14:34
3	LCS1W	SVG012WL	RGZ072	07/17/06	14:54
4	LCD1W	SVG012WC	RGZ073	07/17/06	15:13
5	OC2-PMW15-0-17	G039-01	RGZ082	07/17/06	18:06
6	OC2-PMW15-5-21	G039-04	RGZ083	07/17/06	18:25
7	OC2-PMW18A-0-22	G039-06	RGZ085	07/17/06	19:04
8	OC2-PMW18B-0-23	G039-07	RGZ086	07/17/06	19:24
9	OC2-PMW18C-0-24	G039-08	RGZ087	07/17/06	19:43

FORM V SV OLM02.0

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFZ008
Instrument ID: T-048

Project:OMEGA CHEMICAL
SDG No.: 06G039
Date Analyzed: 06/02/06
Time Analyzed: 13:47

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	216061	2.95	0	0.00	0	0.00
	UPPER LIMIT	432122	3.45	0	0.50	0	0.50
	LOWER LIMIT	108031	2.45	0	-0.50	0	-0.50
	SAMPLE ID						
1	SSTD010	239274	2.95	0	0.00	0	0.00
2	MBLK1W	226574	2.95	0	0.00	0	0.00
3	LCS1W	203634	2.95	0	0.00	0	0.00
4	LCD1W	201178	2.95	0	0.00	0	0.00
5	OC2-PMW15-0-17	214759	2.95	0	0.00	0	0.00
6	OC2-PMW15-5-21	215578	2.95	0	0.00	0	0.00
7	OC2-PMW18A-0-22	213946	2.95	0	0.00	0	0.00
8	OC2-PMW18B-0-23	214165	2.95	0	0.00	0	0.00
9	OC2-PMW18C-0-24	226649	2.95	0	0.00	0	0.00

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.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFZ008
Instrument ID: T-048

Project:OMEGA CHEMICAL
SDG No.: 06G039
Date Analyzed: 06/02/06
Time Analyzed: 13:47

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	325894	7.03	0	0.00	172509	10.83
	UPPER LIMIT	651788	7.53	0	0.50	345018	11.33
	LOWER LIMIT	162947	6.53	0	-0.50	86255	10.33
	SAMPLE ID						
1	SSTD010	424491	7.03	0	0.00	205378	10.86
2	MBLK1W	397559	7.03	0	0.00	197267	10.86
3	LCS1W	372674	7.03	0	0.00	194226	10.84
4	LCD1W	366200	7.03	0	0.00	191828	10.85
5	OC2-PMW15-0-17	415676	7.03	0	0.00	228913	10.84
6	OC2-PMW15-5-21	435890	7.03	0	0.00	238471	10.84
7	OC2-PMW18A-0-22	412276	7.03	0	0.00	226624	10.84
8	OC2-PMW18B-0-23	425365	7.03	0	0.00	236861	10.84
9	OC2-PMW18C-0-24	429064	7.03	0	0.00	237264	10.84

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 : D:\CHEMDATA\06G17\RGZ070.D Vial: 3
Acq On : 17 JUL 2006 13:50 Operator: SG
Sample : CSV48F0227 Inst : TO48
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV48F02.M (RTE Integrator)
Title : METHOD 8270C SIM GCMS-QP5000
Last Update : Fri Jun 02 15:54:34 2006
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	10.000	10.000	0.0	111	0.00
2	T	N-Nitrosodimethylamine	10.000	9.496	5.0	107	0.04
3	S	Phenol-d5	10.000	11.603	-16.0	130	0.02
4	T	Phenol	10.000	12.128	-21.3#	140	0.03
5	T	Bis(2-chloroethyl)ether	10.000	10.182	-1.8	118	0.00
6	T	2-Chlorophenol	10.000	10.832	-8.3	119	0.00
7	P	N-Nitroso-di-n-propylamine	10.000	10.277	-2.8	121	0.00
8	T	2,4-Dimethylphenol	10.000	10.420	-4.2	113	0.00
9	T	2,4-Dichlorophenol	10.000	10.426	-4.3	114	0.02
10	T	Naphthalene	10.000	10.836	-8.4	124	0.00
11	T	4-Chloro-3-methylphenol	10.000	12.053	-20.5#	130	0.02
12	T	2-Methylnaphthalene	10.000	11.030	-10.3	124	0.00
13	T	1-Methylnaphthalene	10.000	11.043	-10.4	126	0.00
14	T	2,4,6-Trichlorophenol	10.000	8.488	15.1	92	0.00
15	T	2,4,5-Trichlorophenol	10.000	9.142	8.6	98	0.02
16	T	Acenaphthylene	10.000	10.921	-9.2	126	0.00
17	C	Acenaphthene	10.000	11.739	-17.4	129	0.00
18	T	Fluorene	10.000	11.501	-15.0	134	0.00
19	T	Azobenzene	10.000	11.087	-10.9	124	0.00
20	I	Phenanthrene-d10	10.000	10.000	0.0	130	0.00
21	T	Hexachlorobenzene	10.000	8.136	18.6	105	0.00
22	T	Pentachlorophenol	10.000	8.917	10.8	112	0.00
23	T	Phenanthrene	10.000	9.575	4.3	133	0.00
24	T	Anthracene	10.000	9.870	1.3	136	0.00
25	C	Fluoranthene	10.000	9.655	3.5	132	0.00
26	T	Pyrene	10.000	9.250	7.5	126	0.00
27	S	Terphenyl-d14	10.000	9.108	8.9	145	0.00
28	I	Perylene-d12	10.000	10.000	0.0	119	0.02
29	T	Benzo(a)anthracene	10.000	10.382	-3.8	131	0.00
30	T	Chrysene	10.000	9.694	3.1	123	0.00
31	T	bis(2-Ethylhexyl)phthalate	10.000	11.770	-17.7	130	-0.02
32	T	Benzo(b)fluoranthene	10.000	10.802	-8.0	132	0.02
33	T	Benzo(k)fluoranthene	10.000	8.546	14.5	98	0.00
34	C	Benzo(a)pyrene	10.000	9.921	0.8	117	0.02
35	T	Indeno(1,2,3-cd)pyrene	10.000	9.942	0.6	116	0.05
36	T	Dibenzo(a,h)anthracene	10.000	9.755	2.4	114	0.05
37	T	Benzo(g,h,i)perylene	10.000	9.416	5.8	111	0.05

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

Evaluate Continuing Calibration Report

Data File : D:\CHEMDATA\06G17\RGZ070.D Vial: 3
Acq On : 17 JUL 2006 13:50 Operator: SG
Sample : CSV48F0227 Inst : TO48
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV48F02.M (RTE Integrator)
Title : METHOD 8270C SIM GCMS-QP5000
Last Update : Fri Jun 02 15:54:34 2006
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	111	0.00
2	T	N-Nitrosodimethylamine	1.306	1.240	5.1	107	0.04
3	S	Phenol-d5	1.408	1.633	-16.0	130	0.02
4	T	Phenol	1.575	1.911	-21.3#	140	0.03
5	T	Bis(2-chloroethyl)ether	1.234	1.257	-1.9	118	0.00
6	T	2-Chlorophenol	1.461	1.582	-8.3	119	0.00
7	P	N-Nitroso-di-n-propylamine	0.642	0.659	-2.6	121	0.00
8	T	2,4-Dimethylphenol	0.975	0.964	1.1	113	0.00
9	T	2,4-Dichlorophenol	0.999	1.041	-4.2	114	0.02
10	T	Naphthalene	3.341	3.620	-8.4	124	0.00
11	T	4-Chloro-3-methylphenol	0.875	1.054	-20.5#	130	0.02
12	T	2-Methylnaphthalene	1.953	2.154	-10.3	124	0.00
13	T	1-Methylnaphthalene	1.881	2.077	-10.4	126	0.00
14	T	2,4,6-Trichlorophenol	0.460	0.391	15.0	92	0.00
15	T	2,4,5-Trichlorophenol	0.472	0.432	8.5	98	0.02
16	T	Acenaphthylene	2.795	3.052	-9.2	126	0.00
17	C	Acenaphthene	1.622	1.771	-9.2	129	0.00
18	T	Fluorene	1.763	2.028	-15.0	134	0.00
19	T	Azobenzene	1.788	1.982	-10.9	124	0.00
20	I	Phenanthrene-d10	1.000	1.000	0.0	130	0.00
21	T	Hexachlorobenzene	0.383	0.311	18.8	105	0.00
22	T	Pentachlorophenol	0.636	0.567	10.8	112	0.00
23	T	Phenanthrene	1.458	1.396	4.3	133	0.00
24	T	Anthracene	1.469	1.450	1.3	136	0.00
25	C	Fluoranthene	1.304	1.259	3.5	132	0.00
26	T	Pyrene	1.357	1.255	7.5	126	0.00
27	S	Terphenyl-d14	0.579	0.592	-2.2	145	0.00
28	I	Perylene-d12	1.000	1.000	0.0	119	0.02
29	T	Benzo(a)anthracene	1.835	1.905	-3.8	131	0.00
30	T	Chrysene	1.927	1.868	3.1	123	0.00
31	T	bis(2-Ethylhexyl)phthalate	2.040	2.402	-17.7	130	-0.02
32	T	Benzo(b)fluoranthene	1.709	1.846	-8.0	132	0.02
33	T	Benzo(k)fluoranthene	1.848	1.579	14.6	98	0.00
34	C	Benzo(a)pyrene	1.703	1.689	0.8	117	0.02
35	T	Indeno(1,2,3-cd)pyrene	1.978	1.967	0.6	116	0.05
36	T	Dibenzo(a,h)anthracene	1.549	1.511	2.5	114	0.05
37	T	Benzo(g,h,i)perylene	1.662	1.565	5.8	111	0.05

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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGZ152
Instrument ID: T-048

Project: OMEGA CHEMICAL
SDG No.: 06G039
DFTPP Injection Date: 07/25/06
DFTPP Injection Time: 15:42

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	39.42
68	Less than 2% of mass 69	0.00(0.0)1
69	Relative abundance of mass 198	41.10
70	Less than 2.0% of mass 69	0.19(0.5)1
127	40.0 - 60.0% of mass 198	45.97
197	Less than 1.0% of mass 198	0.76
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	7.28
275	10.0 - 30.0% of mass 198	19.99
365	Greater than 1.00% of mass 198	1.50
441	Present, but less than mass 443	10.36
442	Greater than 40.0% of mass 198	75.19
443	17.0 - 23.0% of mass 442	12.97(17.2)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	SSTD010	CSV48F0232	RGZ153	07/25/06	18:48
2	OC2-PMW15-1-20	G039-05W	RGZ154	07/25/06	19:09

FORM V SV OLM02.0

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFZ008
Instrument ID: T-048

Project:OMEGA CHEMICAL
SDG No.: 06G039
Date Analyzed: 06/02/06
Time Analyzed: 13:47

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	216061	2.95	0	0.00	0	0.00
	UPPER LIMIT	432122	3.45	0	0.50	0	0.50
	LOWER LIMIT	108031	2.45	0	-0.50	0	-0.50
	SAMPLE ID						
1	SSTD010	176656	2.96	0	0.00	0	0.00
2	OC2-PMW15-1-20	164725	2.96	0	0.00	0	0.00

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.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFZ008
Instrument ID: T-048

Project:OMEGA CHEMICAL
SDG No.: 06G039
Date Analyzed: 06/02/06
Time Analyzed: 13:47

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	325894	7.03	0	0.00	172509	10.83
	UPPER LIMIT	651788	7.53	0	0.50	345018	11.33
	LOWER LIMIT	162947	6.53	0	-0.50	86255	10.33
	SAMPLE ID						
1	SSTD010	328410	7.06	0	0.00	179628	10.88
2	OC2-PMW15-1-20	315939	7.05	0	0.00	164720	10.87

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 : D:\CHEMDATA\06G25\RGZ153.D
Acq On : 25 JUL 2006 18:48
Sample : CSV48F0232
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: KV
Inst : TO48
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV48F02.M (RTE Integrator)
Title : METHOD 8270C SIM GCMS-QP5000
Last Update : Fri Jun 02 15:54:34 2006
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	10.000	10.000	0.0	82	0.00
2	T	N-Nitrosodimethylamine	10.000	13.620	-36.2#	114	0.08
3	S	Phenol-d5	10.000	11.783	-17.8	98	0.03
4	T	Phenol	10.000	11.505	-15.1	98	0.03
5	T	Bis(2-chloroethyl)ether	10.000	10.408	-4.1	89	0.02
6	T	2-Chlorophenol	10.000	11.234	-12.3	91	0.03
7	P	N-Nitroso-di-n-propylamine	10.000	10.441	-4.4	90	0.02
8	T	2,4-Dimethylphenol	10.000	11.341	-13.4	91	0.02
9	T	2,4-Dichlorophenol	10.000	10.694	-6.9	86	0.02
10	T	Naphthalene	10.000	11.563	-15.6	98	0.02
11	T	4-Chloro-3-methylphenol	10.000	12.670	-26.7#	101	0.03
12	T	2-Methylnaphthalene	10.000	11.078	-10.8	92	0.00
13	T	1-Methylnaphthalene	10.000	11.650	-16.5	98	0.00
14	T	2,4,6-Trichlorophenol	10.000	9.412	5.9	75	0.02
15	T	2,4,5-Trichlorophenol	10.000	9.875	1.3	78	0.03
16	T	Acenaphthylene	10.000	11.074	-10.7	94	0.02
17	C	Acenaphthene	10.000	11.798	-18.0	95	0.02
18	T	Fluorene	10.000	11.512	-15.1	99	0.02
19	T	Azobenzene	10.000	12.161	-21.6#	100	0.00
20	I	Phenanthrene-d10	10.000	10.000	0.0	101	0.03
21	T	Hexachlorobenzene	10.000	12.278	-22.8#	123	0.02
22	T	Pentachlorophenol	10.000	10.060	-0.6	97	0.03
23	T	Phenanthrene	10.000	9.709	2.9	104	0.02
24	T	Anthracene	10.000	9.947	0.5	106	0.03
25	C	Fluoranthene	10.000	9.320	6.8	98	0.03
26	T	Pyrene	10.000	9.043	9.6	95	0.03
27	S	Terphenyl-d14	10.000	8.931	10.7	110	0.02
28	I	Perylene-d12	10.000	10.000	0.0	104	0.04
29	T	Benzo(a)anthracene	10.000	9.076	9.2	101	0.03
30	T	Chrysene	10.000	8.639	13.6	96	0.03
31	T	bis(2-Ethylhexyl)phthalate	10.000	10.691	-6.9	103	0.00
32	T	Benzo(b)fluoranthene	10.000	10.213	-2.1	109	0.04
33	T	Benzo(k)fluoranthene	10.000	8.507	14.9	85	0.04
34	C	Benzo(a)pyrene	10.000	9.364	6.4	97	0.04
35	T	Indeno(1,2,3-cd)pyrene	10.000	10.069	-0.7	103	0.06
36	T	Dibenzo(a,h)anthracene	10.000	10.153	-1.5	104	0.05
37	T	Benzo(g,h,i)perylene	10.000	9.496	5.0	98	0.06

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

Evaluate Continuing Calibration Report

Data File : D:\CHEMDATA\06G25\RGZ153.D Vial: 3
Acq On : 25 JUL 2006 18:48 Operator: KV
Sample : CSV48F0232 Inst : TO48
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\SV48F02.M (RTE Integrator)
Title : METHOD 8270C SIM GCMS-QP5000
Last Update : Fri Jun 02 15:54:34 2006
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	82	0.00
2	T	N-Nitrosodimethylamine	1.306	1.779	-36.2#	114	0.08
3	S	Phenol-d5	1.408	1.659	-17.8	98	0.03
4	T	Phenol	1.575	1.813	-15.1	98	0.03
5	T	Bis(2-chloroethyl)ether	1.234	1.285	-4.1	89	0.02
6	T	2-Chlorophenol	1.461	1.641	-12.3	91	0.03
7	P	N-Nitroso-di-n-propylamine	0.642	0.670	-4.4	90	0.02
8	T	2,4-Dimethylphenol	0.975	1.049	-7.6	91	0.02
9	T	2,4-Dichlorophenol	0.999	1.068	-6.9	86	0.02
10	T	Naphthalene	3.341	3.863	-15.6	98	0.02
11	T	4-Chloro-3-methylphenol	0.875	1.108	-26.6#	101	0.03
12	T	2-Methylnaphthalene	1.953	2.163	-10.8	92	0.00
13	T	1-Methylnaphthalene	1.881	2.191	-16.5	98	0.00
14	T	2,4,6-Trichlorophenol	0.460	0.433	5.9	75	0.02
15	T	2,4,5-Trichlorophenol	0.472	0.467	1.1	78	0.03
16	T	Acenaphthylene	2.795	3.095	-10.7	94	0.02
17	C	Acenaphthene	1.622	1.780	-9.7	95	0.02
18	T	Fluorene	1.763	2.030	-15.1	99	0.02
19	T	Azobenzene	1.788	2.174	-21.6#	100	0.00
20	I	Phenanthrene-d10	1.000	1.000	0.0	101	0.03
21	T	Hexachlorobenzene	0.383	0.470	-22.7#	123	0.02
22	T	Pentachlorophenol	0.636	0.640	-0.6	97	0.03
23	T	Phenanthrene	1.458	1.416	2.9	104	0.02
24	T	Anthracene	1.469	1.461	0.5	106	0.03
25	C	Fluoranthene	1.304	1.215	6.8	98	0.03
26	T	Pyrene	1.357	1.227	9.6	95	0.03
27	S	Terphenyl-d14	0.579	0.580	-0.2	110	0.02
28	I	Perylene-d12	1.000	1.000	0.0	104	0.04
29	T	Benzo(a)anthracene	1.835	1.666	9.2	101	0.03
30	T	Chrysene	1.927	1.664	13.6	96	0.03
31	T	bis(2-Ethylhexyl)phthalate	2.040	2.182	-7.0	103	0.00
32	T	Benzo(b)fluoranthene	1.709	1.746	-2.2	109	0.04
33	T	Benzo(k)fluoranthene	1.848	1.572	14.9	85	0.04
34	C	Benzo(a)pyrene	1.703	1.594	6.4	97	0.04
35	T	Indeno(1,2,3-cd)pyrene	1.978	1.992	-0.7	103	0.06
36	T	Dibenzo(a,h)anthracene	1.549	1.573	-1.5	104	0.05
37	T	Benzo(g,h,i)perylene	1.662	1.578	5.1	98	0.06

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

3070

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 #A48- 013

Method File: SV48F02 Tune File: Sim Start Date/Time: 6.2.02 11:58 End Date/Time: 6.2.02 18:17

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
NA	RFZ 001	IB48F0201	NA			
	002	DFT48F0201				
	003	SV48F02 1				.15 ppm
	004	2				.5
	005	3				1
	006	4				2
	007	5				5
	008	6				10
	009	7				20
	010	8				40
	011	9				80
	012	10				100
	013	11				160ppm
	014	ISV48F02 1				
						DN 6.2.02

ANALYTICAL BATCH SV48F02G

Instrument No:	48

INITIAL CALIBRATION REFERENCE	
Date	6.2.02
ICAL ID	SV48F02

Standards		
Name	ID	Conc. (mg/L)
DFTPP	SS2B.04.29.2	50
DCC	SS2C.04.88.3	10
INT. STD.	SS2B.04.27.3	2000
TCL	SS2C.04.89.2	10
0.15 ppm	SS2C.04.88.2	0.15

Solvent	ID
CH_2Cl_2	45342

DATA FILE	02F02

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T048	

Comments:

SURROGATE:
SS2C.04.89.1

Analyzed By: DN
Date Disposed: NA
Disposed by: NA
This page is checked during data review.

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

ANALYSIS RUN LOG FOR SEMIVOLATILES

SOP ☐ EMAX-8270 Rev. No. 2 ☑ EMAX-8270SIM Rev. No. 0 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐

Book #A48- 013

Method File: SV48F02 Tune File: Sim

Start Date/Time: 6.7.06 16:15 End Date/Time: 6.7.06 23:23

ANALYTICAL BATCH CSV48F0207

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RFZ131	IB48F0207				
	132	DFT48F0207				
	133	ISV48F023 *				
	134	CSV48F0207				
	135	SS2C.04.90.3				2ppm
	136	0.15 ppm				
SVF0045	137	SVF0045B	NA	✓		
	138	SL	8			
	139	SC	8			
	140	MDL VERF. 05	NA			0.15ppm
	141	MDL VERF. 06	NA			0.3 ppm
SVF003W	142	SVF003WB	NA		✓	
	143	WL	8			
	144	WC	8			
	145	06F014-01	NA			
	146	-02				
	147	-03				
	148	-04				
	149	-05				
	150	-06				
	151	-07				
	152	06F015-01	NA			gc low
	153	06F203-05R	NA		✓	
						DN 6.8.06

Instrument No:	48

INITIAL CALIBRATION REFERENCE	
Date	6.2.06
ICAL ID	SV48F02

Standards		
Name	ID	Conc. (mg/L)
DFTPP	SS2B.04.29.2	50
DCC	SS2C.04.88.3	10
INT. STD.	SS2B.04.27.3	2000
ICV	SS2C.04.89.2	10

Solvent	ID
CH_2Cl_2	45342

DATA FILE	06F07

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T048	

Comments:

*Evaluate for: Hexachlorobenzene & Pentachlorophenol

Analyzed By: DN / KV

Date Disposed: 6.8.06

Disposed by: DN

This page is checked during data review.

EMAX LABORATORIES, INC. 1835 W. 213th St. Torrance, CA 90501

ANALYSIS RUN LOG FOR SEMIVOLATILES

SOP ☐ EMAX-8270 Rev. No. 2 ☒ EMAX-8270SIM Rev. No. 0 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #A48- 013

Method File: SV48F02 Tune File: Sim Start Date/Time: 7/17/06 13:34 End Date/Time: 7/17/06 20:2

ANALYTICAL BATCH CSV48F02 27

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RGZ068	TB48F0227				
	069	DFT48F0227				
	070	CSV48F0227				
SVG012W	071	SVG012WB	NA		X	
	072	WL	8			
	073	WC	8			
	074	06G019-01	NA			
	075	-05				
	076	-06				
	077	06G027-01				
	078	-03				
	079	-05				
	080	-07				
	081	-08				
	082	06G039-01				
	083	-04				
	084	-05				last is high
	085	-06				
	086	-07				
	087	-08				
NA	RGZ 088	06F238-34	NA			8310 Confirmation
	089	06F238-34QC	NA			

S4
7/17/06

Instrument No:	48

INITIAL CALIBRATION REFERENCE

Date	6/2/06
ICAL ID	SV48F02

Standards

Name	ID	Conc. (mg/L)
DFTPP	SS2B-04-29-2	50
DCC	SS2C-04-88-2	10
INT. STD.	SS2B-04-33-2	2000

Solvent	ID
CH_2Cl_2	45342

DATA FILE	06G17

Electronic Data Archival

Location	Date
HPCHEM_SVOA/T048	

Comments:

Analyzed By: S4
Date Disposed: 7/18/06
Disposed by: S4
This page is checked during data review.

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

ANALYSIS RUN LOG FOR SEMIVOLATILES

SOP ☐ EMAX-8270 Rev. No. 2 ☑ EMAX-8270SIM Rev. No. 0 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #A48- 013

Method File: SV48F02 Tune File: Sim Start Date/Time: 7/25/06 15:42 End Date/Time: 7/25/06 19:47

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RG2151	IB48F0232				
	152	DFT48F0232				
	153	CSV48F0232				
SVG012W	154	06G039-05W	NA		x	
NA	155	06G085-01	NA		x	Combination
↓	156	↓ 04	↓		x	8310
						VV 7/25/05

ANALYTICAL BATCH CSV48F0232

Instrument No:	48
INITIAL CALIBRATION REFERENCE	
Date	6/2/06
ICAL ID	SV48F02

Standards		
Name	ID	Conc. (mg/L)
DFTPP	SS2B-04-29-2	50
DCC	SS2C-04-88-2	10
INT. STD.	SS2B-04-33-2	2000

Solvent	ID	
CH_2Cl_2	45342	

DATA FILE	06G25

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T048	

Comments:

Analyzed By: VV

Date Disposed:

Disposed by:

This page is checked during data review.

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

EXTRACTION LOG

EXTRACTION LOG FOR SEMIVOLATILES

SOP ☐ EMAX-3540 Rev. No.: 0 ☐ EMAX-3510 Rev. No.: 1 ☐ EMAX-3550 Rev. No.: 1 ☑ EMAX-3520 Rev. No.: 2 ☐ EMAX-CLP-SVOA ☐ Book # ESV-031

Matrix: WATER Init.Start Date/Time: 7/12/06 16:30 End Date/Time: 7/13/06 10:30 Final Start Date/Time: 7/14/06 11:00 End Date/Time: 7/15/06 5:00

PREPARATION BATCH: * CVG012

Sample Prep ID	Lab Sample ID	Sonicator Number	Sample Amount (g/ml)	pH	Extract Volume (ml)	Extract Vol. [A] (ml)	Notes
*01	CVG012 - WB	N/A	1000	-	2	1	
*02	- WL		1000	-	2	1	
*03	- WC		1000	-	2	1	
*04	06G019 - 01		1060	7	2	1	
*05	- 05		1060	7	2	1	
*06	- 06		1060	7	2	1	
*07	06G027 - 01		1060	7	2	1	
*08	- 03		1060	7	2	1	
*09	- 05		1060	7	2	1	
*10	- 07		1060	7	2	1	
*11	- 08		1060	7	2	1	
*12	06G028 - 01		1030	8	1	1	
*13	06G039 - 01		1060	7	2	1	
*14	- 04		1060	7	2	1	
*15	- 05		1060	7	2	1	
*16	- 06		1060	7	2	1	
*17	- 07		1060	7	2	1	
*18	- 08		1060	6	2	1	
*19	06G042 - 01		1040	8	1	1	Yellow soln
*20							
*21	7/15/06	JM					
*22							
*23							
*24							
*25							
*26							
*27							
*28							

Standards	ID	Amount Added (ml)
Surrogate	SS2B-04-3	1.0
LCS/MS	SS2B-04-38-3	0.4

Reagent	Lot# / ID
CH_2Cl_2	65342
Na_2SO_4	45045
H_2SO_4	45318
NaOH	SP1B-01-341
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 Witnessed By: JM

Standard Added By: ML

Checked By: ML

Extract Received by: SA 7/14/06 Location: SE03-3

Disposed by: Disposed on:

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

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

3071

LABORATORY REPORT FOR

ARCADIS

OMEGA CHEMICAL

METHOD 3520C/8270C SIM
1,4-DIOXANE BY GC/MS

SDG#: 06G039

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

METHOD 3520C/8270C SIM
1,4-DIOXANE BY GC/MS

Six (6) water samples were received on 07/10/06 for 1,4-Dioxane analysis by Method 3520C/8270C SIM 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. RPDs of two analytes were above QC.

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 CHRONICLE
SEMI VOLATILE ORGANICS BY GC/MS

Client : ARCADIS
Project : OMEGA CHEMICAL

SDG NO. : 06G039
Instrument ID : T-052

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	SVG013WB	1	NA	07/13/0615:13	07/12/0617:00	RGK026	RFK067	SVG013W	Method Blank
LCS1W	SVG013WL	1	NA	07/13/0615:24	07/12/0617:00	RGK027	RFK067	SVG013W	Lab Control Sample (LCS)
LCD1W	SVG013WC	1	NA	07/13/0615:35	07/12/0617:00	RGK028	RFK067	SVG013W	LCS Duplicate
OC2-PMW15-0-17	G039-01	.94	NA	07/13/0617:15	07/12/0617:00	RGK037	RFK067	SVG013W	Field Sample
OC2-PMW15-5-21	G039-04	.94	NA	07/13/0617:26	07/12/0617:00	RGK038	RFK067	SVG013W	Field Sample
OC2-PMW15-1-20	G039-05	.94	NA	07/13/0617:37	07/12/0617:00	RGK039	RFK067	SVG013W	Field Sample
OC2-PMW18A-0-22	G039-06	.94	NA	07/13/0617:49	07/12/0617:00	RGK040	RFK067	SVG013W	Field Sample
OC2-PMW18B-0-23	G039-07	.94	NA	07/13/0618:00	07/12/0617:00	RGK041	RFK067	SVG013W	Field Sample
OC2-PMW18C-0-24	G039-08	.94	NA	07/13/0618:11	07/12/0617:00	RGK042	RFK067	SVG013W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/12/06 17:00
Sample ID:	OC2-PMW15-0-17	Date Analyzed:	07/13/06 17:15
Lab Samp ID:	G039-01	Dilution Factor:	.94
Lab File ID:	RGK037	Matrix :	WATER
Ext Btch ID:	SVG013W	% Moisture :	NA
Calib. Ref.:	RFK067	Instrument ID :	T-052

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,4-DIOXANE	39	1.9	.94

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOBENZENE	70	18-132

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

Client : ARCADIS	Date Collected: 07/10/06
Project : OMEGA CHEMICAL	Date Received: 07/10/06
Batch No. : 06G039	Date Extracted: 07/12/06 17:00
Sample ID: OC2-PMW15-5-21	Date Analyzed: 07/13/06 17:26
Lab Samp ID: G039-04	Dilution Factor: .94
Lab File ID: RGK038	Matrix : WATER
Ext Btch ID: SVG013W	% Moisture : NA
Calib. Ref.: RFK067	Instrument ID : T-052

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,4-DIOXANE	46	1.9	.94

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOBENZENE	69	18-132

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/12/06 17:00
Sample ID:	OC2-PMW15-1-20	Date Analyzed:	07/13/06 17:37
Lab Samp ID:	G039-05	Dilution Factor:	.94
Lab File ID:	RGK039	Matrix :	WATER
Ext Btch ID:	SVG013W	% Moisture :	NA
Calib. Ref.:	RFK067	Instrument ID :	T-052

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,4-DIOXANE	58	1.9	.94

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOBENZENE	94	18-132

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/12/06 17:00
Sample ID:	OC2-PMW18A-0-22	Date Analyzed:	07/13/06 17:49
Lab Samp ID:	G039-06	Dilution Factor:	.94
Lab File ID:	RGK040	Matrix :	WATER
Ext Btch ID:	SVG013W	% Moisture :	NA
Calib. Ref.:	RFK067	Instrument ID :	T-052

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,4-DIOXANE	ND	1.9	.94

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOBENZENE	64	18-132

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/12/06 17:00
Sample ID:	OC2-PMW18B-0-23	Date Analyzed:	07/13/06 18:00
Lab Samp ID:	G039-07	Dilution Factor:	.94
Lab File ID:	RGK041	Matrix :	WATER
Ext Btch ID:	SVG013W	% Moisture :	NA
Calib. Ref.:	RFK067	Instrument ID :	T-052

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,4-DIOXANE	ND	1.9	.94

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOBENZENE	63	18-132

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

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
Batch No.	: 06G039	Date Extracted:	07/12/06 17:00
Sample ID:	OC2-PMW18C-0-24	Date Analyzed:	07/13/06 18:11
Lab Samp ID:	G039-08	Dilution Factor:	.94
Lab File ID:	RGK042	Matrix :	WATER
Ext Btch ID:	SVG013W	% Moisture :	NA
Calib. Ref.:	RFK067	Instrument ID :	T-052

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,4-DIOXANE	ND	1.9	.94

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOBENZENE	81	18-132

QC SUMMARY

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

Client	: ARCADIS	Date Collected:	NA
Project	: OMEGA CHEMICAL	Date Received:	07/12/06
Batch No.	: 06G039	Date Extracted:	07/12/06 17:00
Sample ID:	MBLK1W	Date Analyzed:	07/13/06 15:13
Lab Samp ID:	SVG013WB	Dilution Factor:	1
Lab File ID:	RGK026	Matrix :	WATER
Ext Btch ID:	SVG013W	% Moisture :	NA
Calib. Ref.:	RFK067	Instrument ID :	T-052

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,4-DIOXANE	ND	2	1

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOBENZENE	56	18-132

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 3520C/8270C SIM

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	SVG013WB	SVG013WL	SVG013WC		
LAB FILE ID:	RGK026	RGK027	RGK028		
DATE EXTRACTED:	07/12/0617:00	07/12/0617:00	07/12/0617:00	DATE COLLECTED:	NA
DATE ANALYZED:	07/13/0615:13	07/13/0615:24	07/13/0615:35	DATE RECEIVED:	07/12/06
PREP. BATCH:	SVG013W	SVG013W	SVG013W		
CALIB. REF:	RFK067	RFK067	RFK067		

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 (%)
1,4-Dioxane	ND	40	25.8	64	40	30.2	75	16	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 (%)
Bromobenzene	40	23.5	59	40	27.1	68	18-132

INITIAL CALIBRATIONS

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: EMAX Inc
Lab Code: EMXT Case No.:
Lab File ID: RFK062
Instrument ID: T-052

Project: OMEGA CHEMICAL
SAS No.: SDG No.: 06G039
BFB Injection Date : 06/15/06
BFB Injection Time : 10:38

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.05
75	30.0 - 60.0% of mass 95	31.74
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	0.00(0.0)1
174	50.0- 100.0% of mass 95	94.03
175	5.0 - 9.0% of mass 174	6.70(7.1)1
176	95.0 - 101.0% of mass 174	91.88(97.7)1
177	5.0 - 9.0% of mass 176	5.93(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	SSTD0.5	SV52F151	RFK063	06/15/06	11:04
2	SSTD001	SV52F152	RFK064	06/15/06	11:15
3	SSTD005	SV52F153	RFK065	06/15/06	11:25
4	SSTD010	SV52F154	RFK066	06/15/06	11:36
5	SSTD020	SV52F155	RFK067	06/15/06	11:46
6	SSTD030	SV52F156	RFK068	06/15/06	11:57
7	SSTD040	SV52F157	RFK069	06/15/06	12:08
8	SSTD020	ISV52F151	RFK070	06/15/06	12:19

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :T052
Beginning DateTime :06/15/06 11:04
Spike Units :PPM
IC File :RFK067

Column Spec :ZB-5MS ID :0.18MM
Ending DateTime :06/15/06 12:08
HPChem Method :SV52F15

		.5	1	5	10	20	30	40			
		11:04	11:15	11:25	11:36	11:46	11:57	12:08			
IDX	Parameters	RFK063	RFK064	RFK065	RFK066	RFK067	RFK068	RFK069	Av_RRF	%_RSD	Av_Rt_M
1	1,4-Dioxane-d8	1	1	1	1	1	1	1	1	0	1.4321
2	1,4-Dioxane	2.480	2.609	3.148	2.651	3.200	3.104	3.139	2.905	10.64	1.4507
3	Bromobenzene	1.646	1.716	1.812	1.545	1.778	1.897	1.814	1.744	6.78	3.0029

Ave_%RSD : 8.7 Max_%RSD : 10.6

Emp 6/15/06

3093

Quantitation Limit from Lowest Initial Calibration Concentration

Instrument ID :T052 Column Spec :ZB-5MS ID :0.18MM
Beginning DateTime :06/15/06 11:04 Ending DateTime :06/15/06 12:08
IC File :RFK067 HPChem Method :SV52F15

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-Dioxane-d8	IntSTD	IntSTD	IntSTD	IntSTD
2	1,4-Dioxane	.5	.5	.01667	RFK063
3	Bromobenzene	.5	.5	.01667	RFK063

KRM
6/15/06

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFK067
Instrument ID: T-052

Project: ICAL
SDG No.: ICAL
Date Analyzed: 06/15/06
Time Analyzed: 11:46

		IS1(DD8) AREA #	RT #
	12 HOUR STD	144063	1.42
	UPPER LIMIT	288126	1.92
	LOWER LIMIT	72032	0.92
	SAMPLE ID		
1	SV52F151	150987	1.43
2	SV52F152	156082	1.44
3	SV52F153	150519	1.43
4	SV52F154	171475	1.43
5	SV52F156	236732	1.43
6	SV52F157	149898	1.43
7	ISV52F151	163006	1.43

IS1 (DD8) = 1,4-Dioxane-d8

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 DIOX OLM02.0

KWP 6/15/06

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 #52- 011

Method File: SVS2 F15 **Tune File:** BFB **Start Date/Time:** 6.15.06 10:38 **End Date/Time:** 6.15.06 13:02

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RFK061	IBS2F1501	NA			
	062	BFB52F1501				
	063	SVS2F15 1				0.5ppm
	064	2				1
	065	3				5
	066	4				10
	067	5				20
	068	6				30
	069	7				40
	070	TSVS2F15 1				20 ppm
	071	SVF009WB		✓		
	072	W1				
	073	WC				
	074	MBLV-11	✓		✓	
						KV 6.15.06

ANALYTICAL BATCH SVS2F15

Instrument No:	52
INITIAL CALIBRATION REFERENCE	
Date	6.15.06
ICAL ID	SVS2F15

Standards		
Name	ID	Conc. (mg/L)
~~DFTPP~~ BFB	SS2C.04.83.3	50
DCC	SS2C.04.84.1	20
INT. STD.	SS2A.04.3	1000
ICV	SS2C.04.84.2	20

Solvent	ID
CH_2Cl_2	45342

DATA FILE	06F15

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T052	

Comments:

Analyzed By: KV

Date Disposed: NA

Disposed by: NA

This page is checked during data review.

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

ANALYSIS RUN LOG FOR SEMIVOLATILES

SOP ☐ EMAX-8270 Rev. No. 2 ☐ EMAX-8270SIM Rev. No. 0 ☐ EMAX-CLPSVOA ☒ EMAX-M8270SIM Rev. No. 1 ☐ Book #52- 011

Method File: SV52F15 Tune File: BFB Start Date/Time: 7/13/06 14:23 End Date/Time: 7/13/06 19:09

ANALYTICAL BATCH (SV 52F1504)

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RGK 023	IB52F1504				
	024	BFB 52F1504				
	025	CSV 52F1504				
SVG013W	026	SVG013 WB	NA		X	
	027	WL				
	028	WC				
	029	06G019-01				
	030	-05				
	031	-06				
	032	06G027-01				
	033	-03				
	034	-05				
	035	-07				
	036	-08				
	037	06G039-01				
	038	-04				
	039	-05				
	040	-06				
	041	-07				
	042	-08				
NA	RGK 043	SS2B-04-41-1				1ppm, Spike From 40ppm
						Su 7/13/06

Instrument No:	52
INITIAL CALIBRATION REFERENCE	
Date	6/15/06
ICAL ID	SV52F15

Standards		
Name Su Su	ID 7/13/06	Conc. (mg/L)
~~DFTPP~~ BFB	SS2C-04-93-1	50
DCC	SS2C-04-92-2	20
INT. STD.	SS2A-04-3	100

Solvent	ID
CH_2Cl_2	45342

DATA FILE	06G13

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T052	

Comments:

Analyzed By: Su

Date Disposed: 7/14/06

Disposed by: Su

This page is checked during data review.

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

EXTRACTION LOG

EXTRACTION LOG FOR SEMIVOLATILES

SOP ☐ EMAX-3540 Rev. No.: 0 ☐ EMAX-3510 Rev. No.: 1 ☐ EMAX-3550 Rev. No.: 1 ☒ EMAX-3520 Rev. No.: 2 ☐ EMAX-CLP-SVOA ☐ Book # ESV-031

Matrix: WATER Init.Start Date/Time: 7/12/06 17:00 End Date/Time: Final Start Date/Time: End Date/Time: 7/13/06 11:00

PREPARATION BATCH: * SVG013 WS

Sample Prep ID	Lab Sample ID	Sonicator Number	Sample Amount (g/ml)	pH	Extract Volume (ml)	Clean-up [G] [F] [A] [C]	Notes
*01	SVG013 – WB	N/A	1000		2		
*02	– WL		1000		2		
*03	– WC		1000		2		
*04	OGG019 – 01		1060		2		
*05	– 05		1060		2		
*06	– 06		1060		2		
*07	OGG027 – 01		1060		2		
*08	– 03		1060		2		
*09	– 05		1060		2		
*10	– 07		1060		2		
*11	– 08		1000		2		
*12	OGG039 – 01		1060		2		
*13	– 04		1060		2		
*14	– 05		1060		2		
*15	– 06		1060		2		
*16	– 07		1060		2		
*17	– 08		1060		2		
*18							
*19							
*20							
*21							
*22							
*23							
*24							
*25							
*26							
*27							
*28							

Standards	ID	Amount Added (ml)
Surrogate	SSB-06-26-2	0.10
LCS/MS	1660 10X SRB-06-27-3	1.0

Reagent	Lot# / ID
CH_2Cl_2	45342
Na_2SO_4	45045
H_2SO_4	—
NaOH	—
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		
5		
6		

Comments: Thermometer ID = T_1

Prepared By: JM Witnessed By: JM

Standard Added By: ML

Checked By: ML

Extract Received by: SU 7/13/06 Location: SE01-4m/-5

Disposed by: Disposed on:

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

EMAX LABORATORIES, INC., 1835 W. 215th St., Torrance, CA 90501

LABORATORY REPORT FOR

ARCADIS

OMEGA CHEMICAL

METALS/MERCURY

SDG#: 06G039

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

METHOD 6020A
DISSOLVED METALS BY ICP-MS

Six (6) water samples were received on 07/10/06 for Dissolved Metals analysis by Method 6020A accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", 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. **Serial Dilution / Post-Analytical Spike**

   Sample G039-01 was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

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

   Sample G039-01 was spiked. Recoveries were within QC limit except Ca, Mg, and Na in both MS/MSD and B in MSD were out the limit.

6. **Sample Analysis**

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

LAB CHRONICLE
DISSOLVED METALS BY ICP-MS

Client : ARCADIS
Project : OMEGA CHEMICAL

SDG NO. : 06G039
Instrument ID : T-I98

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	IMG008WB	1	NA	07/31/0617:44	07/13/0610:00	98G30027	98G30025	IMG008W	Method Blank
LCS1W	IMG008WL	1	NA	07/31/0617:53	07/13/0610:00	98G30028	98G30025	IMG008W	Lab Control Sample (LCS)
LCD1W	IMG008WC	1	NA	07/31/0618:01	07/13/0610:00	98G30029	98G30025	IMG008W	LCS Duplicate
OC2-PMW15-0-17AS	G039-01A	1	NA	07/31/0618:10	07/13/0610:00	98G30030	98G30025	IMG008W	Analytical Spike Sample
OC2-PMW15-0-17MS	G039-01M	1	NA	07/31/0618:18	07/13/0610:00	98G30031	98G30025	IMG008W	Matrix Spike Sample (MS)
OC2-PMW15-0-17MSD	G039-01S	1	NA	07/31/0618:27	07/13/0610:00	98G30032	98G30025	IMG008W	MS Duplicate (MSD)
OC2-PMW15-0-17	G039-01	1	NA	07/31/0618:36	07/13/0610:00	98G30033	98G30025	IMG008W	Field Sample
OC2-PMW15-0-17DL	G039-01J	5	NA	07/31/0618:44	07/13/0610:00	98G30034	98G30025	IMG008W	Diluted Sample
OC2-PMW15-5-21	G039-04	1	NA	07/31/0618:53	07/13/0610:00	98G30035	98G30025	IMG008W	Field Sample
OC2-PMW15-1-20	G039-05	1	NA	07/31/0619:01	07/13/0610:00	98G30036	98G30025	IMG008W	Field Sample
OC2-PMW18A-0-22	G039-06	1	NA	07/31/0619:27	07/13/0610:00	98G30039	98G30037	IMG008W	Field Sample
OC2-PMW18B-0-23	G039-07	1	NA	07/31/0619:35	07/13/0610:00	98G30040	98G30037	IMG008W	Field Sample
OC2-PMW18C-0-24	G039-08	1	NA	07/31/0619:44	07/13/0610:00	98G30041	98G30037	IMG008W	Field Sample

FN - Filename
% Moist - Percent Moisture

METHOD 6020A
DISSOLVED METALS BY ICP-MS

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
SDG NO.	: 06G039	Date Extracted:	07/13/06 10:00
Sample ID:	OC2-PMW15-0-17	Date Analyzed:	07/31/06 18:36
Lab Samp ID:	G039-01	Dilution Factor:	1
Lab File ID:	98G30033	Matrix :	WATER
Ext Btch ID:	IMG008W	% Moisture :	NA
Calib. Ref.:	98G30025	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Aluminum	ND	1000	200
Antimony	ND	.5	.25
Arsenic	1.89	.5	.25
Barium	50.7	.5	.25
Beryllium	ND	.5	.25
Boron	331	10	5
Cadmium	ND	1	.5
Calcium	194000	1000	200
Chromium	12	.5	.25
Cobalt	.43J	.5	.25
Copper	1.58	.5	.25
Iron	ND	1000	200
Lead	ND	1	.5
Magnesium	52700	1000	200
Manganese	.604J	1	.5
Molybdenum	2.43	2	1
Nickel	.356J	.5	.25
Potassium	4250	1000	200
Selenium	4.53	1	.5
Silver	ND	1	.5
Sodium	93200	1000	200
Thallium	ND	1	.5
Vanadium	4.78	1	.5
Zinc	5.03J	10	5

7003

METHOD 6020A
DISSOLVED METALS BY ICP-MS

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
SDG NO.	: 06G039	Date Extracted:	07/13/06 10:00
Sample ID:	OC2-PMW15-5-21	Date Analyzed:	07/31/06 18:53
Lab Samp ID:	G039-04	Dilution Factor:	1
Lab File ID:	98G30035	Matrix :	WATER
Ext Btch ID:	IMG008W	% Moisture :	NA
Calib. Ref.:	98G30025	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Aluminum	ND	1000	200
Antimony	ND	.5	.25
Arsenic	1.85	.5	.25
Barium	49.8	.5	.25
Beryllium	ND	.5	.25
Boron	331	10	5
Cadmium	ND	1	.5
Calcium	194000	1000	200
Chromium	12	.5	.25
Cobalt	.459J	.5	.25
Copper	1.14	.5	.25
Iron	ND	1000	200
Lead	ND	1	.5
Magnesium	53400	1000	200
Manganese	.579J	1	.5
Molybdenum	2.38	2	1
Nickel	.313J	.5	.25
Potassium	4240	1000	200
Selenium	4.39	1	.5
Silver	ND	1	.5
Sodium	94000	1000	200
Thallium	ND	1	.5
Vanadium	4.75	1	.5
Zinc	7.83J	10	5

METHOD 6020A
DISSOLVED METALS BY ICP-MS

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
SDG NO.	: 06G039	Date Extracted:	07/13/06 10:00
Sample ID:	OC2-PMW15-1-20	Date Analyzed:	07/31/06 19:01
Lab Samp ID:	G039-05	Dilution Factor:	1
Lab File ID:	98G30036	Matrix :	WATER
Ext Btch ID:	IMG008W	% Moisture :	NA
Calib. Ref.:	98G30025	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Aluminum	ND	1000	200
Antimony	ND	.5	.25
Arsenic	1.82	.5	.25
Barium	51.6	.5	.25
Beryllium	ND	.5	.25
Boron	329	10	5
Cadmium	ND	1	.5
Calcium	192000	1000	200
Chromium	11.9	.5	.25
Cobalt	.446J	.5	.25
Copper	1.14	.5	.25
Iron	ND	1000	200
Lead	ND	1	.5
Magnesium	53000	1000	200
Manganese	ND	1	.5
Molybdenum	2.33	2	1
Nickel	.829	.5	.25
Potassium	4200	1000	200
Selenium	4.35	1	.5
Silver	ND	1	.5
Sodium	92700	1000	200
Thallium	ND	1	.5
Vanadium	4.73	1	.5
Zinc	8.84J	10	5

METHOD 6020A
DISSOLVED METALS BY ICP-MS

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
SDG NO.	: 06G039	Date Extracted:	07/13/06 10:00
Sample ID:	OC2-PMW18A-0-22	Date Analyzed:	07/31/06 19:27
Lab Samp ID:	G039-06	Dilution Factor:	1
Lab File ID:	98G30039	Matrix :	WATER
Ext Btch ID:	IMG008W	% Moisture :	NA
Calib. Ref.:	98G30037	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Aluminum	ND	1000	200
Antimony	.406J	.5	.25
Arsenic	1.52	.5	.25
Barium	32.7	.5	.25
Beryllium	ND	.5	.25
Boron	386	10	5
Cadmium	ND	1	.5
Calcium	258000	1000	200
Chromium	5.59	.5	.25
Cobalt	.622	.5	.25
Copper	2.57	.5	.25
Iron	ND	1000	200
Lead	ND	1	.5
Magnesium	76300	1000	200
Manganese	.532J	1	.5
Molybdenum	3.26	2	1
Nickel	.434J	.5	.25
Potassium	8900	1000	200
Selenium	27.9	1	.5
Silver	ND	1	.5
Sodium	152000	1000	200
Thallium	ND	1	.5
Vanadium	3.99	1	.5
Zinc	7.44J	10	5

METHOD 6020A
DISSOLVED METALS BY ICP-MS

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
SDG NO.	: 06G039	Date Extracted:	07/13/06 10:00
Sample ID:	OC2-PMW18B-0-23	Date Analyzed:	07/31/06 19:35
Lab Samp ID:	G039-07	Dilution Factor:	1
Lab File ID:	98G30040	Matrix :	WATER
Ext Btch ID:	IMG008W	% Moisture :	NA
Calib. Ref.:	98G30037	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Aluminum	ND	1000	200
Antimony	ND	.5	.25
Arsenic	1.3	.5	.25
Barium	31.6	.5	.25
Beryllium	ND	.5	.25
Boron	302	10	5
Cadmium	ND	1	.5
Calcium	282000	1000	200
Chromium	6.1	.5	.25
Cobalt	.712	.5	.25
Copper	1.82	.5	.25
Iron	ND	1000	200
Lead	ND	1	.5
Magnesium	94600	1000	200
Manganese	ND	1	.5
Molybdenum	3.28	2	1
Nickel	.375J	.5	.25
Potassium	6530	1000	200
Selenium	57	1	.5
Silver	ND	1	.5
Sodium	127000	1000	200
Thallium	ND	1	.5
Vanadium	4.41	1	.5
Zinc	9.01J	10	5

METHOD 6020A
DISSOLVED METALS BY ICP-MS

Client	: ARCADIS	Date Collected:	07/10/06
Project	: OMEGA CHEMICAL	Date Received:	07/10/06
SDG NO.	: 06G039	Date Extracted:	07/13/06 10:00
Sample ID:	OC2-PMW18C-0-24	Date Analyzed:	07/31/06 19:44
Lab Samp ID:	G039-08	Dilution Factor:	1
Lab File ID:	98G30041	Matrix :	WATER
Ext Btch ID:	IMG008W	% Moisture :	NA
Calib. Ref.:	98G30037	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Aluminum	ND	1000	200
Antimony	ND	.5	.25
Arsenic	1.66	.5	.25
Barium	177	.5	.25
Beryllium	ND	.5	.25
Boron	78	10	5
Cadmium	ND	1	.5
Calcium	67600	1000	200
Chromium	1.01	.5	.25
Cobalt	ND	.5	.25
Copper	.652	.5	.25
Iron	ND	1000	200
Lead	ND	1	.5
Magnesium	24300	1000	200
Manganese	3.22	1	.5
Molybdenum	4.94	2	1
Nickel	ND	.5	.25
Potassium	3560	1000	200
Selenium	23.8	1	.5
Silver	ND	1	.5
Sodium	40400	1000	200
Thallium	ND	1	.5
Vanadium	5.1	1	.5
Zinc	7.52J	10	5

METHOD 6020A
DISSOLVED METALS BY ICP-MS

Client	: ARCADIS	Date Collected:	NA
Project	: OMEGA CHEMICAL	Date Received:	07/13/06
SDG NO.	: 06G039	Date Extracted:	07/13/06 10:00
Sample ID:	MBLK1W	Date Analyzed:	07/31/06 17:44
Lab Samp ID:	IMG008WB	Dilution Factor:	1
Lab File ID:	98G30027	Matrix :	WATER
Ext Btch ID:	IMG008W	% Moisture :	NA
Calib. Ref.:	98G30025	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Aluminum	ND	1000	200
Antimony	ND	.5	.25
Arsenic	ND	.5	.25
Barium	ND	.5	.25
Beryllium	ND	.5	.25
Boron	ND	10	5
Cadmium	ND	1	.5
Calcium	ND	1000	200
Chromium	ND	.5	.25
Cobalt	ND	.5	.25
Copper	ND	.5	.25
Iron	ND	1000	200
Lead	ND	1	.5
Magnesium	ND	1000	200
Manganese	ND	1	.5
Molybdenum	ND	2	1
Nickel	ND	.5	.25
Potassium	ND	1000	200
Selenium	ND	1	.5
Silver	ND	1	.5
Sodium	ND	1000	200
Thallium	ND	1	.5
Vanadium	ND	1	.5
Zinc	ND	10	5

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
SDG NO.: 06G039
METHOD: METHOD 6020A

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1W				
CONTROL NO.:	IMG008WB	IMG008WL	IMG008WC		
LAB FILE ID:	98G30027	98G30028	98G30029		
DATIME EXTRCTD:	07/13/0610:00	07/13/0610:00	07/13/0610:00	DATE COLLECTED:	NA
DATIME ANALYZD:	07/31/0617:44	07/31/0617:53	07/31/0618:01	DATE RECEIVED:	07/13/06
PREP. BATCH:	IMG008W	IMG008W	IMG008W		
CALIB. REF:	98G30025	98G30025	98G30025		

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 %
Aluminum	ND	5000	4920	98	5000	4850	97	1	80-120	20
Antimony	ND	50	51.7	103	50	51.8	104	0	80-120	20
Arsenic	ND	50	50.8	102	50	51.4	103	1	80-120	20
Barium	ND	50	49.2	98	50	49	98	1	80-120	20
Beryllium	ND	50	47.4	95	50	47.7	95	1	80-120	20
Boron	ND	50	45.3	91	50	45.4	91	0	80-120	20
Cadmium	ND	50	48.7	97	50	49.1	98	1	80-120	20
Calcium	ND	5000	4880	98	5000	4870	97	0	80-120	20
Chromium	ND	50	48.7	97	50	47.8	96	2	80-120	20
Cobalt	ND	50	49.9	100	50	49.4	99	1	80-120	20
Copper	ND	50	47.8	96	50	47	94	2	80-120	20
Iron	ND	5000	4870	97	5000	4890	98	0	80-120	20
Lead	ND	50	48	96	50	47.6	95	1	80-120	20
Magnesium	ND	5000	4880	98	5000	4820	96	1	80-120	20
Manganese	ND	50	48.5	97	50	48.3	97	0	80-120	20
Molybdenum	ND	50	50.1	100	50	49.4	99	1	80-120	20
Nickel	ND	50	48	96	50	47.1	94	2	80-120	20
Potassium	ND	5000	5060	101	5000	4980	100	2	80-120	20
Selenium	ND	50	52.5	105	50	52.5	105	0	80-120	20
Silver	ND	50	56.3	112	50	56.4	113	0	80-120	20
Sodium	ND	5000	4890	98	5000	4910	98	0	80-120	20
Thallium	ND	50	48	96	50	47.6	95	1	80-120	20
Vanadium	ND	50	49.5	99	50	48.3	97	2	80-120	20
Zinc	ND	50	53	106	50	54.1	108	2	80-120	20

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
SDG NO.: 06G039
METHOD: METHOD 6020A

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	OC2-PMW15-0-17				
CONTROL NO.:	G039-01	G039-01M	G039-01S		
LAB FILE ID:	98G30033	98G30031	98G30032		
DATIME EXTRCTD:	07/13/0610:00	07/13/0610:00	07/13/0610:00	DATE COLLECTED:	07/10/06
DATIME ANALYZD:	07/31/0618:36	07/31/0618:18	07/31/0618:27	DATE RECEIVED:	07/10/06
PREP. BATCH:	IMG008W	IMG008W	IMG008W		
CALIB. REF:	98G30025	98G30025	98G30025		

ACCESSION:

PARAMETER	SMPL RSLT ug/L	SPIKE AMT ug/L	MS RSLT ug/L	MS % REC	SPIKE AMT ug/L	MSD RSLT ug/L	MSD % REC	RPD %	QC LIMIT %	MAX RPD %
Aluminum	ND	5000	4930	99	5000	4850	97	2	75-125	20
Antimony	ND	50	55	110	50	54.7	109	1	75-125	20
Arsenic	1.89	50	52.6	102	50	53.5	103	2	75-125	20
Barium	50.7	50	100	99	50	98.8	96	2	75-125	20
Beryllium	ND	50	49.3	99	50	48.9	98	1	75-125	20
Boron	331	50	370	78	50	362	63*	2	75-125	20
Cadmium	ND	50	50	100	50	49.6	99	1	75-125	20
Calcium	194000	5000	190000	-66*	5000	187000	-142*	2	75-125	20
Chromium	12	50	60.7	97	50	61.4	99	1	75-125	20
Cobalt	.43J	50	48.6	96	50	48.3	96	1	75-125	20
Copper	1.58	50	47.5	92	50	48.4	94	2	75-125	20
Iron	ND	5000	4800	96	5000	4780	96	0	75-125	20
Lead	ND	50	51.7	103	50	51.1	102	1	75-125	20
Magnesium	52700	5000	55100	48*	5000	54200	29*	2	75-125	20
Manganese	.604J	50	48.8	96	50	48.1	95	1	75-125	20
Molybdenum	2.43	50	55.9	107	50	55	105	2	75-125	20
Nickel	.356J	50	47.2	94	50	47.8	95	1	75-125	20
Potassium	4250	5000	9040	96	5000	9100	97	1	75-125	20
Selenium	4.53	50	56.5	104	50	56.1	103	1	75-125	20
Silver	ND	50	47	94	50	49.3	99	5	75-125	20
Sodium	93200	5000	94300	23*	5000	92300	-19*	2	75-125	20
Thallium	ND	50	52.2	104	50	51.6	103	1	75-125	20
Vanadium	4.78	50	55.2	101	50	55.9	102	1	75-125	20
Zinc	5.03J	50	52.2	94	50	52	94	0	75-125	20

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 6020A

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	5		
SAMPLE ID:	OC2-PMW15-0-17	OC2-PMW15-0-17		
EMAX SAMP ID:	G039-01	G039-01J		
LAB FILE ID:	98G30033	98G30034		
DATE EXTRACTED:	07/13/0610:00	07/13/0610:00	DATE COLLECTED:	07/10/06
DATE ANALYZED:	07/31/0618:36	07/31/0618:44	DATE RECEIVED:	07/10/06
PREP. BATCH:	IMG008W	IMG008W		
CALIB. REF:	98G30025	98G30025		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Aluminum	ND	ND	0	10
Antimony	ND	ND	0	10
Arsenic	1.89	1.82J	NA	10
Barium	50.7	51.2	1	10
Beryllium	ND	ND	0	10
Boron	331	348	5	10
Cadmium	ND	ND	0	10
Calcium	194000	203000	5	10
Chromium	12	12.3	2	10
Cobalt	.43J	ND	NA	10
Copper	1.58	2.87	81*	10
Iron	ND	ND	0	10
Lead	ND	ND	0	10
Magnesium	52700	56200	7	10
Manganese	.604J	ND	NA	10
Molybdenum	2.43	ND	NA	10
Nickel	.356J	ND	NA	10
Potassium	4250	4410J	NA	10
Selenium	4.53	4.42J	NA	10
Silver	ND	ND	0	10
Sodium	93200	98200	5	10
Thallium	ND	ND	0	10
Vanadium	4.78	4.98J	NA	10
Zinc	5.03J	ND	NA	10

b

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
SDG NO.: 06G039
METHOD: METHOD 6020A

MATRIX:	WATER		% MOISTURE:	NA
DILTN FACTR:	1	1		
SAMPLE ID:	OC2-PMW15-0-17			
CONTROL NO.:	G039-01	G039-01A		
LAB FILE ID:	98G30033	98G30030		
DATIME EXTRCTD:	07/13/0610:00	07/13/0610:00	DATE COLLECTED:	07/10/06
DATIME ANALYZD:	07/31/0618:36	07/31/0618:10	DATE RECEIVED:	07/10/06
PREP. BATCH:	IMG008W	IMG008W		
CALIB. REF:	98G30025	98G30025		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Aluminum	ND	5000	4940	99	75-125
Antimony	ND	50	54.3	109	75-125
Arsenic	1.89	50	53.1	102	75-125
Barium	50.7	50	102	103	75-125
Beryllium	ND	50	50.3	101	75-125
Boron	331	50	382	102	75-125
Cadmium	ND	50	50.3	101	75-125
Calcium	194000	5000	198000	86	75-125
Chromium	12	50	61.4	99	75-125
Cobalt	.43J	50	48.5	96	75-125
Copper	1.58	50	48.1	93	75-125
Iron	ND	5000	4770	95	75-125
Lead	ND	50	51.7	103	75-125
Magnesium	52700	5000	57100	88	75-125
Manganese	.604J	50	48.7	96	75-125
Molybdenum	2.43	50	55.5	106	75-125
Nickel	.356J	50	47.8	95	75-125
Potassium	4250	5000	9440	104	75-125
Selenium	4.53	50	56	103	75-125
Silver	ND	50	49.1	98	75-125
Sodium	93200	5000	97700	89	75-125
Thallium	ND	50	51.8	104	75-125
Vanadium	4.78	50	55.4	101	75-125
Zinc	5.03J	50	53.8	98	75-125

ICP-MS QC CHECK TABLE

QC	CCV HIGH	ICV	CCV	ICSAB	ICSA
Limit%	95-105	90-110	90-110	80-120	80-120
Comp	ug/L	ug/L	ug/L	ug/L	ug/L
Al	10000	6000	4500	100000	100000
Sb	100	60	45	20	0
As	100	60	45	20	0
Ba	100	60	45	20	0
Be	100	60	45	20	0
B	100	60	45	20	0
Cd	100	60	45	20	0
Ca	10000	6000	4500	100000	100000
Cr	100	60	45	20	0
Co	100	60	45	20	0
Cu	100	60	45	20	0
Fe	10000	60	4500	100000	100000
Pb	100	60	45	20	0
Mg	10000	6000	4500	100000	100000
Mn	100	60	45	20	0
Mo	100	60	45	2000	2000
Ni	100	60	45	20	0
Pt	100	60	45	20	0
K	10000	6000	4500	100000	100000
Se	100	60	45	20	0
Si	10000	6000	4500	2000	0
Ag	100	60	45	20	0
Na	10000	6000	4500	100000	100000
Sr	100	60	45	20	0
Tl	100	60	45	20	0
Sn	100	60	45	20	0
Ti	100	60	45	2000	2000
Th	100	60	45	20	0
W	100	60	45	20	0
V	100	60	45	20	0
U	100	60	45	20	0
Zn	100	60	45	20	0
Zr	100	60	45	20	0

ANALYSIS LOG
for
ICP-MS

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

Start Date: 07/31/06 11:17

End Date: 08/01/06 04:39

Comments:

Book #: A98-11

Instrument No.: 98

Analytical Batch: I98630

Analytical Sequence: 98630

Method File: EMAX 6020/200.8

SOP #	Rev. #
☑ EMAX-6020	2
☑ EMAX-200.8	0
☐ EMAX-	

STANDARDS ID	
S0	SMLOB. 02.28.07
S1	NA
S2	NA
S3	SMLOB. 02.28.08
S4	02.29.01
S5	02.29.02
S6	NA
S7	NA
ICV	SMLOB. 02.29.03
CCV	02.29.04
ICSA	02.30.01
ICSAB	02.30.02
6020 TUNE SOLN.	02.30.04
200.8 TUNE SOLN.	0230.05
CRI/MRL	
MRL2 (tv=1/100 zn=10)	SMLOB. 02.30.06
MRL3 (tv=0.5/50 zn=7)	SMLOB. 02.30.07

Analyzed By: JEE

Date: 07/31/06

SEQUENCE FILE : I98G30

4-18	19-33	34-43	44-53	54-63
LFID	LSID	TIME	DATE	DF
98G30003	BLNK	13:06	07/31/06	1.00
98G30004	S0	13:14	07/31/06	1.00
98G30005	S3 10	13:23	07/31/06	1.00
98G30006	S4 50	13:31	07/31/06	1.00
98G30007	S5 100	13:40	07/31/06	1.00
98G30008	ICV	13:48	07/31/06	1.00
98G30009	ICB	13:57	07/31/06	1.00
98G30010	MRL1	14:05	07/31/06	1.00
98G30011	MRL2	14:13	07/31/06	1.00
98G30012	MRL3	14:54	07/31/06	1.00
98G30013	ICSA	15:02	07/31/06	1.00
98G30014	ICSAB	15:11	07/31/06	1.00
98G30015	BLANK	15:19	07/31/06	1.00
98G30016	CCV1	15:28	07/31/06	1.00
98G30017	CCB1	15:36	07/31/06	1.00
98G30018	IDL-01	16:18	07/31/06	1.00
98G30019	IDL-02	16:27	07/31/06	1.00
98G30020	IDL-03	16:35	07/31/06	1.00
98G30021	IDL-04	16:44	07/31/06	1.00
98G30022	IDL-05	16:52	07/31/06	1.00
98G30023	IDL-06	17:01	07/31/06	1.00
98G30024	IDL-07	17:09	07/31/06	1.00
98G30025	CCV2	17:18	07/31/06	1.00
98G30026	CCB2	17:26	07/31/06	1.00
98G30027	IMG008WB	17:44	07/31/06	1.00
98G30028	IMG008WL	17:53	07/31/06	1.00
98G30029	IMG008WC	18:01	07/31/06	1.00
98G30030	G039-01A	18:10	07/31/06	1.00
98G30031	G039-01M	18:18	07/31/06	1.00
98G30032	G039-01S	18:27	07/31/06	1.00
98G30033	G039-01	18:36	07/31/06	1.00
98G30034	G039-01J	18:44	07/31/06	5.00
98G30035	G039-04	18:53	07/31/06	1.00
98G30036	G039-05	19:01	07/31/06	1.00
98G30037	CCV3	19:10	07/31/06	1.00
98G30038	CCB3	19:18	07/31/06	1.00
98G30039	G039-06	19:27	07/31/06	1.00
98G30040	G039-07	19:35	07/31/06	1.00
98G30041	G039-08	19:44	07/31/06	1.00
98G30042	G048-01	19:52	07/31/06	1.00
98G30043	G048-04	20:01	07/31/06	1.00
98G30044	G048-05	20:09	07/31/06	1.00
98G30045	G048-06	20:18	07/31/06	1.00
98G30046	G048-07	20:27	07/31/06	1.00
98G30047	G048-08	20:35	07/31/06	1.00
98G30048	G048-09	20:44	07/31/06	1.00
98G30049	CCV4	20:52	07/31/06	1.00
98G30050	CCB4	21:00	07/31/06	1.00
98G30051	ICSA2	21:09	07/31/06	1.00
98G30052	ICSAB2	21:17	07/31/06	1.00
98G30053	BLANK	21:26	07/31/06	1.00
98G30054	CCV5	21:34	07/31/06	1.00
98G30055	CCB5	21:43	07/31/06	1.00
98G30056	IMG015WB	21:51	07/31/06	1.00
98G30057	IMG015WL	22:00	07/31/06	1.00

98G30058	IMG015WC	22:08	07/31/06	1.00
98G30059	G102-14A	22:17	07/31/06	1.00
98G30060	G102-14	22:25	07/31/06	1.00
98G30061	G102-14J	22:34	07/31/06	5.00
98G30062	G102-15	22:42	07/31/06	1.00
98G30063	G108-01A	22:51	07/31/06	1.00
98G30064	G108-01	22:59	07/31/06	1.00
98G30065	G108-01J	23:08	07/31/06	5.00
98G30066	CCV6	23:16	07/31/06	1.00
98G30067	CCB6	23:25	07/31/06	1.00
98G30068	IMG017WB	23:33	07/31/06	1.00
98G30069	IMG017WL	23:42	07/31/06	1.00
98G30070	IMG017WC	23:50	07/31/06	1.00
98G30071	G108-02	23:59	07/31/06	1.00
98G30072	BLANK	00:07	08/01/06	1.00
98G30073	CCV7	00:16	08/01/06	1.00
98G30074	CCB7	00:24	08/01/06	1.00
98G30075	IMG021WB	00:33	08/01/06	1.00
98G30076	IMG021WL	00:41	08/01/06	1.00
98G30077	IMG021WC	00:50	08/01/06	1.00
98G30078	G130-05	00:58	08/01/06	1.00
98G30079	G130-01A	01:07	08/01/06	1.00
98G30080	G130-01	01:15	08/01/06	1.00
98G30081	G130-01J	01:24	08/01/06	5.00
98G30082	G130-02	01:32	08/01/06	1.00
98G30083	G130-03	01:41	08/01/06	1.00
98G30084	G130-04	01:49	08/01/06	1.00
98G30085	CCV8	01:58	08/01/06	1.00
98G30086	CCB8	02:06	08/01/06	1.00
98G30087	G130-06	02:15	08/01/06	1.00
98G30088	G018-01A	02:23	08/01/06	1.00
98G30089	G018-01	02:32	08/01/06	1.00
98G30090	G018-01J	02:40	08/01/06	5.00
98G30091	G018-04	02:49	08/01/06	1.00
98G30092	G018-10	02:57	08/01/06	1.00
98G30093	G018-12	03:06	08/01/06	1.00
98G30094	BLANK	03:14	08/01/06	1.00
98G30095	CCV9	03:22	08/01/06	1.00
98G30096	CCB9	03:31	08/01/06	1.00
98G30097	IMG020SB	03:39	08/01/06	1.00
98G30098	IMG020SL	03:48	08/01/06	1.00
98G30099	IMG020SC	03:56	08/01/06	1.00
98G30100	ICSA3	04:05	08/01/06	1.00
98G30101	ICSAB3	04:13	08/01/06	1.00
98G30102	BLANK	04:22	08/01/06	1.00
98G30103	CCV10	04:30	08/01/06	1.00
98G30104	CCB10	04:39	08/01/06	1.00

SDG : 06G039 UNIT : % ICPMS CHECK : I98G30 DATE : 07/31/06 INST : EMAXTI98

ANALYTE	Li	Be	B	Na	Mg	Al	K	Ca	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	As	Se	Sr	Mo	Ag	Cd	Sn	Sb	Ba	Tl	Pb	U
BLNK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S0	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S3 10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S4 50	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5 100	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV	96	99	100	104	103	102	104	102	105	101	101	101	103	102	102	102	101	100	102	99	101	102	101	101	102	101	102	101	100
ICB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MRL1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MRL2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MRL3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA	----	----	----	93	90	90	87	93	99	----	----	----	91	----	----	----	----	----	----	----	103	----	----	----	----	----	----	----	----
ICSAB	88	89	101	93	91	91	89	93	101	94	94	104	92	94	91	99	106	94	97	108	105	112	99	101	104	107	91	91	90
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV1	94	98	95	104	104	103	105	102	104	99	99	101	103	103	99	99	102	100	103	102	102	99	101	102	102	101	103	102	98
CCB1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IDL-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IDL-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IDL-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IDL-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IDL-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IDL-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IDL-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	94	97	94	104	103	103	106	102	101	100	99	101	102	102	98	98	103	102	103	102	100	98	101	102	101	102	102	101	96
CCB2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG008WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG008WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG008WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-01M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-01S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	95	97	104	102	104	103	106	101	101	101	99	100	102	102	100	100	102	100	103	104	100	98	100	101	101	101	103	101	96
CCB3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G048-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G048-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G048-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G048-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G048-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G048-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G048-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	94	94	104	103	102	102	106	103	100	99	98	99	102	101	98	99	100	102	104	105	100	98	101	102	101	102	101	99	94
CCB4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA2	----	----	----	97	99	99	95	98	108	----	----	----	97	----	----	----	----	----	----	----	108	----	----	----	----	----	----	----	----
ICSAB2	90	90	106	98	99	99	98	99	108	102	101	112	98	101	96	102	109	94	101	113	109	116	102	104	107	109	104	102	99
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	94	95	96	102	103	103	107	101	102	100	99	100	102	102	98	99	101	101	104	104	101	99	101	101	102	102	102	100	95
CCB5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG015WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG015WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

IMG015WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G102-14A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G102-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G102-14J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G102-15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G108-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G108-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G108-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	94	95	102	101	101	102	103	100	100	98	98	99	101	100	97	98	100	103	104	102	99	98	100	101	101	101	101	100	95
CCB6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG017WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG017WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG017WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G108-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	94	95	99	99	102	102	105	100	99	99	98	99	100	101	98	99	101	101	103	102	100	98	101	101	101	101	101	98	93
CCB7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG021WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG021WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG021WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G130-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G130-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G130-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G130-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G130-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G130-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G130-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	93	94	99	101	101	101	103	99	99	97	97	99	99	101	96	97	102	102	102	104	100	98	100	101	101	102	98	97	93
CCB8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G130-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G018-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G018-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G018-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G018-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G018-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G018-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	93	94	94	99	101	101	103	99	101	98	97	99	100	100	97	97	101	100	104	103	100	97	101	102	101	102	99	98	93
CCB9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG020SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG020SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG020SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA3	----	----	----	96	96	97	95	98	107	----	----	----	97	----	----	----	----	----	----	----	108	----	----	----	----	----	----	----	----
ICSAB3	90	88	97	97	97	98	97	98	107	101	100	111	98	100	96	102	109	97	101	113	108	117	104	104	106	108	102	101	99
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	93	95	93	98	100	101	104	99	100	99	98	98	101	100	98	98	101	101	104	103	101	98	99	100	100	101	99	98	92
CCB10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

QC limit of each parameter are listed in a table attached next to all the ICP check forms
* : Out of QC Limit

SDG : 06G039 UNIT : UG/L SUMMARY of CALIBRATION BLANKS : I98G30 (WATER) DATE : 07/31/06 INST : EMAXTI98

ANALYTE	Li	Be	B	Na	Mg	Al	K	Ca	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	As	Se	Sr	Mo	Ag	Cd	Sn	Sb	Ba	Tl	Pb	U
BLNK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S0	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S3 10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S4 50	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5 100	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICB	.201	.081	.629	-.976	-14.5	-5.39	.918	.129	2.09	.089	.059	.055	1.87	.047	.043	.040	.051	.068	.125	-.005	-.176	.032	.025	.110	.353	.016	.074	.039	.051
MRL1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MRL2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MRL3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA	.167	.014	2.72	----	----	----	----	----	----	.061	.454	2.66	----	.782	.734	2.15	3.37	.139	.057	3.16	----	.065	.635	.227	.310	.791	.034	.379	.010
ICSAB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB1	.012	.020	-.435	-4.58	-15.6	-10.5	4.90	-7.85	-.193	.053	.030	-.061	-7.29	-.014	-.134	-.019	-.006	.038	.015	-.014	-.142	-.002	.025	.063	.188	-.007	.022	-.001	.009
IDL-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IDL-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IDL-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IDL-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IDL-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IDL-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IDL-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB2	.072	.016	-.648	-14.4	-20.7	-9.66	1.46	-7.95	-.331	.060	.009	-.027	-10.3	-.003	-.128	-.039	-.008	.064	.039	-.009	-.272	.006	.034	.059	.208	.005	.020	.009	.019
IMG008WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG008WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG008WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-01M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-01S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB3	-.063	.020	2.45	33.9	-12.6	-9.71	-4.32	55.0	-.542	.067	.001	-.037	-11.2	-.007	-.190	-.010	.015	.052	.034	.222	-.268	.010	-.021	.016	.215	.011	.049	.008	.025
G039-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G039-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G048-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G048-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G048-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G048-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G048-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G048-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G048-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB4	-.053	.033	3.21	5.22	-12.9	-7.23	-8.38	-1.55	-.650	.079	-.018	.037	-12.4	.022	-.231	.029	.037	.038	.019	.288	-.245	.033	-.006	.054	.241	.037	.055	.035	.049
ICSA2	.099	.004	3.57	----	----	----	----	----	----	.097	.470	2.88	----	.858	.573	1.88	3.82	.160	.044	3.32	----	.056	.598	-.018	.298	.849	.027	.489	.004
ICSAB2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB5	-.063	.012	1.15	-6.11	-18.1	-10.1	-4.41	-4.04	-.506	.048	-.037	-.062	-5.43	-.012	-.224	-.003	.034	.026	.009	.010	-.138	.002	.021	-.001	.210	-.008	.021	.006	.015
IMG015WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG015WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

IMG015WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G102-14A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G102-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G102-14J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G102-15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G108-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G108-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G108-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB6	-.071	.023	2.95	2.72	-26.9	-9.95	-4.40	-7.54	-.578	.042	-.024	-.042	-11.0	-.006	-.238	-.030	-.023	.026	.020	.026	-.243	.003	-.007	.034	.217	-.002	.046	.005	.019
IMG017WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG017WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG017WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G108-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB7	-.014	.022	1.96	-2.82	-26.1	-9.01	-6.18	-3.46	-.609	.056	-.028	-.032	-9.60	.002	-.235	-.050	.019	.038	.037	.025	-.257	.016	.019	.070	.231	.021	.054	.016	.029
IMG021WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG021WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG021WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G130-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G130-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G130-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G130-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G130-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G130-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G130-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB8	.038	.049	1.89	14.6	-19.4	-6.94	-7.67	1.52	-.461	.075	.012	-.012	-8.19	.027	-.222	.033	.067	.053	.063	.151	-.207	.039	.014	.134	.326	.048	.050	.031	.049
G130-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G018-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G018-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G018-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G018-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G018-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G018-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB9	.024	.030	.622	-18.2	-23.9	-6.61	-11.1	-4.38	-.478	.011	-.017	.011	-6.26	.024	-.223	-.043	.046	.067	.061	.040	-.221	.026	-.000	.078	.276	.031	.044	.027	.044
IMG020SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG020SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IMG020SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA3	.105	.047	1.71	----	----	----	----	----	----	.070	.492	2.87	----	.860	.639	1.83	3.67	.195	.070	3.29	----	.096	.568	.158	.352	.839	.277	.512	.052
ICSAB3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB10	-.058	.129	.157	-3.68	44.1	57.9	-3.49	2.95	.695	.026	-.016	.063	4.53	.121	-.233	-.028	.133	.065	.049	.141	1.07	.131	.091	.174	.366	.133	.158	.113	.118

QC limit of each parameter are listed in a table attached next to all the ICP check forms
* : Out of QC Limit

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Fi	Sa	Dil	ISTD Conc	Action on Failure	Skip	LC	LC	Result
1		Keyword		TUNBEG	Start of TUNE											
2	C:\ICPCHEM\1\METHODS\TN6020.M	Tun6	1301	98G30001	6020tunchk		1.000									
3	C:\ICPCHEM\1\METHODS\TN200_8.M	Tun2	1302	98G30002	2008tunchk		1.000									
4		Keyword		TUNEND	End of TUNE											
5		Keyword		CALBEG	Start of CALIB											
6	C:\ICPCHEM\1\METHODS\EMAX6020.M	CalBlk	1101	98G30003	BLNK		Level 1									
7	C:\ICPCHEM\1\METHODS\EMAX6020.M	CalBlk	1102	98G30004	S0		Level 1									
8	C:\ICPCHEM\1\METHODS\EMAX6020.M	CalStd	1105	98G30005	S3 10		Level 4									
9	C:\ICPCHEM\1\METHODS\EMAX6020.M	CalStd	1106	98G30006	S4 50		Level 5									
10	C:\ICPCHEM\1\METHODS\EMAX6020.M	CalStd	1107	98G30007	S5 100		Level 6									
11	C:\ICPCHEM\1\METHODS\EMAX6020.M	ICV1	1203	98G30008	ICV		1.000									
12	C:\ICPCHEM\1\METHODS\EMAX6020.M	ICB	1101	98G30009	ICB		1.000									
13	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	1205	98G30010	MRL1		1.000									
14	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	1206	98G30011	MRL2		1.000									
15	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	1207	98G30012	MRL3		1.000									
16	C:\ICPCHEM\1\METHODS\EMAX6020.M	ICS-A	1201	98G30013	ICSA		1.000									
17	C:\ICPCHEM\1\METHODS\EMAX6020.M	ICS-AB	1202	98G30014	ICSAB		1.000									
18	C:\ICPCHEM\1\METHODS\EMAX6020.M	Blank	1101	98G30015	BLANK		1.000									
19	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCV	1305	98G30016	CCV1		1.000									
20	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCB	1102	98G30017	CCB1		1.000									
21		Keyword		CALEND	End of CALIB											
22		Keyword		SMPLBEG	Start of SMPL											
23	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	2101	98G30018	IDL-01		1.000									
24	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	2102	98G30019	IDL-02		1.000									
25	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	2103	98G30020	IDL-03		1.000									
26	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	2104	98G30021	IDL-04		1.000									
27	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	2105	98G30022	IDL-05		1.000									
28	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	2106	98G30023	IDL-06		1.000									
29	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	2107	98G30024	IDL-07		1.000									
30	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCV	1305	98G30025	CCV2		1.000									
31	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCB	1102	98G30026	CCB2		1.000									
32	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3101	98G30027	IMG008WB		1.000									
33	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3102	98G30028	IMG008WL		1.000									
34	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3103	98G30029	IMG008WC		1.000									
35	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3104	98G30030	G039-01A		1.000									
36	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3105	98G30031	G039-01M		1.000									
37	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3106	98G30032	G039-01S		1.000									
38	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3107	98G30033	G039-01		1.000									
39	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3108	98G30034	G039-01J		5.000									
40	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3109	98G30035	G039-04		1.000									
41	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3110	98G30036	G039-05		1.000									
42	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCV	1305	98G30037	CCV3		1.000									
43	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCB	1102	98G30038	CCB3		1.000									
44	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3111	98G30039	G039-06		1.000									
45	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3112	98G30040	G039-07		1.000									
46	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3201	98G30041	G039-08		1.000									

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	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Fi	Sa	Dil	ISTD Conc	Action on Failure	Skip	LC	LC	Result
47	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3202	98G30042	G048-01		1.000									
48	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3203	98G30043	G048-04		1.000									
49	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3204	98G30044	G048-05		1.000									
50	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3205	98G30045	G048-06		1.000									
51	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3206	98G30046	G048-07		1.000									
52	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3207	98G30047	G048-08		1.000									
53	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3208	98G30048	G048-09		1.000									
54	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCV	1305	98G30049	CCV4		1.000									
55	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCB	1102	98G30050	CCB4		1.000									
56	C:\ICPCHEM\1\METHODS\EMAX6020.M	ICS-A	1201	98G30051	ICSA2		1.000									
57	C:\ICPCHEM\1\METHODS\EMAX6020.M	ICS-AB	1202	98G30052	ICSAB2		1.000									
58	C:\ICPCHEM\1\METHODS\EMAX6020.M	Blank	1101	98G30053	BLANK		1.000									
59	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCV	1305	98G30054	CCV5		1.000									
60	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCB	1102	98G30055	CCB5		1.000									
61	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3209	98G30056	IMG015WB		1.000									
62	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3210	98G30057	IMG015WL		1.000									
63	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3211	98G30058	IMG015WC		1.000									
64	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3212	98G30059	G102-14A	DISSOLVE	1.000									
65	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3301	98G30060	G102-14	DISSOLVE	1.000									
66	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3302	98G30061	G102-14J	DISSOLVE	5.000									
67	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3303	98G30062	G102-15	DISSOLVE	1.000									
68	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3304	98G30063	G108-01A	DISSOLVE	1.000									
69	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3305	98G30064	G108-01	DISSOLVE	1.000									
70	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3306	98G30065	G108-01J	DISSOLVE	5.000									
71	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCV	1305	98G30066	CCV6		1.000									
72	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCB	1102	98G30067	CCB6		1.000									
73	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3307	98G30068	IMG017WB		1.000									
74	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3308	98G30069	IMG017WL		1.000									
75	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3309	98G30070	IMG017WC		1.000									
76	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3310	98G30071	G108-02	TOTAL	1.000									
77	C:\ICPCHEM\1\METHODS\EMAX6020.M	Blank	1101	98G30072	BLANK		1.000									
78	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCV	1305	98G30073	CCV7		1.000									
79	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCB	1102	98G30074	CCB7		1.000									
80	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3311	98G30075	IMG021WB		1.000									
81	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3312	98G30076	IMG021WL		1.000									
82	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3401	98G30077	IMG021WC		1.000									
83	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3402	98G30078	G130-05		1.000									
84	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3403	98G30079	G130-01A		1.000									
85	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3404	98G30080	G130-01		1.000									
86	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3405	98G30081	G130-01J		5.000									
87	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3406	98G30082	G130-02		1.000									
88	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3407	98G30083	G130-03		1.000									
89	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3408	98G30084	G130-04		1.000									
90	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCV	1305	98G30085	CCV8		1.000									
91	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCB	1102	98G30086	CCB8		1.000									
92	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3409	98G30087	G130-06		1.000									

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	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Fi	Sa	Dil	ISTD Conc	Action on Failure	Skip	LC	LC	Result
93	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3410	98G30088	G018-01A		1.000									
94	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3411	98G30089	G018-01		1.000									
95	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3412	98G30090	G018-01J		5.000									
96	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3501	98G30091	G018-04		1.000									
97	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3502	98G30092	G018-10		1.000									
98	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3503	98G30093	G018-12		1.000									
99	C:\ICPCHEM\1\METHODS\EMAX6020.M	Blank	1101	98G30094	BLANK		1.000									
100	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCV	1305	98G30095	CCV9		1.000									
101	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCB	1102	98G30096	CCB9		1.000									
102	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3504	98G30097	IMG020SB		1.000									
103	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3505	98G30098	IMG020SL		1.000									
104	C:\ICPCHEM\1\METHODS\EMAX6020.M	Sample	3506	98G30099	IMG020SC		1.000									
105	C:\ICPCHEM\1\METHODS\EMAX6020.M	ICS-A	1201	98G30100	ICSA3		1.000									
106	C:\ICPCHEM\1\METHODS\EMAX6020.M	ICS-AB	1202	98G30101	ICSAB3		1.000									
107	C:\ICPCHEM\1\METHODS\EMAX6020.M	Blank	1101	98G30102	BLANK		1.000									
108	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCV	1305	98G30103	CCV10		1.000									
109	C:\ICPCHEM\1\METHODS\EMAX6020.M	CCB	1102	98G30104	CCB10		1.000									
110		Keyword		StandBy												
111		Keyword		SMPLEND	End of SMPL											
112		Keyword		End	End of Sequence											
113		Keyword		CCVBEG	Start of CCV											
114		Keyword		CCVEND	End of CCV											
115		Keyword		BLKBEG	Start of BLANK											
116		Keyword		BLKEND	End of BLANK											
117		Keyword		ERRBEG	Start of ERRTERM											
118		Keyword		ERREND	End of ERRTERM											

DIGESTION LOG FOR ICP-MS METALS

SOP ☐ EMAX-3005 Rev. No.4 ☐ EMAX-3010 Rev. No. 3 ☐ EMAX-3050 Rev. No. 3 ☐ EMAX-CLP-TAL ☑ EMAX-200.8 Rev. 0 ☑ EMAX-6020 Rev. 2 ☐ Book # EIM-007

Matrix: WATER Start Date: 7-13-06 Time: 10:00 Temp: 85 °C Ending Date: 7-13-06 Time: 12:00 Temp.: 85 °C

Sample Prep ID	Lab Sample ID	Matrix Description: Color	Texture / Clarity	Artifacts	Sample Amount (g | ml)	pH	Extract Volume (ml)	Digestate Description: Color	Clarity
01	IMG008-WB				50	–	50		
02	-WL				50	–	50		
03	-WC				50	–	50		
04	G039-01				50	<2	50		
05	-01M				50		50		
06	-01S				50		50		
07	-04				50		50		
08	-05				50		50		
09	-06				50		50		
10	-07				50		50		
11	-08				50		50		
12	G047-01				50		50		
13	-01M				50		50		
14	-01S				50		50		
15	-02				50		50		
16	-03				50		50		
17	-04				50		50		
18	-05				50		50		
19	-06				50		50		
20	-07				50		50		
21	G048-01				50		50		
22	-04				50		50		
23	-05				50		50		
24	-06				50		50		
25	-07				50		50		
26	-08				50		50		
27	-09				50		50		

Standards	ID	Amount Added (ml)
LCS -1	SM6A-02-03	0.25
LCS -2	↓ -02-04	0.25
LCS -3	N/A	
MS		

Reagent	Lot# / ID	Amount Added (ml)
HNO_3	SW1A-03-152	0.5
HCl	SW1A-03-317	0.25
H_2O_2	N/A	
HNO3 (1:1)	N/A	

Digestate Location	ICP D3
Extract Location	

Legend:

Texture	Cs = Coarse	Md = Medium	Fn = Fine
Clarity	Cr = Clear	Cy = Cloudy	Td = Turbid
Artifacts	Rk = rocks	Sl = Shale	Vg=Vegetation
Color	Bu = blue	Bk = Black	Bn = Brown
	Gn = Green	Og = Orange	Rd = Red
	Yw = Yellow	Cl = Colorless	

Comments:

☐ Soil Samples - diluted 1-ml of digestate to 10-ml reagent water (DF=10X)

Prepared By: MC Standard Added By: MC

Witnessed By: JEE Extracts Rcvd. By: JEE 7/13/06

Checked By: JEE

Date Disposed: Disposed by:

BATCH: IMG008-W

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

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Six (6) water samples were received on 07/10/06 for Dissolved Mercury analysis by Method 7470A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", 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. Serial Dilution/Post-Analytical Spike

Sample G039-08 was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

5. Matrix Spike/Matrix Spike Duplicate

Sample G039-08 was spiked. All recoveries were within QC limit.

6. Sample Analysis

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

LAB CHRONICLE
DISSOLVED MERCURY BY COLD VAPOR

Client : ARCADIS
Project : OMEGA CHEMICAL

SDG NO. : 06G039
Instrument ID : TI047

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	HGG017WB	1	NA	07/14/0611:00	07/13/0614:00	M47G015010	M47G015008	HGG017W	Method Blank
LCS1W	HGG017WL	1	NA	07/14/0611:02	07/13/0614:00	M47G015011	M47G015008	HGG017W	Lab Control Sample (LCS)
LCD1W	HGG017WC	1	NA	07/14/0611:04	07/13/0614:00	M47G015012	M47G015008	HGG017W	LCS Duplicate
OC2-PMW18C-0-24AS	G039-08A	1	NA	07/14/0611:06	07/13/0614:00	M47G015013	M47G015008	HGG017W	Analytical Spike Sample
OC2-PMW18C-0-24	G039-08	1	NA	07/14/0611:08	07/13/0614:00	M47G015014	M47G015008	HGG017W	Field Sample
OC2-PMW18C-0-24DL	G039-08J	5	NA	07/14/0611:10	07/13/0614:00	M47G015015	M47G015008	HGG017W	Diluted Sample
OC2-PMW18C-0-24MS	G039-08M	1	NA	07/14/0611:13	07/13/0614:00	M47G015016	M47G015008	HGG017W	Matrix Spike Sample (MS)
OC2-PMW18C-0-24MSD	G039-08S	1	NA	07/14/0611:15	07/13/0614:00	M47G015017	M47G015008	HGG017W	MS Duplicate (MSD)
OC2-PMW15-0-17	G039-01	1	NA	07/14/0611:17	07/13/0614:00	M47G015018	M47G015008	HGG017W	Field Sample
OC2-PMW15-5-21	G039-04	1	NA	07/14/0611:19	07/13/0614:00	M47G015019	M47G015008	HGG017W	Field Sample
OC2-PMW15-1-20	G039-05	1	NA	07/14/0611:25	07/13/0614:00	M47G015022	M47G015020	HGG017W	Field Sample
OC2-PMW18A-0-22	G039-06	1	NA	07/14/0611:27	07/13/0614:00	M47G015023	M47G015020	HGG017W	Field Sample
OC2-PMW18B-0-23	G039-07	1	NA	07/14/0611:29	07/13/0614:00	M47G015024	M47G015020	HGG017W	Field Sample

FN - Filename
% Moist - Percent Moisture

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G039

Matrix : WATER
Instrument ID : TI047

SAMPLE ID	EMAX SAMPLE ID	RESULTS (ug/L)	DLF	MOIST	RL (ug/L)	MDL (ug/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	HGG017WB	ND	1	NA	.5	.1	07/14/0611:00	07/13/0614:00	M47G015010	M47G015008	HGG017W	NA	07/13/06
LCS1W	HGG017WL	5.11	1	NA	.5	.1	07/14/0611:02	07/13/0614:00	M47G015011	M47G015008	HGG017W	NA	07/13/06
LCD1W	HGG017WC	5.12	1	NA	.5	.1	07/14/0611:04	07/13/0614:00	M47G015012	M47G015008	HGG017W	NA	07/13/06
OC2-PMW18C-0-24AS	G039-08A	2.08	1	NA	.5	.1	07/14/0611:06	07/13/0614:00	M47G015013	M47G015008	HGG017W	07/10/06	07/10/06
OC2-PMW18C-0-24	G039-08	ND	1	NA	.5	.1	07/14/0611:08	07/13/0614:00	M47G015014	M47G015008	HGG017W	07/10/06	07/10/06
OC2-PMW18C-0-24DL	G039-08J	ND	5	NA	2.5	.5	07/14/0611:10	07/13/0614:00	M47G015015	M47G015008	HGG017W	07/10/06	07/10/06
OC2-PMW18C-0-24MS	G039-08M	5.27	1	NA	.5	.1	07/14/0611:13	07/13/0614:00	M47G015016	M47G015008	HGG017W	07/10/06	07/10/06
OC2-PMW18C-0-24MSD	G039-08S	5.29	1	NA	.5	.1	07/14/0611:15	07/13/0614:00	M47G015017	M47G015008	HGG017W	07/10/06	07/10/06
OC2-PMW15-0-17	G039-01	ND	1	NA	.5	.1	07/14/0611:17	07/13/0614:00	M47G015018	M47G015008	HGG017W	07/10/06	07/10/06
OC2-PMW15-5-21	G039-04	ND	1	NA	.5	.1	07/14/0611:19	07/13/0614:00	M47G015019	M47G015008	HGG017W	07/10/06	07/10/06
OC2-PMW15-1-20	G039-05	ND	1	NA	.5	.1	07/14/0611:25	07/13/0614:00	M47G015022	M47G015020	HGG017W	07/10/06	07/10/06
OC2-PMW18A-0-22	G039-06	ND	1	NA	.5	.1	07/14/0611:27	07/13/0614:00	M47G015023	M47G015020	HGG017W	07/10/06	07/10/06
OC2-PMW18B-0-23	G039-07	ND	1	NA	.5	.1	07/14/0611:29	07/13/0614:00	M47G015024	M47G015020	HGG017W	07/10/06	07/10/06

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
SDG NO.: 06G039
METHOD: METHOD 7470A

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1W				
CONTROL NO.:	HGG017WB	HGG017WL	HGG017WC		
LAB FILE ID:	M47G015010	M47G015011	M47G015012		
DATIME EXTRCTD:	07/13/0614:00	07/13/0614:00	07/13/0614:00	DATE COLLECTED:	NA
DATIME ANALYZD:	07/14/0611:00	07/14/0611:02	07/14/0611:04	DATE RECEIVED:	07/13/06
PREP. BATCH:	HGG017W	HGG017W	HGG017W		
CALIB. REF:	M47G015008	M47G015008	M47G015008		

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 %
Dissolved Mercury	ND	5	5.11	102	5	5.12	102	0	80-120	20

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EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
SDG NO.: 06G039
METHOD: METHOD 7470A

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	OC2-PMW18C-0-24				
CONTROL NO.:	G039-08	G039-08M	G039-08S		
LAB FILE ID:	M47G015014	M47G015016	M47G015017		
DATIME EXTRCTD:	07/13/0614:00	07/13/0614:00	07/13/0614:00	DATE COLLECTED:	07/10/06
DATIME ANALYZD:	07/14/0611:08	07/14/0611:13	07/14/0611:15	DATE RECEIVED:	07/10/06
PREP. BATCH:	HGG017W	HGG017W	HGG017W		
CALIB. REF:	M47G015008	M47G015008	M47G015008		

ACCESSION:

PARAMETER	SMPL RSLT ug/L	SPIKE AMT ug/L	MS RSLT ug/L	MS % REC	SPIKE AMT ug/L	MSD RSLT ug/L	MSD % REC	RPD %	QC LIMIT %	MAX RPD %
Dissolved Mercury	ND	5	5.27	105	5	5.29	106	0	75-125	20

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EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 7470A

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	5		
SAMPLE ID:	OC2-PMW18C-0-24	OC2-PMW18C-0-24DL		
EMAX SAMP ID:	G039-08	G039-08J		
LAB FILE ID:	M47G015014	M47G015015		
DATE EXTRACTED:	07/13/0614:00	07/13/0614:00	DATE COLLECTED:	07/10/06
DATE ANALYZED:	07/14/0611:08	07/14/0611:10	DATE RECEIVED:	07/10/06
PREP. BATCH:	HGG017W	HGG017W		
CALIB. REF:	M47G015008	M47G015008		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Dissolved Mercury	ND	ND	0	10

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
SDG NO.: 06G039
METHOD: METHOD 7470A

MATRIX:	WATER		% MOISTURE:	NA
DILTN FACTR:	1	1		
SAMPLE ID:	OC2-PMW18C-0-24			
CONTROL NO.:	G039-08	G039-08A		
LAB FILE ID:	M47G015014	M47G015013		
DATIME EXTRCTD:	07/13/0614:00	07/13/0614:00	DATE COLLECTED:	07/10/06
DATIME ANALYZD:	07/14/0611:08	07/14/0611:06	DATE RECEIVED:	07/10/06
PREP. BATCH:	HGG017W	HGG017W		
CALIB. REF:	M47G015008	M47G015008		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Dissolved Mercury	ND	2	2.08	104	85-115

7002

ANALYSIS RUN LOG
for
MERCURY

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

Start Date: 7/14/06 **Start Time:** 10:37

End Date: 7/14/06 **End Time:** 13:05

Book #: A47-47

Instrument No.: 47

Analytical Sequence/Batch: M47G015

Method File: Hg

Comments:

QC OK

G051-02 MS/MSD were overrange

G427-04 MS/MSD were out of QC limit (STLC)

SOP #	Rev. #
☑ EMAX-7470	3
☐ EMAX-7471	3
☐ EMAX-CLP-245.5	
☐ EMAX-CLP-245.1	
☐ EMAX-	

STANDARDS ID	
S1	BLACK
S2	SM3B-06-889
S3	↓
S4	↓
S5	↓
S6	↓
ICV	SM3B-06-890
CCV	↓
LCS	↓

Analyzed By: HT

Date: 7/14/06

"M47G015"

EMAXlfid	EMAXlsid	conc	Raw_resp	rsd/rf	adatetime	DF
M47G015000	STD1REP1	0	6806		07/14/0610:37	1
M47G015001	STD2REP1	.2	25525		07/14/0610:39	1
M47G015002	STD3REP1	1	96206		07/14/0610:42	1
M47G015003	STD4REP1	2	183353		07/14/0610:44	1
M47G015004	STD5REP1	5	449758		07/14/0610:46	1
M47G015005	STD6REP1	10	874232		07/14/0610:49	1
M47G015006	ICV	2.01	183452	0	07/14/0610:52	1
M47G015007	ICB	-.036	6129	0	07/14/0610:54	1
M47G015008	CCV1	5.11	453104	0	07/14/0610:56	1
M47G015009	CCB1	-.047	5196	0	07/14/0610:58	1
M47G015010	HGG017WB	-.042	5596	0	07/14/0611:00	1
M47G015011	HGG017WL	5.11	453374	0	07/14/0611:02	1
M47G015012	HGG017WC	5.12	453651	0	07/14/0611:04	1
M47G015013	G039-08A	2.08	189555	0	07/14/0611:06	1
M47G015014	G039-08	-.1	624	0	07/14/0611:08	1
M47G015015	G039-08J	-.042	5609	0	07/14/0611:10	5
M47G015016	G039-08M	5.27	466996	0	07/14/0611:13	1
M47G015017	G039-08S	5.29	468835	0	07/14/0611:15	1
M47G015018	G039-01	-.046	5316	0	07/14/0611:17	1
M47G015019	G039-04	-.04	5779	0	07/14/0611:19	1
M47G015020	CCV2	5.14	455847	0	07/14/0611:21	1
M47G015021	CCB2	-.071	3125	0	07/14/0611:23	1
M47G015022	G039-05	-.048	5135	0	07/14/0611:25	1
M47G015023	G039-06	-.041	5705	0	07/14/0611:27	1
M47G015024	G039-07	-.022	7338	0	07/14/0611:29	1
M47G015025	G027-01	-.035	6264	0	07/14/0611:32	1
M47G015026	G027-03	-.008	8533	0	07/14/0611:34	1
M47G015027	G027-05	-.041	5689	0	07/14/0611:36	1
M47G015028	G027-07	-.057	4357	0	07/14/0611:38	1
M47G015029	G027-08	-.029	6779	0	07/14/0611:41	1
M47G015030	G028-01	.132	20729	0	07/14/0611:43	1
M47G015031	G042-01	.196	26310	0	07/14/0611:45	1
M47G015032	CCV3	5.17	458366	0	07/14/0611:47	1
M47G015033	CCB3	-.05	4960	0	07/14/0611:49	1
M47G015034	G048-01	-.031	6571	0	07/14/0611:51	1
M47G015035	G048-04	-.063	3796	0	07/14/0611:53	1
M47G015036	G048-05	-.06	4090	0	07/14/0611:55	1
M47G015037	G048-06	-.032	6488	0	07/14/0611:57	1
M47G015038	G048-07	-.055	4488	0	07/14/0612:00	1
M47G015039	G048-08	-.049	5049	0	07/14/0612:02	1
M47G015040	G048-09	-.014	8046	0	07/14/0612:04	1
M47G015041	HGG018WB	-.029	6730	0	07/14/0612:06	1
M47G015042	HGG018WL	5.22	462182	0	07/14/0612:08	1
M47G015043	HGG018WC	5.17	458548	0	07/14/0612:10	1
M47G015044	CCV4	5.19	460117	0	07/14/0612:12	1
M47G015045	CCB4	-.054	4556	0	07/14/0612:14	1
M47G015046	TXG003SB	.03	11859	0	07/14/0612:16	1
M47G015047	G051-02A	7.09	625191	0	07/14/0612:18	1
M47G015048	G051-02	5.18	458758	0	07/14/0612:21	1
M47G015049	G051-02J	.99	95269	0	07/14/0612:24	5
M47G015050	G051-02M	10.9	952333	0	07/14/0612:26	1
M47G015051	G051-02S	10.9	958932	0	07/14/0612:29	1
M47G015052	G051-04	6.44	568643	0	07/14/0612:31	1
M47G015053	G051-06	7.38	650162	0	07/14/0612:33	1
M47G015054	G051-08	8.27	727607	0	07/14/0612:35	1
M47G015055	WTG001SB	-.063	3768	0	07/14/0612:37	1
M47G015056	CCV5	5.22	462851	0	07/14/0612:40	1
M47G015057	CCB5	-.067	3460	0	07/14/0612:42	1
M47G015058	G427-01	-.012	8237	0	07/14/0612:44	1
M47G015059	G427-02	-.051	4852	0	07/14/0612:46	1
M47G015060	G427-03	-.054	4595	0	07/14/0612:48	1
M47G015061	G427-04A	2.12	193499	0	07/14/0612:50	1
M47G015062	G427-04	-.038	6009	0	07/14/0612:52	1
M47G015063	G427-04J	-.079	2416	0	07/14/0612:55	5
M47G015064	G427-04M	.151	22360	0	07/14/0612:57	1
M47G015065	G427-04S	1.62	149837	0	07/14/0612:59	1
M47G015066	G427-05	-.012	8264	0	07/14/0613:01	1
M47G015067	CCV6	5.21	461841	0	07/14/0613:03	1
M47G015068	CCB6	-.047	5206	0	07/14/0613:05	1
**********	**********	**********	**********	**********	**********	***
EMAXlfid	EMAXlsid	Xint	Yint	rrf	adatetime	DF
M47G015000	BLANK	-.1070688	9295.605	.9999479	07/14/0613:05	1

RunProt: HGCOM

RunFold: M176015 Seq: 6 Batch:

Prnt: R/T On Pump: On

Rev: 4.2 10:51:04 14 Jul 2006 Xmit: Off Gas: 0.35 LPM

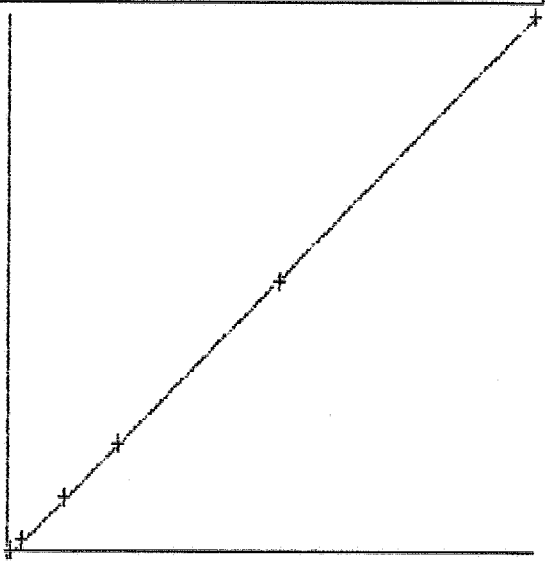
State: Idle User: HT A/S: On

CALIBRATION: Line proto: HGCOM

	Hg Conc.	Calc.	Dev.	Accepted ->linear
S1	.000	-.028	-.028	Quadratic
S2	.200	.187	-.013	Wtdlinear
S3	1.00	1.00	.001	C
S4	2.00	2.00	.005	Accept o
S5	5.00	5.07	.073	n
S6	10.0	9.96	-.038	c

A .0000000 r .999948

B 1.15170e-5 C -1.06741e-1



Relative Absorbance

	Mean		
S1	6006	6 SD	6006
S2	25525	0 %RSD	25525
S3	96206	0 %RSD	96206
S4	183353	0 %RSD	183353
S5	449758	0 %RSD	449758
S6	874232	0 %RSD	874232

New cal coefficients stored

DIGESTION LOG FOR MERCURY

SOP ☑ EMAX-7470 Rev. No.3 ☐ EMAX-7471 Rev. No.3 ☐ EMAX-CLP-245.5 ☐ EMAX-CLP-245.1 ☐

Matrix: Water Start Date: 7/13/06 Time: 14:00 Ending Date: 7/13/06 Time: 16:30 Book # E47-047

BATCH: HG017W

Sample Prep ID	Lab Sample ID	Matrix Description Color	Matrix Description Texture / Clarity	Matrix Description Artifacts	Sample Amount (g / ml)	Dry Weight	pH	Extract Volume (ml)	Matrix Description Color	Matrix Description Clarity
01	S-0	Cr	Cr	N/A	0	N/A	N/A	150	Cr	Cr
02	0.2				0.2					
03	1				1					
04	2				2					
05	5				5					
06	10				10					
07	ICV				2					
08	ICB				0					
09	CCV				5					
10	CCB				0					
11	HGG017WB				100					
12	WL									
13	WC									
14 *	G027-01						<2			
15	03						<2			
16	05						<2			
17	07						<2			
18	08						<2			
19	G028-01						<2			
20 *	G039-01						<2			
21	04						<2			
22	05						<2			
23	06						<2			
24	07						<2			
25	08						<2			
26	08M						<2			
27	08S						<2			
28	G042-01						<2			

Standards	ID	Conc. (µg/L)	Amount Added (ml)
ICAL SM	3B-06-889	100	0.2,1,2,5,10
ICV SM	3B-06-890		2
CCV/MS			5
LCS			5
Reagent	Lot# / ID		
HNO_3	SW1A-03-318		
HCl	N/A		
H_2SO_4	SW1A-03-303		
$KMnO_4$	SM5B-02-51		
$K_2S_2O_8$		52	
$NH_2OH.HCl$		49	
$SnCl_2$		50	
Temp of Digestion Bath:	95 °C		

Legend

Color			
Bu = blue	Cs = Coarse	Cr = Clear	Rk = rocks
Bk = black	Md = Medium	Cy = Cloudy	Sl = Shale
Bn = Brown	Fn = Fine	Td = Turbid	Vg=Vegetation
Gn = Green			
Og = Orange			
Rd = Red			
Yw = Yellow			

Comments:

Prepared By: NT

Standard Added By: NT Witnessed By: MC

Checked By:

Disposed By: Date Disposed:

EMAX LABORATORIES, INC. 1835 W. 213th St. Torrance, CA 90501

DIGESTION LOG FOR MERCURY

SOP ☑ EMAX-7470 Rev. No.3 ☐ EMAX-7471 Rev. No.3 ☐ EMAX-CLP-245.5 ☐ EMAX-CLP-245.1 ☐

Matrix: Water Start Date: 7/13/06 Time: 14:00 Ending Date: 7/13/06 Time: 16:30 Book # E47-047

BATCH: HG0717W

Sample Prep ID	Lab Sample ID	Matrix Description			Sample Amount (g/ml)	Dry Weight	pH	Extract Volume (ml)	Matrix Description	
		Color	Texture / Clarity	Artifacts					Color	Clarity
01 *	G048-01	Cr	Cr	N/A	100	N/A	<2	150	Cr	Cr
02	04						<2			
03	05						<2			
04	06						<2			
05	07						<2			
06	08						<2			
07	09						<2			
08										
09										
10										
11										
12										
13										
14										
15										
16										
17					NT					
18					7/13/06					
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										

Standards	ID	Conc. (µg/L)	Amount Added (ml)
ICAL			
ICV			
CCV/MS			
LCS			
Reagent	Lot# / ID		
HNO_3			
HCl			
H_2SO_4			
$KMnO_4$			
$K_2S_2O_8$			
$NH_2OH.HCl$			
$SnCl_2$			
Temp of Digestion Bath:	°C		
Legend			

SAME AS PAGE 34

Color			
Bu = blue	Cs = Coarse	Cr = Clear	Rk = rocks
Bk = black	Md = Medium	Cy = Cloudy	Sl = Shale
Bn = Brown	Fn = Fine	Td = Turbid	Vg=Vegetation
Gn = Green			
Og = Orange			
Rd = Red			
Yw = Yellow			

Comments:

Prepared By: NT

Standard Added By: NT Witnessed By: MC

Checked By:

Disposed By: Date Disposed:

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

LABORATORY REPORT FOR

ARCADIS

OMEGA CHEMICAL

WET CHEMICAL ANALYSES

SDG#: 06G039

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

METHOD 160.1
TOTAL DISSOLVED SOLIDS

Six (6) water samples were received on 07/10/06 for Total Dissolved Solids analysis by Method 160.1 in accordance with "Method for Chemical Analysis of Water and Wastewater", EPA 600/4-79-020 (1983).

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. Duplicate

No duplicate sample was designated in this SDG.

5. Matrix Spike

No MS sample was designated in this SDG.

6. Sample Analysis

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

METHOD 160.1
TOTAL DISSOLVED SOLIDS

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G039

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	TDG005WB	ND	1	NA	20	5	07/17/0617:00	07/14/0616:00	TDG005-01	NA	TDG005W	NA	07/14/06
LCS1W	TDG005WL	265	1	NA	20	5	07/17/0617:00	07/14/0616:00	TDG005-02	NA	TDG005W	NA	07/14/06
LCD1W	TDG005WC	285	1	NA	20	5	07/17/0617:00	07/14/0616:00	TDG005-03	NA	TDG005W	NA	07/14/06
OC2-PMW15-0-17	G039-01	1090	1	NA	20	5	07/17/0617:00	07/14/0616:00	TDG005-03	NA	TDG005W	07/10/06	07/10/06
OC2-PMW15-5-21	G039-04	1070	1	NA	20	5	07/17/0617:00	07/14/0616:00	TDG005-04	NA	TDG005W	07/10/06	07/10/06
OC2-PMW15-1-20	G039-05	1110	1	NA	20	5	07/17/0617:00	07/14/0616:00	TDG005-05	NA	TDG005W	07/10/06	07/10/06
OC2-PMW18A-0-22	G039-06	1720	1	NA	20	5	07/17/0617:00	07/14/0616:00	TDG005-06	NA	TDG005W	07/10/06	07/10/06
OC2-PMW18B-0-23	G039-07	1810	1	NA	20	5	07/17/0617:00	07/14/0616:00	TDG005-07	NA	TDG005W	07/10/06	07/10/06
OC2-PMW18C-0-24	G039-08	430	1	NA	20	5	07/17/0617:00	07/14/0616:00	TDG005-08	NA	TDG005W	07/10/06	07/10/06

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 160.1
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G039
SAMPLE ID: LCS1W/LCD1W
CONTROL NO.: TDG005WL/C

DATE RECEIVED: 07/14/06
DATE EXTRACTED: 07/14/06 16:00
DATE ANALYZED: 07/17/06 17:00/17:00

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 %
TDS	ND	275	265	96	275	285	104	7	80-120	20

ANALYSIS LOG
for
GRAVIMETRIC

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

Comments:

Book #: AGV-022

Balance ID: ☑ 40706360 ☐ 37030058

Analytical Batch: 06TD6005

SOP #	Rev. #
☑ EMAX-160.1	3
☐ EMAX-160.2	2
☐ EMAX-160.3	1
☐ EMAX-160.4	0
☐ EMAX-160.5	0
☐ EMAX-	

STANDARDS ID	CONC. (mg/L)
LCS SW7A-07-036	275 mg/L

Analyzed By: EH

Date: 7/17/06

EMAX LABORATORIES, INC.

GRAVIMETRIC CALCULATION

Analytical Batch: 06TDG005 | Start Date/Time: 07/14/06 16:00 | Temp IN(°C):

Balance ID: 40706360 | End Date/Time: 07/17/06 17:00 | Temp Out(°C):

DATA FILE ID	Sample ID	Sample Amount (ml)	Dish (g)	Dry Weight + Dish (g)	SOLIDS (mg)	RESULT (mg/L)	NOTES
06TDG005 01	TDG005WB	100	64.4858	64.4858		ND	
06TDG005 02	TDG005WL	20	13.2061	13.2114	5.3000	265	96
06TDG005 03	TDG005WC	20	13.3656	13.3713	5.7000	285	104
06TDG005 04	G039-01	20	13.1552	13.1771	21.9000	1090	
06TDG005 05	G039-04	20	13.2633	13.2846	21.3000	1070	
06TDG005 06	G039-05	20	13.2703	13.2926	22.3000	1110	
06TDG005 07	G039-06	20	13.2849	13.3194	34.5000	1720	
06TDG005 08	G039-07	20	13.2977	13.3339	36.2000	1810	
06TDG005 09	G039-08	20	13.2484	13.257	8.6000	430	
06TDG005 10	G048-01	20	13.3418	13.4012	59.4000	2970	
06TDG005 11	G048-04	20	13.2178	13.2401	22.3000	1110	
06TDG005 12	G048-05	20	13.105	13.1234	18.4000	920	
06TDG005 13	G048-06	20	13.3096	13.3302	20.6000	1030	
06TDG005 14	G048-07	20	13.2104	13.2313	20.9000	1040	
06TDG005 15	G048-08	20	13.2366	13.2553	18.7000	935	
06TDG005 16	G048-09	20	13.261	13.2779	16.9000	845	
06TDG005 17	G048-09D	20	13.09	13.1065	16.5000	825	

LCS Concentration: 275 mg/L | MDL(mg/L): 5 | Initial Reading by: FH

SOP: EMAX160.1 Rev. 3 | RL (mg/L): 10 | Final Reading by: FH

COMMENTS:

Reviewed by: dlu

GRAVIMETRIC ANALYSES
RAW DATA

06TDG005.xls

EMAX LABORATORIES, INC.

Analytical Batch: 06TDG005 Instrument ID: 40706360 Oven Temp IN (°C): Oven Temp OUT (°C): SOP: EMAX160.1 Rev.

DATA FILE ID	Sample ID	Sample Amount (ml)	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 2nd & 3rd Dry Wt. Rdg. (<0.5mg)
06TDG005 01	TDG005WB	100	B	64.4858	07/14/06	16:00	64.4861	07/17/06	14:48	64.4858	07/17/06	16:48	64.4858	07/17/06	17:00	0.0
06TDG005 02	TDG005WL	20	1	13.2061	07/14/06	16:00	13.2115	07/17/06	14:49	13.2114	07/17/06	16:48	13.2114	07/17/06	17:00	0.0
06TDG005 03	TDG005WC	20	2	13.3656	07/14/06	16:00	13.3716	07/17/06	14:49	13.3713	07/17/06	16:48	13.3713	07/17/06	17:00	0.0
06TDG005 04	G039-01	20	3	13.1552	07/14/06	16:01	13.1774	07/17/06	14:49	13.1771	07/17/06	16:48	13.1771	07/17/06	17:00	0.0
06TDG005 05	G039-04	20	4	13.2633	07/14/06	16:01	13.2849	07/17/06	14:49	13.2846	07/17/06	16:49	13.2846	07/17/06	17:00	0.0
06TDG005 06	G039-05	20	5	13.2703	07/14/06	16:01	13.2928	07/17/06	14:49	13.2926	07/17/06	16:49	13.2926	07/17/06	17:00	0.0
06TDG005 07	G039-06	20	6	13.2849	07/14/06	16:01	13.3195	07/17/06	14:50	13.3194	07/17/06	16:49	13.3194	07/17/06	17:00	0.0
06TDG005 08	G039-07	20	7	13.2977	07/14/06	16:01	13.334	07/17/06	14:50	13.3339	07/17/06	16:49	13.3339	07/17/06	17:00	0.0
06TDG005 09	G039-08	20	8	13.2484	07/14/06	16:02	13.2572	07/17/06	14:50	13.257	07/17/06	16:50	13.257	07/17/06	17:00	0.0
06TDG005 10	G048-01	20	9	13.3418	07/14/06	16:02	13.4014	07/17/06	14:50	13.4012	07/17/06	16:50	13.4012	07/17/06	17:00	0.0
06TDG005 11	G048-04	20	10	13.2178	07/14/06	16:02	13.24	07/17/06	14:51	13.2401	07/17/06	16:50	13.2401	07/17/06	17:00	0.0
06TDG005 12	G048-05	20	11	13.1050	07/14/06	16:02	13.1237	07/17/06	14:51	13.1234	07/17/06	16:50	13.1234	07/17/06	17:00	0.0
06TDG005 13	G048-06	20	12	13.3096	07/14/06	16:03	13.3302	07/17/06	14:51	13.3302	07/17/06	16:51	13.3302	07/17/06	17:00	0.0
06TDG005 14	G048-07	20	13	13.2104	07/14/06	16:03	13.2315	07/17/06	14:51	13.2313	07/17/06	16:51	13.2313	07/17/06	17:00	0.0
06TDG005 15	G048-08	20	14	13.2366	07/14/06	16:03	13.2554	07/17/06	14:52	13.2553	07/17/06	16:51	13.2553	07/17/06	17:00	0.0
06TDG005 16	G048-09	20	15	13.2610	07/14/06	16:03	13.2779	07/17/06	14:52	13.2779	07/17/06	16:51	13.2779	07/17/06	17:00	0.0
06TDG005 17	G048-09D	20	16	13.0900	07/14/06	16:03	13.1067	07/17/06	14:52	13.1065	07/17/06	16:51	13.1065	07/17/06	17:00	0.0

LCS Conc: 275 mg/L MDL : 5 mg/L RL: 10 mg/L

Initial Reading by: KH

Final Reading by: KH

Reviewed by: [illegible]

COMMENTS:

9995

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

METHOD 218.6
HEXAVALENT CHROMIUM

Seven (7) water samples were received on 07/10/06 for Hexavalent Chromium analysis by Method 218.6 in accordance with "Method for Determination of Dissolved Hexavalent Chromium in Drinking Water, Groundwater and Industrial Wastewater Effluent by Ion Chromatography", EPA Rev. 3.0, November, 1991.

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blanks were free of contamination at the Reporting Limit.

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

   All Recoveries were within QC limits.

4. **Duplicate**

   Sample G039-08 was analyzed for Duplicate. % RPD was within QC limit.

5. **Matrix Spike**

   Sample G039-08 was spiked. Recovery was bias high.

6. **Sample Analysis**

   Sample results were analyzed according to the prescribed QC procedures. All QC criteria were met except as aforementioned.

SAMPLE RESULTS

METHOD 218.6
HEXAVALENT CHROMIUM

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G039

Matrix : WATER
Instrument ID : I59

SAMPLE ID	EMAX SAMPLE ID	RESULTS (ug/L)	DLF	MOIST	RL (ug/L)	MDL (ug/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	HCG004WB	ND	1	NA	.2	.1	07/11/0600:29	NA	IG10009	IG10007	HCG004W	NA	NA
LCS1W	HCG004WL	1	1	NA	.2	.1	07/11/0600:40	NA	IG10010	IG10007	HCG004W	NA	NA
OC2-PMW15-0-17	G039-01	15.3	5	NA	1	.5	07/11/0601:01	NA	IG10011	IG10007	HCG004W	07/10/06	07/10/06
OC2-PMW15-5-21	G039-04	14.8	5	NA	1	.5	07/11/0601:11	NA	IG10012	IG10007	HCG004W	07/10/06	07/10/06
OC2-PMW15-1-20	G039-05	14.7	5	NA	1	.5	07/11/0601:21	NA	IG10013	IG10007	HCG004W	07/10/06	07/10/06
OC2-PMW18A-0-22	G039-06	6.49	2	NA	.4	.2	07/11/0602:03	NA	IG10014	IG10007	HCG004W	07/10/06	07/10/06
OC2-PMW18B-0-23	G039-07	7.08	2	NA	.4	.2	07/11/0602:13	NA	IG10015	IG10007	HCG004W	07/10/06	07/10/06
LCS2W	HCG005WL	1.02	1	NA	.2	.1	07/11/0612:03	NA	IG11003	IG11001	HCG005W	NA	NA
OC2-PMW18C-0-24	G039-08	1.03	1	NA	.2	.1	07/11/0612:13	NA	IG11004	IG11001	HCG005W	07/10/06	07/10/06
OC2-PMW18C-0-24DUP	G039-08D	.996	1	NA	.2	.1	07/11/0612:23	NA	IG11005	IG11001	HCG005W	07/10/06	07/10/06
OC2-PMW18C-0-24MS	G039-08M	2.3	1	NA	.2	.1	07/11/0612:34	NA	IG11006	IG11001	HCG005W	07/10/06	07/10/06
MBLK2W	HCG005WQ	ND	1	NA	.2	.1	07/11/0612:44	NA	IG11007	IG11001	HCG005W	NA	NA

QC SUMMARY

EMAX QUALITY CONTROL DATA
LCS ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 218.6

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	1		
SAMPLE ID:	MBLK1W			
LAB SAMP ID:	HCG004WB	HCG004WL		
LAB FILE ID:	IG10009	IG10010		
DATE EXTRACTED:	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	07/11/0600:29	07/11/0600:40	DATE RECEIVED:	NA
PREP. BATCH:	HCG004W	HCG004W		
CALIB. REF:	IG10007	IG10007		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	QC LIMIT (%)
Hexavalent Chromium	ND	1	1	100	90-110

EMAX QUALITY CONTROL DATA
LCS ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 218.6

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MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	1		
SAMPLE ID:	MBLK2W			
LAB SAMP ID:	HCG005WQ	HCG005WL		
LAB FILE ID:	IG11007	IG11003		
DATE EXTRACTED:	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	07/11/0612:44	07/11/0612:03	DATE RECEIVED:	NA
PREP. BATCH:	HCG005W	HCG005W		
CALIB. REF:	IG11001	IG11001		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	QC LIMIT (%)
Hexavalent Chromium	ND	1	1.02	102	90-110

EMAX QUALITY CONTROL DATA
MS ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 218.6

==========

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	1		
SAMPLE ID:	OC2-PMW18C-0-24			
LAB SAMP ID:	G039-08	G039-08M		
LAB FILE ID:	IG11004	IG11006		
DATE EXTRACTED:	NA	NA	DATE COLLECTED:	07/10/06
DATE ANALYZED:	07/11/0612:13	07/11/0612:34	DATE RECEIVED:	07/10/06
PREP. BATCH:	HCG005W	HCG005W		
CALIB. REF:	IG11001	IG11001		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	QC LIMIT (%)
Hexavalent Chromium	1.03	1	2.3	127*	80-120

INITIAL CALIBRATION

IC RESULT FORM CalVersion : CR6.QF1

LFID	LSID	SelCmp	Cr6	DateTime	DF
IG10001	IB	C	ND	07/10/0622:56	1
IG10002	S-0.0	C	ND	07/10/0623:06	1
IG10003	S-0.0	C ✓	ND	07/10/0623:17	1
IG10004	S-0.2	C	0.199	07/10/0623:27	1
IG10005	S-2.0	C	2.041	07/10/0623:37	1
IG10006	S-5.0	C	4.984	07/10/0623:48	1
IG10007	ICV	C	105%	07/10/0623:58	1
IG10008	ICB	C	ND	07/11/0600:09	1
IG10009	HCG004WB	C	ND	07/11/0600:29	1
IG10010	HCG004WL	C	1.003	07/11/0600:40	1
IG10011	G039-01	C	15.311	07/11/0601:01	5
IG10012	G039-04	C	14.837	07/11/0601:11	5
IG10013	G039-05	C	14.694	07/11/0601:21	5
IG10014	G039-06	C	6.491	07/11/0602:03	2
IG10015	G039-07	C	7.075	07/11/0602:13	2
IG10016	G039-08	C	0.984	07/11/0602:24	2
IG10017	G039-08D	C	1.010	07/11/0602:34	2
IG10018	G039-08M	C	3.605	07/11/0602:45	2
IG10019	CCV1	C	105%	07/11/0602:55	1

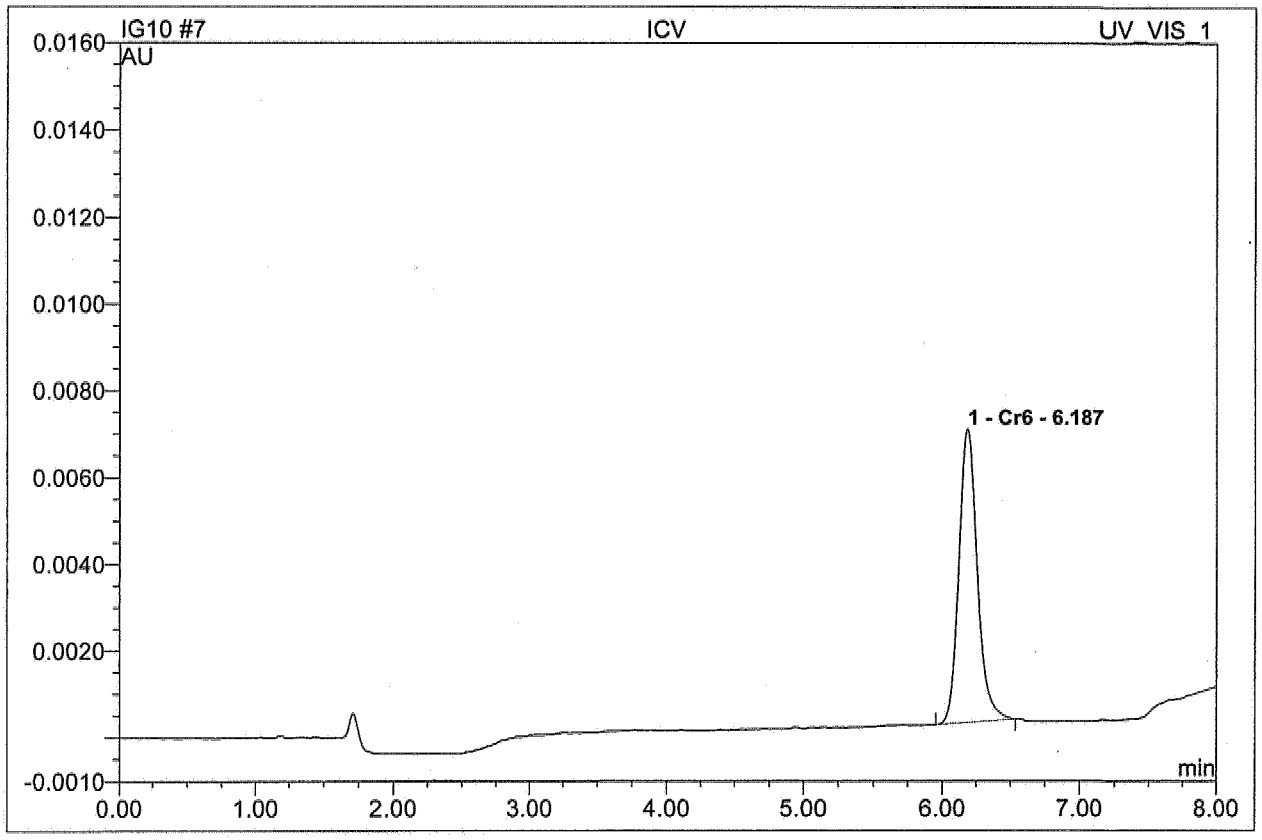
7-21-06

8915

SECOND SOURCE

IG10 007 ICV

Sample Name:	**ICV**	*Injection Volume:*	**1000.0**
Vial Number:	**0**	*Channel:*	**UV_VIS_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**Cr6 Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**IC59G10**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/10/2006 23:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**8.00**	*Sample Amount:*	**1.0000**

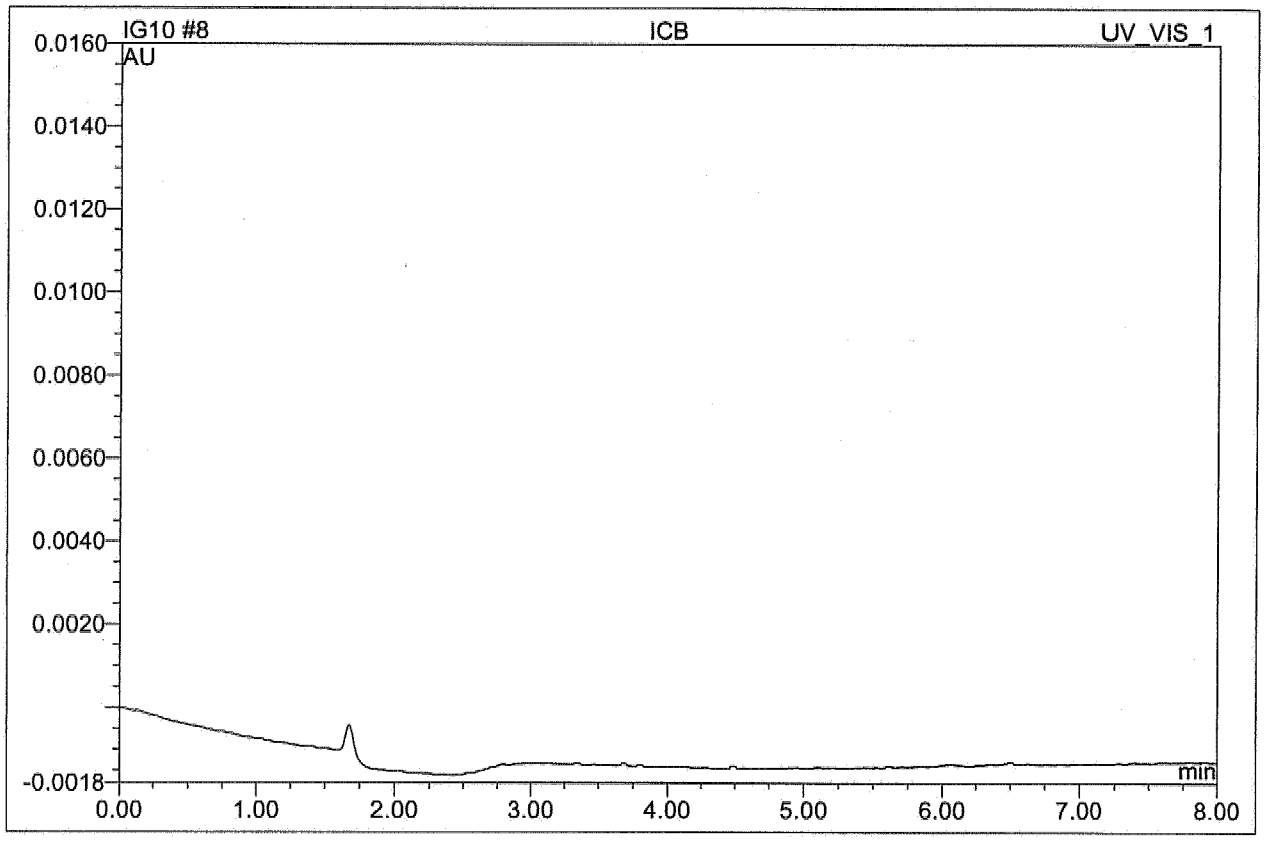


No.	Ret.Time min	Peak Name	Height AU	Area AU*min	Rel.Area %	Amount	Type
1	6.19	Cr6	0.0067800	0.0010637	100.00	3.155	BMB
Total:			0.007	0.001	100.00	3.155	

RW
7-21-06

IG10 008 ICB

Sample Name:	**ICB**	*Injection Volume:*	**1000.0**
Vial Number:	**0**	*Channel:*	**UV_VIS_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**Cr6 Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**IC59G10**	*Dilution Factor:*	**1.0000**
Recording Time:	**7/11/2006 0:09**	*Sample Weight:*	**1.0000**
Run Time (min):	**8.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height AU	Area AU*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

RC
7-21-06

DAILY CALIBRATION

IC RESULT FORM CalVersion : CR6.QF1

LFID	LSID	SelCmp	Cr6	DateTime	DF
IG10001	IB	C	ND	07/10/0622:56	1
IG10002	S-0.0	C	ND	07/10/0623:06	1
IG10003	S-0.0	C	ND	07/10/0623:17	1
IG10004	S-0.2	C	0.199	07/10/0623:27	1
IG10005	S-2.0	C	2.041	07/10/0623:37	1
IG10006	S-5.0	C	4.984	07/10/0623:48	1
IG10007	ICV	C	105%	07/10/0623:58	1
IG10008	ICB	C	ND	07/11/0600:09	1
IG10009	HCG004WB	C	ND	07/11/0600:29	1
IG10010	HCG004WL	C	1.003	07/11/0600:40	1
IG10011	G039-01	C	15.311	07/11/0601:01	5
IG10012	G039-04	C	14.837	07/11/0601:11	5
IG10013	G039-05	C	14.694	07/11/0601:21	5
IG10014	G039-06	C	6.491	07/11/0602:03	2
IG10015	G039-07	C	7.075	07/11/0602:13	2
IG10016	G039-08	C	0.984	07/11/0602:24	2
IG10017	G039-08D	C	1.010	07/11/0602:34	2
IG10018	G039-08M	C	3.605	07/11/0602:45	2
IG10019	CCV1	C	105%	07/11/0602:55	1

IC RESULT FORM CalVersion : CR6.QF1

LFID	LSID	SelCmp	Cr6	DateTime	DF
IG11001	CCV2	C	103%	07/11/0611:42	1
IG11002	HCG005WB	*	0.120	07/11/0611:52	1
IG11003	HCG005WL	C	1.018	07/11/0612:03	1
IG11004	G039-08	C	1.028	07/11/0612:13	1
IG11005	G039-08D	C	0.996	07/11/0612:23	1
IG11006	G039-08M	C	2.298	07/11/0612:34	1
IG11007	HCG005WB	C	ND	07/11/0612:44	1
IG11008	CCV3	C	105%	07/11/0612:55	1

ANALYTICAL LOGS

ANALYSIS RUN LOG FOR IC - HEXAVALENT CHROMIUM

SOP ☑ EMAX-218.6 Revision No. 2 ☐ EMAX-7199 Revision No. 1 ☐ Book # A59-008

Start Date: 7/10/06 Time 22:56 Ending Date: 7/11/06 Time: 02:55

ANALYTICAL BATCH # HCG004W

Sample Prep ID	Data File Name	Lab Sample ID	DF	Matrix S	Matrix W	Notes
* 1	1610001	IB	1		X	
* 2	002	S-0.0				
* 3	003	S-0.0				
* 4	004	S-0.2				
* 5	005	S-2.0				
* 6	006	S-5.0				
* 7	007	ICV				
* 8	008	ICB				
* 9	009	HCG004WB				
* 0	010	↓ MV	✓			
* 1	011	6029-01	5			
* 2	012	04	5			
* 3	013	05	5			
* 4	014	06	2			
* 5	015	07				
* 6	016	08				
* 7	017	08D				
* 8	018	08M	✓			
* 9	✓ 019	CCV1	1		✓	
* 0						
* 1						
* 2						
* 3						
* 4			✓	7/10/06		
* 5						
* 6						
* 7						
* 8						
* 9						
* 0						

Instrument Number	59
INITIAL CALIBRATION REFERENCE	
Method File	IC59610
ICAL ID	SW9B-03-547
ICV ID	↓ 548

STANDARDS

Name	ID	Conc. (µg/L)
ICAL S_1	SW9B-03-547	0.0
S_2	↓	0.2
S_3		2.0
S_4		5.0
S_5	✓	7/10/06

ICV/LCS/MS	SW9B-03-548	3.0
CCV	↓ 549	2.0
LCS/MS	↓ 550	1.0

Comments:

Analyzed By: ✓

This page is checked during the data review process.

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

00223

ANALYSIS RUN LOG FOR IC - HEXAVALENT CHROMIUM

SOP ☐ EMAX-218.6 Revision No. 2 ☐ EMAX-7199 Revision No. 1 ☐ Book # A59-008

Start Date: 7/11/06 Time 11:42 Ending Date: 7/11/06 Time: 12:55

ANALYTICAL BATCH # HCG005W

	Sample Prep ID	Data File Name	Lab Sample ID	DF	Matrix S	Matrix W	Notes
*	1	1611001	CCV2	1		X	
*	2	002	HCG005WB				
*	3	003	↓ WL				
*	4	004	6039-08				
*	5	005	08D				
*	6	006	↓ 08M				
*	7	007	HCG005WQ				
*	8	008	CCV3				
*	9						
*	0						
*	1						
*	2						
*	3						
*	4						
*	5						
*	6						
*	7						
*	8						
*	9						
*	0						
*	1						
*	2						
*	3						
*	4						
*	5						
*	6						
*	7						
*	8						
*	9						
*	0						

~ 7/11/06

Instrument Number	59
INITIAL CALIBRATION REFERENCE	
Method File	IC59910
ICAL ID	SW9B-03-547
ICV ID	↓ 548

STANDARDS

Name		ID	Conc. (µg/L)
ICAL	S_1	SW9B-03-547	0.0
	S_2	↓	0.2
	S_3		2.0
	S_4		5.0
	S_5	~ 7/11/06	

CCV/LCS/MS	SW9B-03-548	3.0
CCV	↓ 551 ~~549~~	2.0
LCS/MS	↓ 552 ~~550~~	1.0

Comments:

Analyzed By: ~

This page is checked during the data review process.

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

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

METHOD 300.0
ANIONS

Six (6) water samples were received on 07/10/06 for Bromide, Chloride, Fluoride, Nitrate-N, Nitrite-N, Orthophosphate-P and Sulfate analyses by method 300.0 in accordance with "Method for Determination of Inorganic Anions by Ion Chromatography", EPA 600/84-017.

1. Holding Time

Analyses 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 limits.

4. Duplicate

Duplicate sample was not designated in this SDG.

5. Matrix Spike

MS sample was not designated in this SDG.

6. Sample Analysis

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

SAMPLE RESULTS

METHOD 300.0
BROMIDE

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G039

Matrix : WATER
Instrument ID : I100

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	ICG006WB	ND	1	NA	1	.1	07/10/0622:02	NA	AG10-14	AG10-12	ICG006W	NA	NA
LCS1W	ICG006WL	4.84	1	NA	1	.1	07/10/0622:18	NA	AG10-15	AG10-12	ICG006W	NA	NA
LCD1W	ICG006WC	4.84	1	NA	1	.1	07/10/0622:35	NA	AG10-16	AG10-12	ICG006W	NA	NA
OC2-PMW15-0-17	G039-01	.948J	1	NA	1	.1	07/11/0601:50	NA	AG10-27	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW15-5-21	G039-04	.945J	1	NA	1	.1	07/11/0602:07	NA	AG10-28	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW15-1-20	G039-05	.888J	1	NA	1	.1	07/11/0602:23	NA	AG10-29	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW18A-0-22	G039-06	.567J	1	NA	1	.1	07/11/0602:40	NA	AG10-30	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW18B-0-23	G039-07	.633J	1	NA	1	.1	07/11/0602:57	NA	AG10-31	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW18C-0-24	G039-08	.368J	1	NA	1	.1	07/11/0603:13	NA	AG10-32	AG10-24	ICG006W	07/10/06	07/10/06

METHOD 300.0
CHLORIDE

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G039

Matrix : WATER
Instrument ID : I100

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	ICG015WB	ND	1	NA	1	.1	07/15/0615:15	NA	AG15-04	AG15-01	ICG015W	NA	NA
LCS1W	ICG015WL	4.74	1	NA	1	.1	07/15/0615:51	NA	AG15-06	AG15-01	ICG015W	NA	NA
LCD1W	ICG015WC	4.75	1	NA	1	.1	07/15/0616:08	NA	AG15-07	AG15-01	ICG015W	NA	NA
OC2-PMW15-0-17	G039-01	78.4	25	NA	25	2.5	07/15/0616:25	NA	AG15-08	AG15-01	ICG015W	07/10/06	07/10/06
OC2-PMW15-5-21	G039-04	78.1	25	NA	25	2.5	07/15/0616:41	NA	AG15-09	AG15-01	ICG015W	07/10/06	07/10/06
OC2-PMW15-1-20	G039-05	78.5	25	NA	25	2.5	07/15/0616:58	NA	AG15-10	AG15-01	ICG015W	07/10/06	07/10/06
OC2-PMW18A-0-22	G039-06	74.5	50	NA	50	5	07/15/0617:14	NA	AG15-11	AG15-01	ICG015W	07/10/06	07/10/06
OC2-PMW18B-0-23	G039-07	98.7J	100	NA	100	10	07/15/0617:31	NA	AG15-12	AG15-01	ICG015W	07/10/06	07/10/06
OC2-PMW18C-0-24	G039-08	76.2	20	NA	20	2	07/15/0617:47	NA	AG15-13	AG15-01	ICG015W	07/10/06	07/10/06

METHOD 300.0
FLUORIDE

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G039

Matrix : WATER
Instrument ID : I100

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	ICG006WB	ND	1	NA	.1	.05	07/10/0622:02	NA	AG10-14	AG10-12	ICG006W	NA	NA
LCS1W	ICG006WL	1.91	1	NA	.1	.05	07/10/0622:18	NA	AG10-15	AG10-12	ICG006W	NA	NA
LCD1W	ICG006WC	1.88	1	NA	.1	.05	07/10/0622:35	NA	AG10-16	AG10-12	ICG006W	NA	NA
OC2-PMW15-0-17	G039-01	.301	1	NA	.1	.05	07/11/0601:50	NA	AG10-27	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW15-5-21	G039-04	.3	1	NA	.1	.05	07/11/0602:07	NA	AG10-28	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW15-1-20	G039-05	.298	1	NA	.1	.05	07/11/0602:23	NA	AG10-29	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW18A-0-22	G039-06	.268	1	NA	.1	.05	07/11/0602:40	NA	AG10-30	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW18B-0-23	G039-07	.271	1	NA	.1	.05	07/11/0602:57	NA	AG10-31	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW18C-0-24	G039-08	.42	1	NA	.1	.05	07/11/0603:13	NA	AG10-32	AG10-24	ICG006W	07/10/06	07/10/06

METHOD 300.0
NITRATE-N

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G039

Matrix : WATER
Instrument ID : I100

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	ICG006WB	ND	1	NA	.1	.05	07/10/0622:02	NA	AG10-14	AG10-12	ICG006W	NA	NA
LCS1W	ICG006WL	1.86	1	NA	.1	.05	07/10/0622:18	NA	AG10-15	AG10-12	ICG006W	NA	NA
LCD1W	ICG006WC	1.86	1	NA	.1	.05	07/10/0622:35	NA	AG10-16	AG10-12	ICG006W	NA	NA
OC2-PMW18C-0-24	G039-08	4.63	1	NA	.1	.05	07/11/0603:13	NA	AG10-32	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW15-0-17	G039-01	9.32	5	NA	.5	.25	07/11/0603:30	NA	AG10-33	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW15-5-21	G039-04	9.29	5	NA	.5	.25	07/11/0603:46	NA	AG10-34	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW15-1-20	G039-05	9.33	5	NA	.5	.25	07/11/0604:03	NA	AG10-35	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW18A-0-22	G039-06	16	5	NA	.5	.25	07/11/0604:53	NA	AG10-38	AG10-36	ICG006W	07/10/06	07/10/06
OC2-PMW18B-0-23	G039-07	15.4	5	NA	.5	.25	07/11/0605:09	NA	AG10-39	AG10-36	ICG006W	07/10/06	07/10/06

METHOD 300.0
NITRITE-N

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G039

Matrix : WATER
Instrument ID : I100

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	ICG006WB	ND	1	NA	.1	.05	07/10/0622:02	NA	AG10-14	AG10-12	ICG006W	NA	NA
LCS1W	ICG006WL	1.9	1	NA	.1	.05	07/10/0622:18	NA	AG10-15	AG10-12	ICG006W	NA	NA
LCD1W	ICG006WC	1.88	1	NA	.1	.05	07/10/0622:35	NA	AG10-16	AG10-12	ICG006W	NA	NA
OC2-PMW15-0-17	G039-01	ND	1	NA	.1	.05	07/11/0601:50	NA	AG10-27	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW15-5-21	G039-04	ND	1	NA	.1	.05	07/11/0602:07	NA	AG10-28	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW15-1-20	G039-05	ND	1	NA	.1	.05	07/11/0602:23	NA	AG10-29	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW18A-0-22	G039-06	ND	1	NA	.1	.05	07/11/0602:40	NA	AG10-30	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW18B-0-23	G039-07	ND	1	NA	.1	.05	07/11/0602:57	NA	AG10-31	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW18C-0-24	G039-08	ND	1	NA	.1	.05	07/11/0603:13	NA	AG10-32	AG10-24	ICG006W	07/10/06	07/10/06

METHOD 300.0
ORTHOPHOSPHATE-P

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G039

Matrix : WATER
Instrument ID : I100

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	ICG006WB	ND	1	NA	1	.25	07/10/0622:02	NA	AG10-14	AG10-12	ICG006W	NA	NA
LCS1W	ICG006WL	4.66	1	NA	1	.25	07/10/0622:18	NA	AG10-15	AG10-12	ICG006W	NA	NA
LCD1W	ICG006WC	4.71	1	NA	1	.25	07/10/0622:35	NA	AG10-16	AG10-12	ICG006W	NA	NA
OC2-PMW15-0-17	G039-01	.306J	1	NA	1	.25	07/11/0601:50	NA	AG10-27	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW15-5-21	G039-04	.281J	1	NA	1	.25	07/11/0602:07	NA	AG10-28	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW15-1-20	G039-05	.282J	1	NA	1	.25	07/11/0602:23	NA	AG10-29	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW18A-0-22	G039-06	ND	1	NA	1	.25	07/11/0602:40	NA	AG10-30	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW18B-0-23	G039-07	ND	1	NA	1	.25	07/11/0602:57	NA	AG10-31	AG10-24	ICG006W	07/10/06	07/10/06
OC2-PMW18C-0-24	G039-08	ND	1	NA	1	.25	07/11/0603:13	NA	AG10-32	AG10-24	ICG006W	07/10/06	07/10/06

METHOD 300.0
SULFATE

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G039

Matrix : WATER
Instrument ID : I100

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	ICG006WB	ND	1	NA	1	.25	07/10/0622:02	NA	AG10-14	AG10-12	ICG006W	NA	NA
LCS1W	ICG006WL	4.62	1	NA	1	.25	07/10/0622:18	NA	AG10-15	AG10-12	ICG006W	NA	NA
LCD1W	ICG006WC	4.63	1	NA	1	.25	07/10/0622:35	NA	AG10-16	AG10-12	ICG006W	NA	NA
OC2-PMW18C-0-24	G039-08	66.3	5	NA	5	1.25	07/11/0605:26	NA	AG10-40	AG10-36	ICG006W	07/10/06	07/10/06
MBLK2W	ICG015WB	ND	1	NA	1	.25	07/15/0615:15	NA	AG15-04	AG15-01	ICG015W	NA	NA
LCS2W	ICG015WL	4.68	1	NA	1	.25	07/15/0615:51	NA	AG15-06	AG15-01	ICG015W	NA	NA
LCD2W	ICG015WC	4.68	1	NA	1	.25	07/15/0616:08	NA	AG15-07	AG15-01	ICG015W	NA	NA
OC2-PMW15-0-17	G039-01	288	25	NA	25	6.25	07/15/0616:25	NA	AG15-08	AG15-01	ICG015W	07/10/06	07/10/06
OC2-PMW15-5-21	G039-04	288	25	NA	25	6.25	07/15/0616:41	NA	AG15-09	AG15-01	ICG015W	07/10/06	07/10/06
OC2-PMW15-1-20	G039-05	289	25	NA	25	6.25	07/15/0616:58	NA	AG15-10	AG15-01	ICG015W	07/10/06	07/10/06
OC2-PMW18A-0-22	G039-06	696	50	NA	50	12.5	07/15/0617:14	NA	AG15-11	AG15-01	ICG015W	07/10/06	07/10/06
OC2-PMW18B-0-23	G039-07	718	100	NA	100	25	07/15/0617:31	NA	AG15-12	AG15-01	ICG015W	07/10/06	07/10/06

QC SUMMARIES

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 300.0

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	ICG006WB	ICG006WL	ICG006WC		
LAB FILE ID:	AG10-14	AG10-15	AG10-16		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	07/10/0622:02	07/10/0622:18	07/10/0622:35	DATE RECEIVED:	NA
PREP. BATCH:	ICG006W	ICG006W	ICG006W		
CALIB. REF:	AG10-12	AG10-12	AG10-12		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Bromide	ND	5	4.84	97	5	4.84	97	0	90-110	20

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 300.0

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	ICG015WB	ICG015WL	ICG015WC		
LAB FILE ID:	AG15-04	AG15-06	AG15-07		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	07/15/0615:15	07/15/0615:51	07/15/0616:08	DATE RECEIVED:	NA
PREP. BATCH:	ICG015W	ICG015W	ICG015W		
CALIB. REF:	AG15-01	AG15-01	AG15-01		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Chloride-Cl	ND	5	4.74	95	5	4.75	95	0	90-110	20

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: EPA 300.0

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	ICG006WB	ICG006WL	ICG006WC		
LAB FILE ID:	AG10-14	AG10-15	AG10-16		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	07/10/0622:02	07/10/0622:18	07/10/0622:35	DATE RECEIVED:	NA
PREP. BATCH:	ICG006W	ICG006W	ICG006W		
CALIB. REF:	AG10-12	AG10-12	AG10-12		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Fluoride-F	ND	2	1.91	95	2	1.88	94	1	90-110	20

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 300.0

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	ICG006WB	ICG006WL	ICG006WC		
LAB FILE ID:	AG10-14	AG10-15	AG10-16		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	07/10/0622:02	07/10/0622:18	07/10/0622:35	DATE RECEIVED:	NA
PREP. BATCH:	ICG006W	ICG006W	ICG006W		
CALIB. REF:	AG10-12	AG10-12	AG10-12		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Nitrate-N	ND	2	1.86	93	2	1.86	93	0	90-110	20

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 300.0

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	ICG006WB	ICG006WL	ICG006WC		
LAB FILE ID:	AG10-14	AG10-15	AG10-16		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	07/10/0622:02	07/10/0622:18	07/10/0622:35	DATE RECEIVED:	NA
PREP. BATCH:	ICG006W	ICG006W	ICG006W		
CALIB. REF:	AG10-12	AG10-12	AG10-12		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Nitrite-N	ND	2	1.9	95	2	1.88	94	1	90-110	20

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 300.0

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	ICG006WB	ICG006WL	ICG006WC		
LAB FILE ID:	AG10-14	AG10-15	AG10-16		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	07/10/0622:02	07/10/0622:18	07/10/0622:35	DATE RECEIVED:	NA
PREP. BATCH:	ICG006W	ICG006W	ICG006W		
CALIB. REF:	AG10-12	AG10-12	AG10-12		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
ORTHOPHOSPHATE-P	ND	5	4.66	93	5	4.71	94	1	90-110	20

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 300.0

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	ICG006WB	ICG006WL	ICG006WC		
LAB FILE ID:	AG10-14	AG10-15	AG10-16		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	07/10/0622:02	07/10/0622:18	07/10/0622:35	DATE RECEIVED:	NA
PREP. BATCH:	ICG006W	ICG006W	ICG006W		
CALIB. REF:	AG10-12	AG10-12	AG10-12		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Sulfate	ND	5	4.62	92	5	4.63	93	0	90-110	20

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 300.0

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK2W				
LAB SAMP ID:	ICG015WB	ICG015WL	ICG015WC		
LAB FILE ID:	AG15-04	AG15-06	AG15-07		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	07/15/0615:15	07/15/0615:51	07/15/0616:08	DATE RECEIVED:	NA
PREP. BATCH:	ICG015W	ICG015W	ICG015W		
CALIB. REF:	AG15-01	AG15-01	AG15-01		

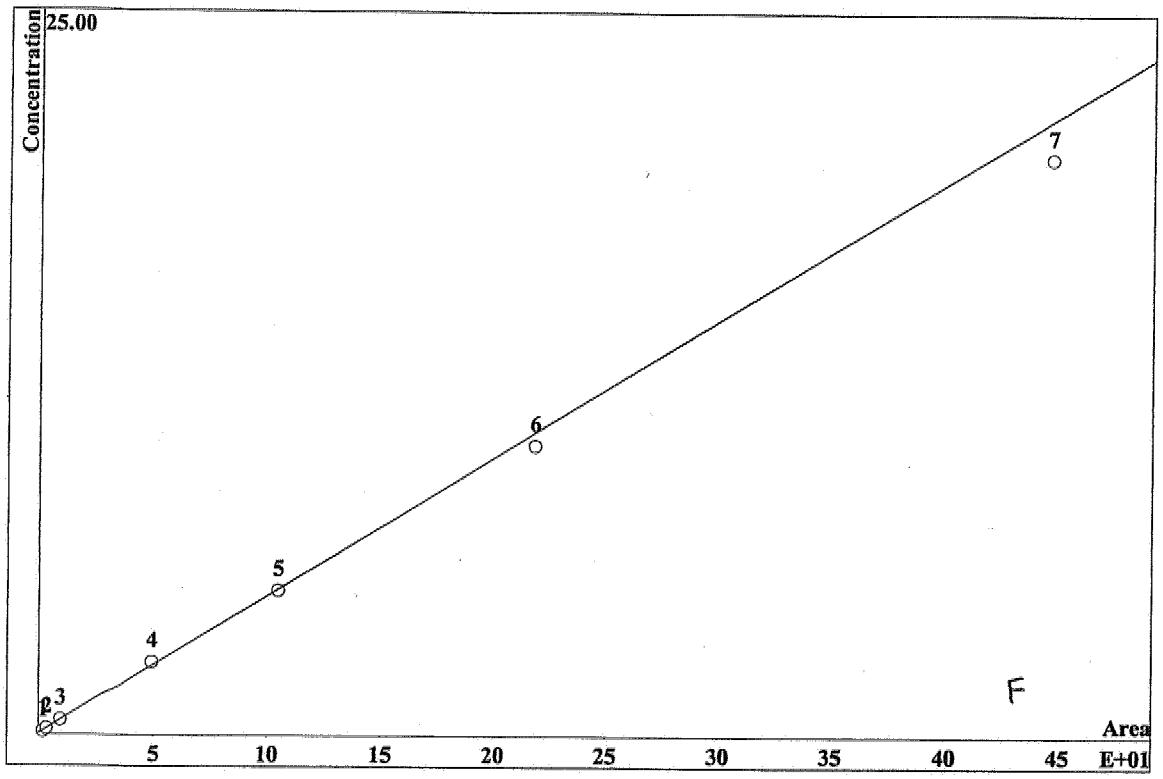
ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Sulfate	ND	5	4.68	94	5	4.68	94	0	90-110	20

INITIAL CALIBRATION

CALIBRATION OF COMPONENT fluoride

Method: IC100-G10.mtw
Equation: Q = 0.0477052·A + 0.0377862
RSD: 4.577 %
Correlation coefficient: 0.999513



K3 = 0 K2 = 0 K1 = 0.0477052 K0 = 0.0377862
Base: Area
Ref.channel: Cond
ISTD:
Formula: Linear
Weight: 1

Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1	0.1865	1.998	0.1	1	3.522	Yes	q7101422.chw
2	0.3578	3.742	0.2	1	3.522	Yes	q7101439.chw
3	0.9123	9.984	0.5	1	3.522	Yes	q7101456.chw
4	4.948	49.21	2.5	1	3.522	Yes	q7101512.chw
5	10.74	105.1	5	1	3.522	Yes	q7101529.chw
6	22.12	218.5	10	1	3.522	No	q7101545.chw
7	43.35	446.8	20	1	3.522	No	q7101602.chw

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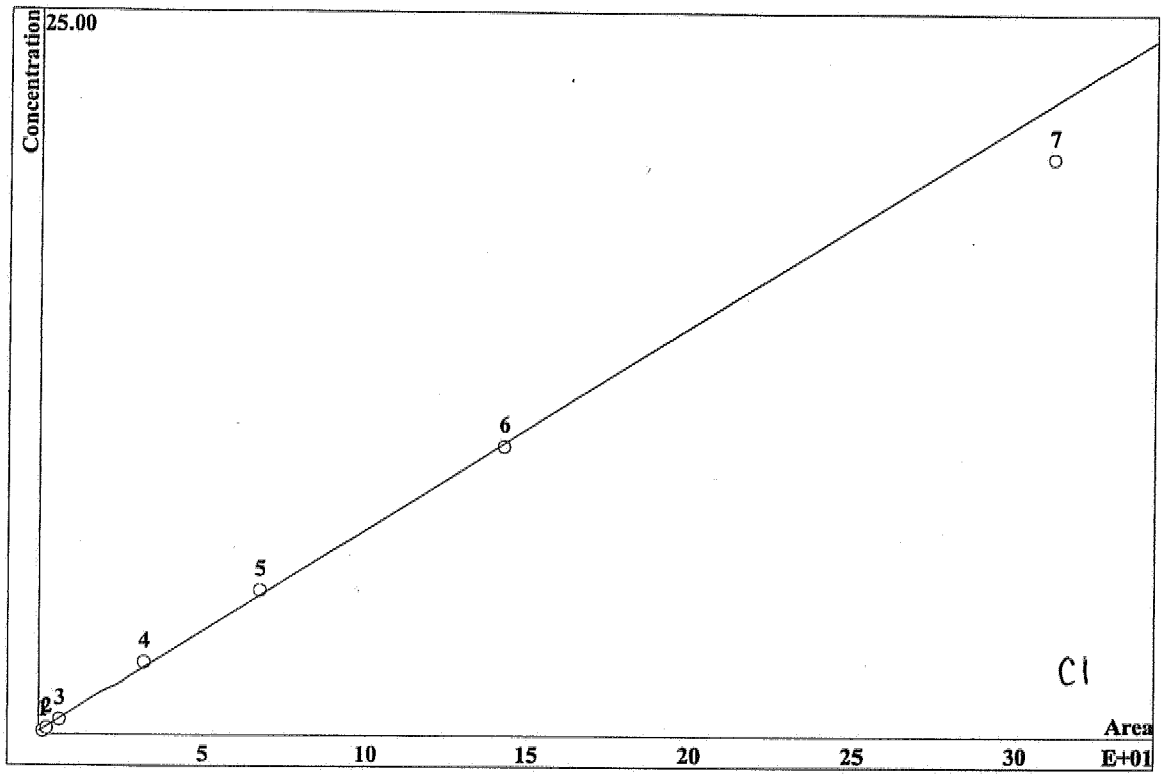
CALIBRATION OF COMPONENT chloride

Method: IC100-G10.mtw
Equation: Q = 0.0701529·A + 0.0957071
RSD: 4.689 %
Correlation coefficient: 0.999460



K3 = 0 K2 = 0 K1 = 0.0701529 K0 = 0.0957071
Base: Area
Ref.channel: Cond
ISTD:
Formula: Linear
Weight: 1

Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1	0.1206	1.337	0.1	1	5.156	Yes	q7101422.chw
2	0.2302	2.522	0.2	1	5.156	Yes	q7101439.chw
3	0.5727	6.531	0.5	1	5.156	Yes	q7101456.chw
4	2.985	32.02	2.5	1	5.156	Yes	q7101512.chw
5	6.326	67.5	5	1	5.156	Yes	q7101529.chw
6	13.83	142.8	10	1	5.156	Yes	q7101545.chw
7	30.88	311.4	20	1	5.156	No	q7101602.chw

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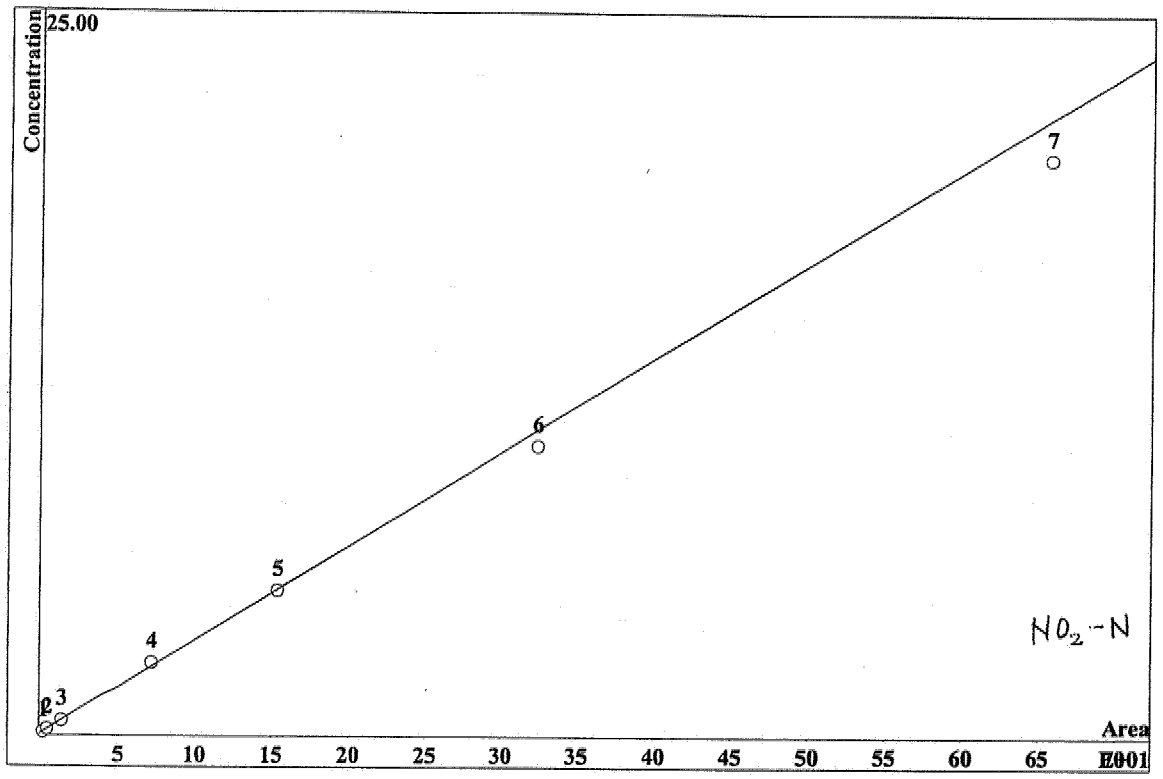
9945

CALIBRATION OF COMPONENT nitrite

Method: IC100-G10.mtw
Equation: Q = 0.0325194·A + 0.0332248
RSD: 4.662 %
Correlation coefficient: 0.999494



K3 = 0 K2 = 0 K1 = 0.0325194 K0 = 0.0332248
Base: Area
Ref.channel: Cond
ISTD:
Formula: Linear
Weight: 1

Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1	0.2314	2.849	0.1	1	6.03	Yes	q7101422.chw
2	0.4509	5.546	0.2	1	6.03	Yes	q7101439.chw
3	1.145	15.17	0.5	1	6.03	Yes	q7101456.chw
4	5.836	72.25	2.5	1	6.03	Yes	q7101512.chw
5	12.27	154.3	5	1	6.03	Yes	q7101529.chw
6	24.93	324	10	1	6.03	No	q7101545.chw
7	46.78	657.8	20	1	6.03	No	q7101602.chw

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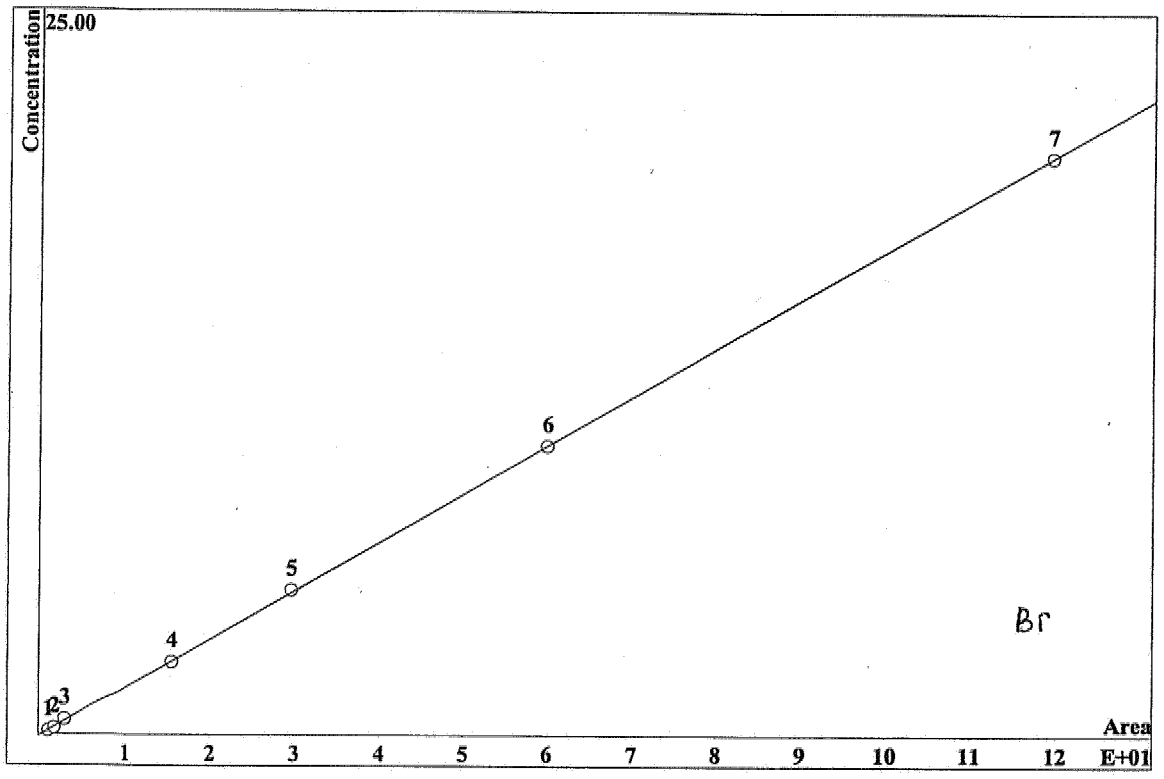
CALIBRATION OF COMPONENT bromide

Method: IC100-G10.mtw
Equation: Q = 0.168115·A - 0.0780705
RSD: 1.013 %
Correlation coefficient: 0.999976



K3 = 0 K2 = 0 K1 = 0.168115 K0 = -0.0780705
Base: Area
Ref.channel: Cond
ISTD:
Formula: Linear
Weight: 1

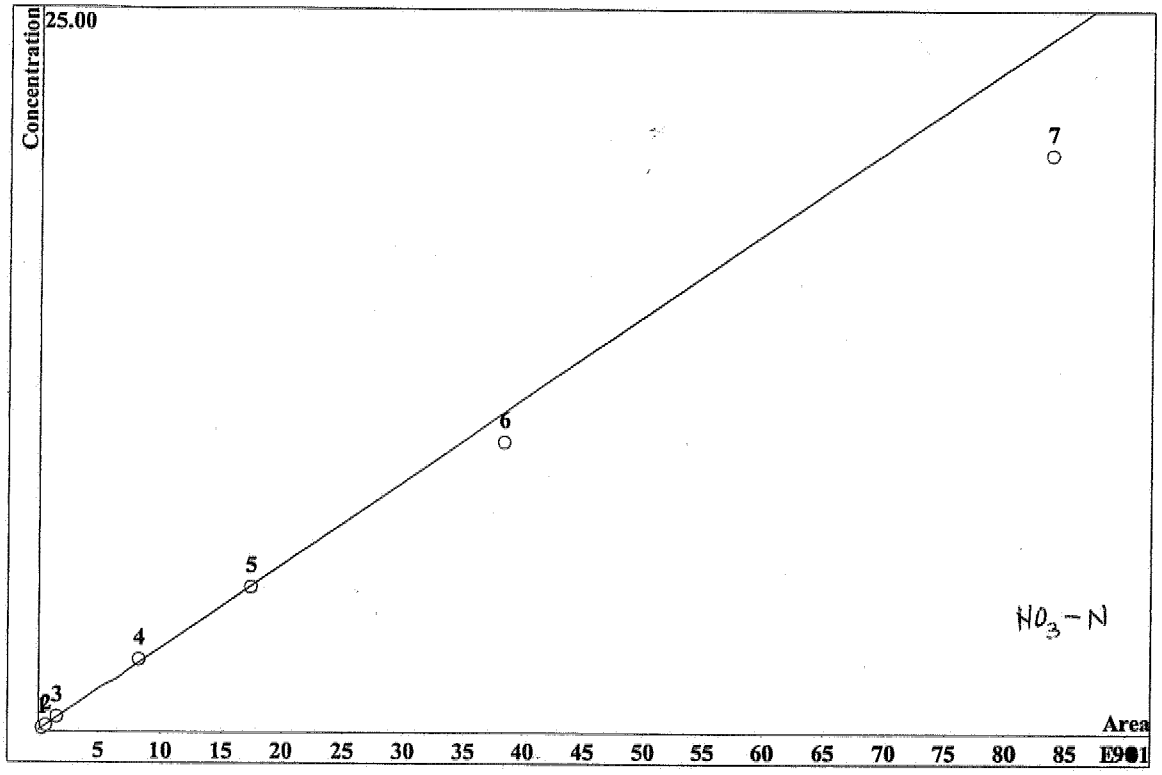
Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1	0.06231	1.242	0.1	1	7.369	Yes	q7101422.chw
2	0.1011	1.968	0.2	1	7.369	Yes	q7101439.chw
3	0.1989	3.175	0.5	1	7.369	Yes	q7101456.chw
4	0.9425	15.5	2.5	1	7.369	Yes	q7101512.chw
5	1.812	29.66	5	1	7.369	Yes	q7101529.chw
6	3.352	60.02	10	1	7.369	Yes	q7101545.chw
7	5.27	119.5	20	1	7.369	Yes	q7101602.chw

pu 7-11-06

8047

CALIBRATION OF COMPONENT nitrate

Method: IC100-G10.mtw
Equation: Q = 0.0286202·A + 0.0479968
RSD: 4.074 %
Correlation coefficient: 0.999614



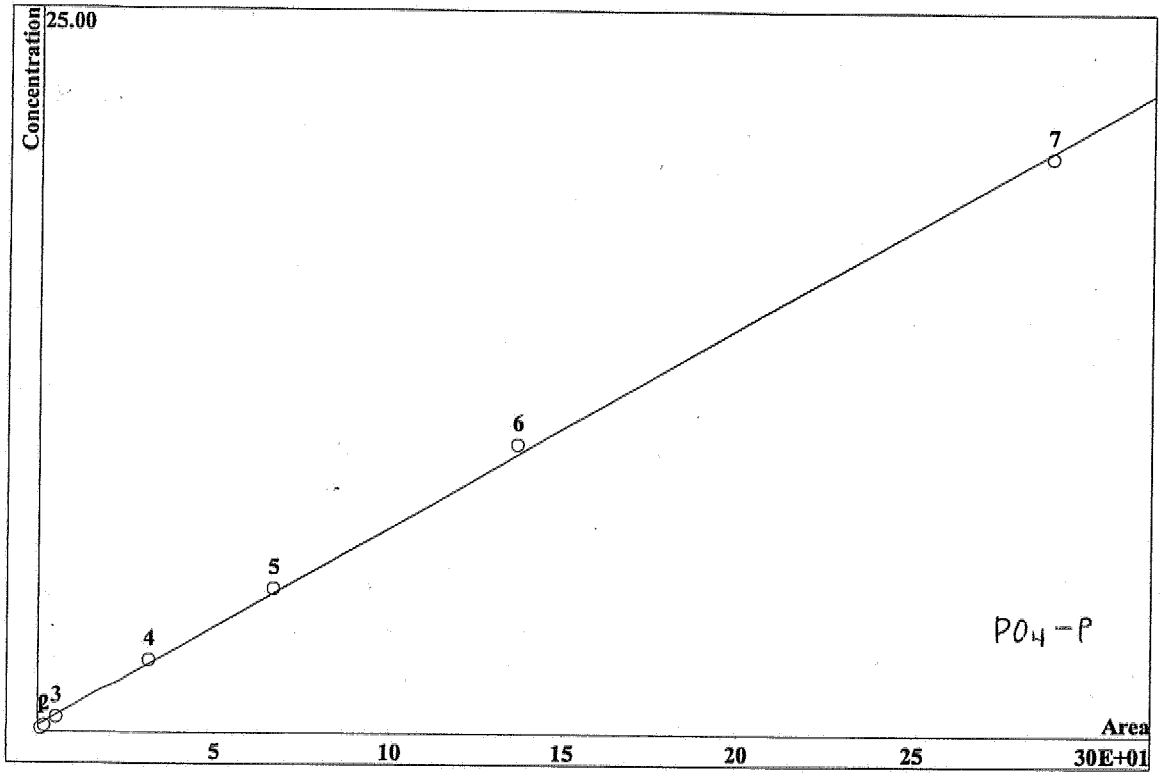
K3 = 0 K2 = 0 K1 = 0.0286202 K0 = 0.0479968
Base: Area
Ref.channel: Cond
ISTD:
Formula: Linear
Weight: 1

Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1	0.1923	3.172	0.1	1	8.163	Yes	q7101422.chw
2	0.3783	6.152	0.2	1	8.163	Yes	q7101439.chw
3	0.9475	15.42	0.5	1	8.163	Yes	q7101456.chw
4	5.138	82.27	2.5	1	8.163	Yes	q7101512.chw
5	11.27	174.6	5	1	8.163	Yes	q7101529.chw
6	24.98	383.8	10	1	8.163	No	q7101545.chw
7	53.01	837.7	20	1	8.163	No	q7101602.chw

7-11-06

CALIBRATION OF COMPONENT phosphate

Method: IC100-G10.mtw
Equation: Q = 0.0690924·A + 0.21502
RSD: 4.136 %
Correlation coefficient: 0.999602



K3 = 0 K2 = 0 K1 = 0.0690924 K0 = 0.21502
Base: Area
Ref.channel: Cond
ISTD:
Formula: Linear
Weight: 1

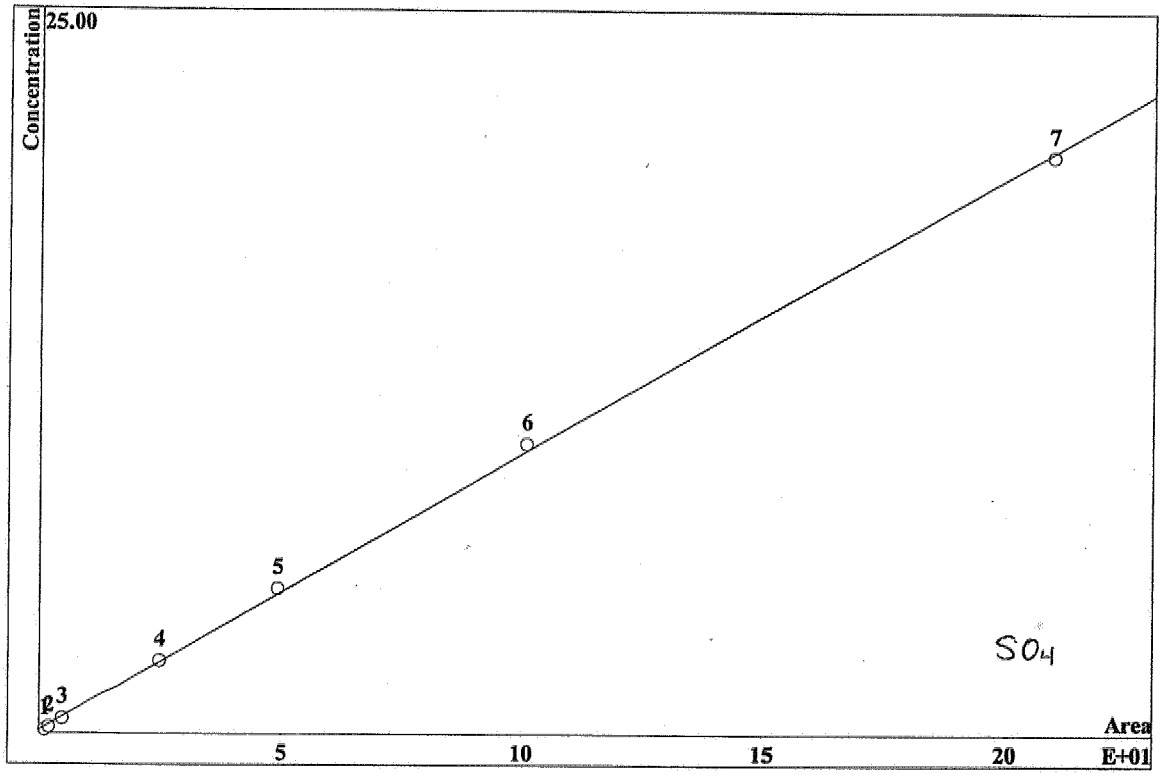
Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1	0.04479	0.8956	0.1	1	9.915	Yes	q7101422.chw
2	0.09744	1.938	0.2	1	9.915	Yes	q7101439.chw
3	0.2533	5.372	0.5	1	9.915	Yes	q7101456.chw
4	1.478	31.27	2.5	1	9.915	Yes	q7101512.chw
5	3.288	66.97	5	1	9.915	Yes	q7101529.chw
6	6.986	136.8	10	1	9.915	Yes	q7101545.chw
7	15.57	289.3	20	1	9.915	Yes	q7101602.chw

AO 7-11-06

9849

CALIBRATION OF COMPONENT sulfate

Method: IC100-G10.mtw
Equation: Q = 0.0956366·A + 0.104642
RSD: 3.169 %
Correlation coefficient: 0.999767



K3 = 0 K2 = 0 K1 = 0.0956366 K0 = 0.104642
Base: Area
Ref.channel: Cond
ISTD:
Formula: Linear
Weight: 1

Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1	0.05447	1.261	0.1	1	11.71	Yes	q7101422.chw
2	0.09657	2.091	0.2	1	11.71	Yes	q7101439.chw
3	0.2272	4.929	0.5	1	11.71	Yes	q7101456.chw
4	1.137	24.62	2.5	1	11.71	Yes	q7101512.chw
5	2.309	49.22	5	1	11.71	Yes	q7101529.chw
6	4.815	101	10	1	11.71	Yes	q7101545.chw
7	10.24	209.7	20	1	11.71	Yes	q7101602.chw

7-11-06

SECOND SOURCE

IC Result Check FormVersion : QD1

LFID	LSID	Selection	phosphate	chloride	nitrate	fluoride	nitrite	bromide	sulfate	RawNetID	DF
AG10-10	ICV	PCNFIBS	100.3%	98.3%	99.3%	99.3%	98.4%	98.9%	96.3%	q7101618	1
AG10-11	ICB	PCNFIBS	0	0	0	0	0	0	0	q7101635	1
AG10-12	CCV1	PCNFIBS	90.3%	93.2%	92.7%	92.6%	94.6%	96.4%	92.6%	q7102129	1
AG10-13	CCB1	PCNFIBS	0	0	0	0	0	0	0	q7102145	1
AG10-24	CCV2	PCNFIBS	94.6%	94.3%	93.4%	93.8%	94.9%	97.1%	92.6%	q7110101	1
AG10-25	CCB2	PCNFIBS	0	0	0	0	0	0	0	q7110117	1
AG10-36	CCV3	PCNFIBS	93.8%	93.7%	93.4%	94.5%	95%	97.2%	92.8%	q7110419	1
AG10-37	CCB3	PCNFIBS	0	0	0	0	0	0	0	q7110436	1
AG10-41	CCV4	PCNFIBS	93.6%	93.6%	93.1%	93.7%	94.2%	96.9%	92.6%	q7110542	1
AG10-42	CCB4	PCNFIBS	0	0	0	0	0	0	0	q7110559	1

7/18/06

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DAILY CALIBRATION

IC Result Check FormVersion : QD1

LFID	LSID	Selection	bromide	sulfate	nitrite	nitrate	fluoride	chloride	phosphate	RawNetID	DF
AG15-01	CCV31	BSINFCP	97.5%	92.8%	90%	92.7%	94%	94.4%	101.1%	q7151419	1
AG15-02	CCB31	BSINFCP	0	0	0	0	0	0	0	q7151436	1
AG15-14	CCV32	BSINFCP	97.4%	92.7%	87.9%*	92.8%	93%	94.2%	101.6%	q7151804	1
AG15-15	CCB32	BSINFCP	0	0	0	0	0	0	0	q7151820	1
AG15-26	CCV33	BSINFCP	97.6%	93%	88%*	92.7%	92.4%	94.3%	101.7%	q7152123	1
AG15-27	CCB33	BSINFCP	0	0	0	0	0	0	0	q7152139	1
AG15-37	CCV34	BSINFCP	97.6%	92.9%	87.2%*	92.8%	93.4%	94.3%	102.8%	q7160025	1
AG15-38	CCB34	BSINFCP	0	0	0	0	0	0	0	q7160041	1
AG15-49	CCV35	BSINFCP	97.6%	92.9%	87.3%*	92.6%	94.5%	94.4%	102.9%	q7160344	1
AG15-50	CCB35	BSINFCP	0	0	0	0	0	0	0	q7160400	1
AG15-61	CCV36	BSINFCP	97.7%	93.2%	86.2%*	92.6%	94%	94.4%	102.3%	q7160702	1
AG15-62	CCB36	BSINFCP	0	0	0	0	0	0	0	q7160719	1
AG15-73	CCV37	BSINFCP	96.9%	92.1%	88.5%*	90.5%	92.5%	93.7%	97.8%	q7161021	1
AG15-74	CCB37	BSINFCP	0	0	0	0	0	0	0	q7161038	1
AG15-80	CCV38	BSINFCP	96.6%	92%	89%*	90.6%	90.2%	93.6%	95.2%	q7161217	1
AG15-81	CCB38	BSINFCP	0	0	0	0	0	0	0	q7161234	1

ANALYTICAL LOG

ANALYSIS RUN LOG
for
ION CHROMATOGRAPHY

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

Comments:

Conc. of: S1 — 0.1 ppm
S2 — 0.2 ppm
S3 — 0.5 ppm
S4 — 2.5 ppm
S5 — 5.0 ppm
S6 — 10.0 ppm
S7 — 20.0 ppm

Book #: A100-07

Instrument No.: 100

Analytical Sequence: AG10

Method File: IC100 - G10.mtw

Analytical Batch: ICG006W

SOP #	Rev. #
☑ EMAX-300.0	3
☐ EMAX-9056	2
☐ EMAX-	

STANDARDS ID		
ICAL	S1IB-03-37-2	
ICV		37-3
CCV		38-1
LCS		38-2
MS	$NO_3 + NO_2 + PO_4 = 2ppm$; $Al = 5ppm$ ACC STD	

F1 ad 07/10/06

ELECTRONIC DATA ARCHIVAL	
Location	Date
☐ IC METROHM	
☐	

Analyzed By: ad

Date: 07/10/06

File Name	Method	Ident	Vial	Volume	Dilution	Amount	Internal Standard Amount	Calibration Level	Sample Info 1	Sample Info 2
q7101349.chw	IC100-G10.mtw	AG10-01 IB	1	1.0	1.0	1.0	100.0	0		
q7101406.chw	IC100-G10.mtw	AG10-02 S0	2	1.0	1.0	1.0	100.0	0		
q7101422.chw	IC100-G10.mtw	AG10-03 S1	3	1.0	1.0	1.0	100.0	1		
q7101439.chw	IC100-G10.mtw	AG10-04 S2	4	1.0	1.0	1.0	100.0	2		
q7101456.chw	IC100-G10.mtw	AG10-05 S3	5	1.0	1.0	1.0	100.0	3		
q7101512.chw	IC100-G10.mtw	AG10-06 S4	6	1.0	1.0	1.0	100.0	4		
q7101529.chw	IC100-G10.mtw	AG10-07 S5	7	1.0	1.0	1.0	100.0	5		
q7101545.chw	IC100-G10.mtw	AG10-08 S6	8	1.0	1.0	1.0	100.0	6		
q7101602.chw	IC100-G10.mtw	AG10-09 S7	9	1.0	1.0	1.0	100.0	7		
q7101618.chw	IC100-G10.mtw	AG10-10 ICV	10	1.0	1.0	1.0	100.0	0		
q7101635.chw	IC100-G10.mtw	AG10-11 ICB	11	1.0	1.0	1.0	100.0	0		
q7102129.chw	IC100-G10.mtw	AG10-12 CCV1	12	1.0	1.0	1.0	100.0	0		
q7102145.chw	IC100-G10.mtw	AG10-13 CCB1	13	1.0	1.0	1.0	100.0	0		
q7102202.chw	IC100-G10.mtw	AG10-14 ICG006WB	14	1.0	1.0	1.0	100.0	0		
q7102218.chw	IC100-G10.mtw	AG10-15 ICG006WL	15	1.0	1.0	1.0	100.0	0		
q7102235.chw	IC100-G10.mtw	AG10-16 ICG006WC	16	1.0	1.0	1.0	100.0	0		
q7102305.chw	IC100-G10.mtw	AG10-17 G037-06	17	1.0	1.0	1.0	100.0	0		
q7102321.chw	IC100-G10.mtw	AG10-18 G037-01	18	1.0	1.0	1.0	100.0	0		
q7102338.chw	IC100-G10.mtw	AG10-19 G037-01D	19	1.0	1.0	1.0	100.0	0		
q7102354.chw	IC100-G10.mtw	AG10-20 G037-01M	20	1.0	1.0	1.0	100.0	0		
q7110011.chw	IC100-G10.mtw	AG10-21 G037-02	21	1.0	1.0	1.0	100.0	0		
q7110027.chw	IC100-G10.mtw	AG10-22 G037-03	22	1.0	1.0	1.0	100.0	0		
q7110044.chw	IC100-G10.mtw	AG10-23 G037-04	23	1.0	1.0	1.0	100.0	0		
q7110101.chw	IC100-G10.mtw	AG10-24 CCV2	24	1.0	1.0	1.0	100.0	0		
q7110117.chw	IC100-G10.mtw	AG10-25 CCB2	25	1.0	1.0	1.0	100.0	0		
q7110134.chw	IC100-G10.mtw	AG10-26 G037-05	26	1.0	1.0	1.0	100.0	0		
q7110150.chw	IC100-G10.mtw	AG10-27 G039-01	27	1.0	1.0	1.0	100.0	0		
q7110207.chw	IC100-G10.mtw	AG10-28 G039-04	28	1.0	1.0	1.0	100.0	0		
q7110223.chw	IC100-G10.mtw	AG10-29 G039-05	29	1.0	1.0	1.0	100.0	0		
q7110240.chw	IC100-G10.mtw	AG10-30 G039-06	30	1.0	1.0	1.0	100.0	0		
q7110257.chw	IC100-G10.mtw	AG10-31 G039-07	31	1.0	1.0	1.0	100.0	0		
q7110313.chw	IC100-G10.mtw	AG10-32 G039-08	32	1.0	1.0	1.0	100.0	0		
q7110330.chw	IC100-G10.mtw	AG10-33 G039-01 DF=5	33	1.0	5.0	1.0	100.0	0		
q7110346.chw	IC100-G10.mtw	AG10-34 G039-04 DF=5	34	1.0	5.0	1.0	100.0	0		
q7110403.chw	IC100-G10.mtw	AG10-35 G039-05 DF=5	35	1.0	5.0	1.0	100.0	0		
q7110419.chw	IC100-G10.mtw	AG10-36 CCV3	36	1.0	1.0	1.0	100.0	0		
q7110436.chw	IC100-G10.mtw	AG10-37 CCB3	37	1.0	1.0	1.0	100.0	0		
q7110453.chw	IC100-G10.mtw	AG10-38 G039-06 DF=5	38	1.0	5.0	1.0	100.0	0		
q7110509.chw	IC100-G10.mtw	AG10-39 G039-07 DF=5	39	1.0	5.0	1.0	100.0	0		
q7110526.chw	IC100-G10.mtw	AG10-40 G039-08 DF=5	40	1.0	5.0	1.0	100.0	0		
q7110542.chw	IC100-G10.mtw	AG10-41 CCV4	41	1.0	1.0	1.0	100.0	0		
q7110559.chw	IC100-G10.mtw	AG10-42 CCB4	42	1.0	1.0	1.0	100.0	0		

F

FINAL

9957

ANALYSIS RUN LOG
for
ION CHROMATOGRAPHY

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

Comments:

* AG15 - 82 → AG15-84: Instrumentation Error. Samples not injected, including ending MRL/MDL ck.

* AG15 - 16 → AG15-25; AG15-48; AG15-51 → AG15-60; AG15-63 → AG15-69; AG15-75 → AG15-79 : Re-run all samples due to no ending MRL/MDL ck.

* See Run Log for more details.

Book #: A100-07

Instrument No.: 100

Analytical Sequence: AG15

Method File: IC100 - G10.mtw

Analytical Batch: ICG015W + ICG016W + ICG017W

SOP #	Rev. #
☑ EMAX-300.0	3
☐ EMAX-9056	2
☐ EMAX-	

STANDARDS ID		
ICAL	S11B - 03 - 37 - 2	
ICV		37 - 3
CCV		42 - 3
LCS		43 - 1
MS	NO_3 + NO_2 + Fl = 2 ppm ; All = 5 ppm ACC STD	

ELECTRONIC DATA ARCHIVAL	
Location	Date
☐ IC METROHM	
☐	

Analyzed By: dl

Date: 07/15/06

File Name	Method	Ident	Vial	Volume	Dilution	Amount	Internal Standard Amount	Calibration Level	Sample Info 1	Sample Info 2
q7151419.chw	IC100-G10.mtw	AG15-01 CCV31	1	1.0	1.0	1.0	100.0	0		
q7151436.chw	IC100-G10.mtw	AG15-02 CCB31	2	1.0	1.0	1.0	100.0	0		
q7151452.chw	IC100-G10.mtw	AG15-03 MRL * NO_3 Contamination. Not Used.	3	1.0	1.0	1.0	100.0	0		
q7151515.chw	IC100-G10.mtw	AG15-04 ICG015WB Res Only	4	1.0	1.0	1.0	100.0	0		
q7151535.chw	IC100-G10.mtw	AG15-05 MRL	5	1.0	1.0	1.0	100.0	0		
q7151551.chw	IC100-G10.mtw	AG15-06 ICG015WL	6	1.0	1.0	1.0	100.0	0		
q7151608.chw	IC100-G10.mtw	AG15-07 ICG015WC	7	1.0	1.0	1.0	100.0	0		
q7151625.chw	IC100-G10.mtw	AG15-08 G039-01 DF=25	8	1.0	25.0	1.0	100.0	0		
q7151641.chw	IC100-G10.mtw	AG15-09 G039-04 DF=25	9	1.0	25.0	1.0	100.0	0		
q7151658.chw	IC100-G10.mtw	AG15-10 G039-05 DF=25	10	1.0	25.0	1.0	100.0	0		
q7151714.chw	IC100-G10.mtw	AG15-11 G039-06 DF=50	11	1.0	50.0	1.0	100.0	0		
q7151731.chw	IC100-G10.mtw	AG15-12 G039-07 DF=100	12	1.0	100.0	1.0	100.0	0		
q7151747.chw	IC100-G10.mtw	AG15-13 G039-08 DF=20	13	1.0	20.0	1.0	100.0	0		
q7151804.chw	IC100-G10.mtw	AG15-14 CCV32	14	1.0	1.0	1.0	100.0	0		
q7151820.chw	IC100-G10.mtw	AG15-15 CCB32	15	1.0	1.0	1.0	100.0	0		
q7151837.chw	IC100-G10.mtw	AG15-16 G032-02 DF=20	16	1.0	20.0	1.0	100.0	0		
q7151854.chw	IC100-G10.mtw	AG15-17 G032-03 DF=5	17	1.0	5.0	1.0	100.0	0		
q7151910.chw	IC100-G10.mtw	AG15-18 G032-04 DF=5	18	1.0	5.0	1.0	100.0	0		
q7151927.chw	IC100-G10.mtw	AG15-19 G032-04D DF=5	19	1.0	5.0	1.0	100.0	0		
q7151943.chw	IC100-G10.mtw	AG15-20 G032-04M DF=5 Re-run All. No	20	1.0	5.0	1.0	100.0	0		
q7152000.chw	IC100-G10.mtw	AG15-21 G032-04S DF=5 Ending MRL	21	1.0	5.0	1.0	100.0	0		
q7152016.chw	IC100-G10.mtw	AG15-22 G032-05 DF=5 ck.	22	1.0	5.0	1.0	100.0	0		
q7152033.chw	IC100-G10.mtw	AG15-23 G032-06 DF=5	23	1.0	5.0	1.0	100.0	0		
q7152050.chw	IC100-G10.mtw	AG15-24 G032-07 DF=5	24	1.0	5.0	1.0	100.0	0		
q7152106.chw	IC100-G10.mtw	AG15-25 G032-08 DF=10	25	1.0	10.0	1.0	100.0	0		
q7152123.chw	IC100-G10.mtw	AG15-26 CCV33	26	1.0	1.0	1.0	100.0	0		
q7152139.chw	IC100-G10.mtw	AG15-27 CCB33	27	1.0	1.0	1.0	100.0	0		
q7152156.chw	IC100-G10.mtw	AG15-28 G048-01 DF=100	28	1.0	100.0	1.0	100.0	0		
q7152212.chw	IC100-G10.mtw	AG15-29 G048-04 DF=50	29	1.0	50.0	1.0	100.0	0		
q7152229.chw	IC100-G10.mtw	AG15-30 G048-05 DF=50	30	1.0	50.0	1.0	100.0	0		
q7152245.chw	IC100-G10.mtw	AG15-31 G048-06 DF=50	31	1.0	50.0	1.0	100.0	0		
q7152302.chw	IC100-G10.mtw	AG15-32 G048-07 DF=50	32	1.0	50.0	1.0	100.0	0		
q7152319.chw	IC100-G10.mtw	AG15-33 G048-08 DF=20	33	1.0	20.0	1.0	100.0	0		
q7152335.chw	IC100-G10.mtw	AG15-34 G048-08D DF=20	34	1.0	20.0	1.0	100.0	0		
q7152352.chw	IC100-G10.mtw	AG15-35 G048-08M DF=20	35	1.0	20.0	1.0	100.0	0	FINAL	
q7160008.chw	IC100-G10.mtw	AG15-36 G048-09 DF=20	36	1.0	20.0	1.0	100.0	0		
q7160025.chw	IC100-G10.mtw	AG15-37 CCV34	37	1.0	1.0	1.0	100.0	0		
q7160041.chw	IC100-G10.mtw	AG15-38 CCB34	38	1.0	1.0	1.0	100.0	0		
q7160058.chw	IC100-G10.mtw	AG15-39 ICG016WB	39	1.0	1.0	1.0	100.0	0		
q7160115.chw	IC100-G10.mtw	AG15-40 ICG016WL	40	1.0	1.0	1.0	100.0	0		
q7160131.chw	IC100-G10.mtw	AG15-41 ICG016WC	41	1.0	1.0	1.0	100.0	0		
q7160148.chw	IC100-G10.mtw	AG15-42 G050-02 DF=10	42	1.0	10.0	1.0	100.0	0		
q7160204.chw	IC100-G10.mtw	AG15-43 G050-03 DF=10	43	1.0	10.0	1.0	100.0	0		
q7160221.chw	IC100-G10.mtw	AG15-44 G050-04 DF=20	44	1.0	20.0	1.0	100.0	0		
q7160237.chw	IC100-G10.mtw	AG15-45 G050-04D DF=20	45	1.0	20.0	1.0	100.0	0		
q7160254.chw	IC100-G10.mtw	AG15-46 G050-04M DF=20	46	1.0	20.0	1.0	100.0	0		
q7160310.chw	IC100-G10.mtw	AG15-47 G050-04S DF=20	47	1.0	20.0	1.0	100.0	0		
q7160327.chw	IC100-G10.mtw	AG15-48 G045-21 DF=5 → Rerun. No	48	1.0	5.0	1.0	100.0	0		
q7160344.chw	IC100-G10.mtw	AG15-49 CCV35 Ending MRL ck.	49	1.0	1.0	1.0	100.0	0		
q7160400.chw	IC100-G10.mtw	AG15-50 CCB35	50	1.0	1.0	1.0	100.0	0		
q7160417.chw	IC100-G10.mtw	AG15-51 G045-21D DF=5	51	1.0	5.0	1.0	100.0	0		
q7160433.chw	IC100-G10.mtw	AG15-52 G045-21M DF=5	52	1.0	5.0	1.0	100.0	0		
q7160450.chw	IC100-G10.mtw	AG15-53 G045-22 DF=5	53	1.0	5.0	1.0	100.0	0		
q7160506.chw	IC100-G10.mtw	AG15-54 G045-23 DF=5	54	1.0	5.0	1.0	100.0	0		
q7160523.chw	IC100-G10.mtw	AG15-55 G045-24 DF=5 Re-run All. No	55	1.0	5.0	1.0	100.0	0		
q7160539.chw	IC100-G10.mtw	AG15-56 G045-25 DF=5 Ending MRL ck.	56	1.0	5.0	1.0	100.0	0		
q7160556.chw	IC100-G10.mtw	AG15-57 G045-26 DF=5	57	1.0	5.0	1.0	100.0	0		
q7160613.chw	IC100-G10.mtw	AG15-58 G045-27 DF=5	58	1.0	5.0	1.0	100.0	0		
q7160629.chw	IC100-G10.mtw	AG15-59 G045-28 DF=5	59	1.0	5.0	1.0	100.0	0		

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

METHOD 314.0
PERCHLORATE

Six (6) water samples were received on 07/10/06 for Perchlorate analysis by Method 314.0 in accordance with "Method for Determination of Perchlorate by Ion Chromatography", EPA 600/98-118.

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 sample results were within QC limits.

4. **Duplicate**

   Sample G039-05 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike**

   Sample G039-05 was spiked. %Recovery was within QC limit.

6. **Sample Analysis**

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

SAMPLE RESULTS

METHOD 314.0
PERCHLORATE

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G039

Matrix : WATER
Instrument ID : I57

SAMPLE ID	EMAX SAMPLE ID	RESULTS (ug/L)	DLF	MOIST	RL (ug/L)	MDL (ug/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	PCG007WB	ND	1	NA	5	.5	07/28/0622:05	NA	JG28011	JG28010	PCG007W	NA	NA
LCS1W	PCG007WL	9.98	1	NA	5	.5	07/28/0622:46	NA	JG28013	JG28010	PCG007W	NA	NA
LCD1W	PCG007WC	9.93	1	NA	5	.5	07/28/0623:06	NA	JG28014	JG28010	PCG007W	NA	NA
OC2-PMW15-0-17	G039-01	4.19J	1	NA	5	.5	07/29/0601:48	NA	JG28022	JG28021	PCG007W	07/10/06	07/10/06
OC2-PMW15-5-21	G039-04	3.96J	1	NA	5	.5	07/29/0602:08	NA	JG28023	JG28021	PCG007W	07/10/06	07/10/06
OC2-PMW15-1-20	G039-05	3.95J	1	NA	5	.5	07/29/0602:29	NA	JG28024	JG28021	PCG007W	07/10/06	07/10/06
OC2-PMW15-1-20DUP	G039-05D	4.36J	1	NA	5	.5	07/29/0602:49	NA	JG28025	JG28021	PCG007W	07/10/06	07/10/06
OC2-PMW15-1-20MS	G039-05M	13.2	1	NA	5	.5	07/29/0603:09	NA	JG28026	JG28021	PCG007W	07/10/06	07/10/06
OC2-PMW18A-0-22	G039-06	6.55	1	NA	5	.5	07/29/0603:29	NA	JG28027	JG28021	PCG007W	07/10/06	07/10/06
OC2-PMW18B-0-23	G039-07	6.21	1	NA	5	.5	07/29/0603:50	NA	JG28028	JG28021	PCG007W	07/10/06	07/10/06
OC2-PMW18C-0-24	G039-08	2.72J	1	NA	5	.5	07/29/0604:10	NA	JG28029	JG28021	PCG007W	07/10/06	07/10/06

QC SUMMARIES

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 314.0

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	PCG007WB	PCG007WL	PCG007WC		
LAB FILE ID:	JG28011	JG28013	JG28014		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	07/28/0622:05	07/28/0622:46	07/28/0623:06	DATE RECEIVED:	NA
PREP. BATCH:	PCG007W	PCG007W	PCG007W		
CALIB. REF:	JG28010	JG28010	JG28010		

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 (%)
Perchlorate	ND	10	9.98	100	10	9.93	99	1	85-115	20

EMAX QUALITY CONTROL DATA
MS ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 314.0

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	1		
SAMPLE ID:	OC2-PMW15-1-20			
LAB SAMP ID:	G039-05	G039-05M		
LAB FILE ID:	JG28024	JG28026		
DATE EXTRACTED:	NA	NA	DATE COLLECTED:	07/10/06
DATE ANALYZED:	07/29/0602:29	07/29/0603:09	DATE RECEIVED:	07/10/06
PREP. BATCH:	PCG007W	PCG007W		
CALIB. REF:	JG28021	JG28021		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	QC LIMIT (%)
Perchlorate	3.95	10	13.2	92	80-120

EMAX QUALITY CONTROL DATA
DUPLICATE SAMPLE ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 314.0

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	1		
SAMPLE ID:	OC2-PMW15-1-20			
EMAX SAMP ID:	G039-05	G039-05D		
LAB FILE ID:	JG28024	JG28025		
DATE EXTRACTED:	NA	NA	DATE COLLECTED:	07/10/06
DATE ANALYZED:	07/29/0602:29	07/29/0602:49	DATE RECEIVED:	07/10/06
PREP. BATCH:	PCG007W	PCG007W		
CALIB. REF:	JG28021	JG28021		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	DUPL RSLT (ug/L)	RPD RSLT %	QC LIMIT (%)
Perchlorate	3.95J	4.36J	NA	20

INITIAL CALIBRATION

IC SEQ FORM (ESD)

LFID	LSID	SELCOMP	METHOD	DateTime	DF
JG28001	IB	P	IC57G28	07/28/0617:30	1
JG28002	S-0.0	P	IC57G28	07/28/0619:03	1
JG28003	S-2.0	P	IC57G28	07/28/0619:23	1
JG28004	S-4.0	P	IC57G28	07/28/0619:44	1
JG28005	S-10.0	P	IC57G28	07/28/0620:04	1
JG28006	S-25.0	P	IC57G28	07/28/0620:24	1
JG28007	S-30.0	P	IC57G28	07/28/0620:44	1
JG28008	ICV	P	IC57G28	07/28/0621:05	1
JG28009	ICB	P	IC57G28	07/28/0621:25	1
JG28010	IPCS	P	IC57G28	07/28/0621:45	1
JG28011	PCG007WB	P	IC57G28	07/28/0622:05	1
JG28012	MRL	P	IC57G28	07/28/0622:26	1
JG28013	PCG007WL	P	IC57G28	07/28/0622:46	1
JG28014	PCG007WC	P	IC57G28	07/28/0623:06	1
JG28015	G048-01	P	IC57G28	07/28/0623:26	2
JG28016	G064-01	P	IC57G28	07/28/0623:47	1
JG28017	G064-02	P	IC57G28	07/29/0600:07	1
JG28018	G064-03	P	IC57G28	07/29/0600:27	1
JG28019	G064-04	P	IC57G28	07/29/0600:47	1
JG28020	G064-05	P	IC57G28	07/29/0601:08	1
JG28021	CCV1-15	P	IC57G28	07/29/0601:28	1
JG28022	G039-01	P	IC57G28	07/29/0601:48	1
JG28023	G039-04	P	IC57G28	07/29/0602:08	1
JG28024	G039-05	P	IC57G28	07/29/0602:29	1
JG28025	G039-05D	P	IC57G28	07/29/0602:49	1
JG28026	G039-05M	P	IC57G28	07/29/0603:09	1
JG28027	G039-06	P	IC57G28	07/29/0603:29	1
JG28028	G039-07	P	IC57G28	07/29/0603:50	1
JG28029	G039-08	P	IC57G28	07/29/0604:10	1
JG28030	CCV2-30	P	IC57G28	07/29/0604:30	1

8-2-06

9068

Method : c:\ezchrom\methods\ic57g28.met
Printed : Aug 02, 2006 14:41:32
Channel : A
Peak : PERCHLORATE

* - Replicate Not Used

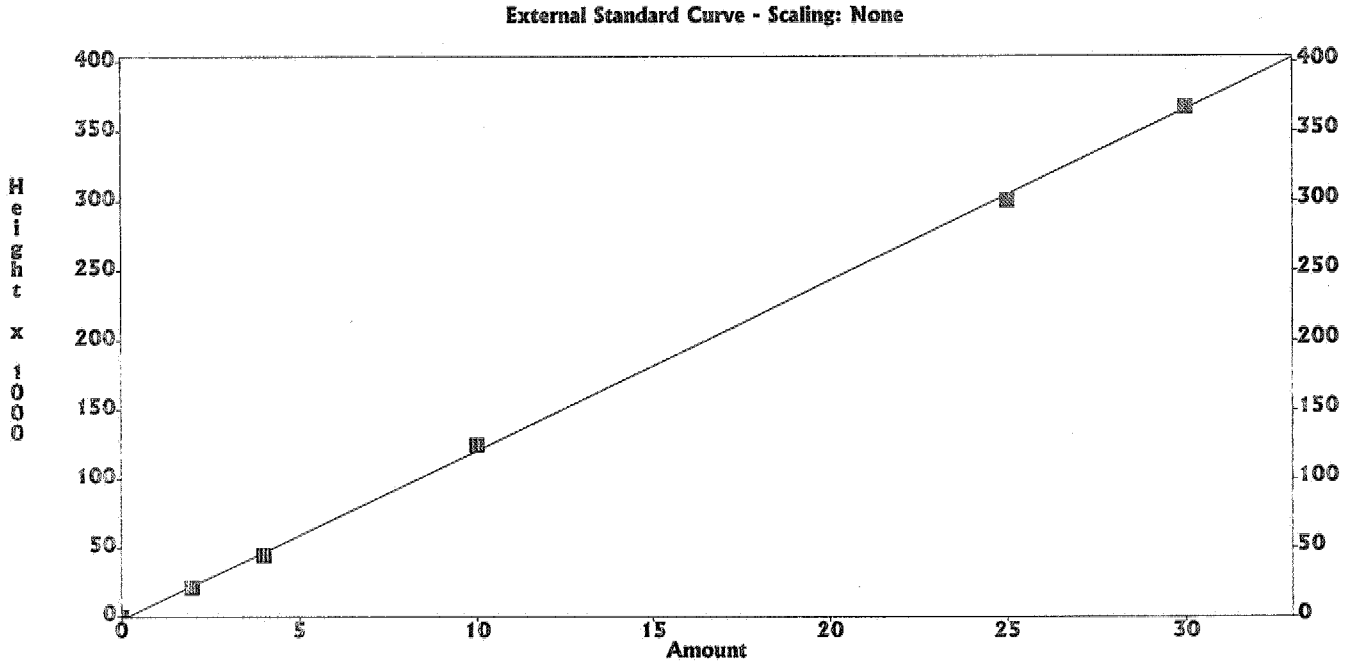
Level	Height	Amount	RF	Rep Hgt 1	Rep Hgt 2	Rep Hgt 3	Rep Hgt 4	Rep Hgt 5	Replic STD	Replic %RSD	Old Height
2	21407	2	10703.50	21407							0
3	45030	4	11257.50	45030							0
4	124940	10	12494.00	124940							0
5	300544	25	12021.76	300544							0
6	367432	30	12247.73	367432							0

Calib Flag: Replace

Average RF: 11744.9
RF StdDev: 743.76
RF %RSD: 6.333

RF Definition: Height / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 8.15415e-005 x Height + 0.185417
R^2 = 0.999559



SECOND SOURCE

IC RESULT FORM CalVersion: PCHLO314.QA1

LFID	LSID	SELCOMP	PERCHLORATE	DateTime	Df
JG28001	IB	P	.000	07/28/0617:30	1
JG28002	S-0.0	P	.0000	07/28/0619:03	1
JG28003	S-2.0	P	2	07/28/0619:23	1
JG28004	S-4.0	P	4	07/28/0619:44	1
JG28005	S-10.0	P	10	07/28/0620:04	1
JG28006	S-25.0	P	25	07/28/0620:24	1
JG28007	S-30.0	P	30	07/28/0620:44	1
JG28008	ICV	P	100%	07/28/0621:05	1
JG28009	ICB	P	.000	07/28/0621:25	1
JG28010	IPCS	P	82.6%	07/28/0621:45	1
JG28011	PCG007WB	P	.000	07/28/0622:05	1
JG28012	MRL	P	105%	07/28/0622:26	1
JG28013	PCG007WL	P	9.98	07/28/0622:46	1
JG28014	PCG007WC	P	9.93	07/28/0623:06	1
JG28015	G048-01	P	6.77	07/28/0623:26	2
JG28016	G064-01	P	8.19	07/28/0623:47	1
JG28017	G064-02	P	4.34	07/29/0600:07	1
JG28018	G064-03	P	1.79	07/29/0600:27	1
JG28019	G064-04	P	1.28	07/29/0600:47	1
JG28020	G064-05	P	3.77	07/29/0601:08	1
JG28021	CCV1-15	P	95.4%	07/29/0601:28	1
JG28022	G039-01	P	4.19	07/29/0601:48	1
JG28023	G039-04	P	3.96	07/29/0602:08	1
JG28024	G039-05	P	3.95	07/29/0602:29	1
JG28025	G039-05D	P	4.36	07/29/0602:49	1
JG28026	G039-05M	P	13.2	07/29/0603:09	1
JG28027	G039-06	P	6.55	07/29/0603:29	1
JG28028	G039-07	P	6.21	07/29/0603:50	1
JG28029	G039-08	P	2.72	07/29/0604:10	1
JG28030	CCV2-30	P	96.5%	07/29/0604:30	1

8-2-06

DAILY CALIBRATION

IC SEQ FORM (ESD)

LFID	LSID	SELCOMP	METHOD	DateTime	DF
JG28001	IB	P	IC57G28	07/28/0617:30	1
JG28002	S-0.0	P	IC57G28	07/28/0619:03	1
JG28003	S-2.0	P	IC57G28	07/28/0619:23	1
JG28004	S-4.0	P	IC57G28	07/28/0619:44	1
JG28005	S-10.0	P	IC57G28	07/28/0620:04	1
JG28006	S-25.0	P	IC57G28	07/28/0620:24	1
JG28007	S-30.0	P	IC57G28	07/28/0620:44	1
JG28008	ICV	P	IC57G28	07/28/0621:05	1
JG28009	ICB	P	IC57G28	07/28/0621:25	1
JG28010	IPCS	P	IC57G28	07/28/0621:45	1
JG28011	PCG007WB	P	IC57G28	07/28/0622:05	1
JG28012	MRL	P	IC57G28	07/28/0622:26	1
JG28013	PCG007WL	P	IC57G28	07/28/0622:46	1
JG28014	PCG007WC	P	IC57G28	07/28/0623:06	1
JG28015	G048-01	P	IC57G28	07/28/0623:26	2
JG28016	G064-01	P	IC57G28	07/28/0623:47	1
JG28017	G064-02	P	IC57G28	07/29/0600:07	1
JG28018	G064-03	P	IC57G28	07/29/0600:27	1
JG28019	G064-04	P	IC57G28	07/29/0600:47	1
JG28020	G064-05	P	IC57G28	07/29/0601:08	1
JG28021	CCV1-15	P	IC57G28	07/29/0601:28	1
JG28022	G039-01	P	IC57G28	07/29/0601:48	1
JG28023	G039-04	P	IC57G28	07/29/0602:08	1
JG28024	G039-05	P	IC57G28	07/29/0602:29	1
JG28025	G039-05D	P	IC57G28	07/29/0602:49	1
JG28026	G039-05M	P	IC57G28	07/29/0603:09	1
JG28027	G039-06	P	IC57G28	07/29/0603:29	1
JG28028	G039-07	P	IC57G28	07/29/0603:50	1
JG28029	G039-08	P	IC57G28	07/29/0604:10	1
JG28030	CCV2-30	P	IC57G28	07/29/0604:30	1

IC RESULT FORM CalVersion: PCHLO314.QA1

LFID	LSID	SELCOMP	PERCHLORATE	DateTime	Df
JG28001	IB	P	.000	07/28/0617:30	1
JG28002	S-0.0	P	.0000	07/28/0619:03	1
JG28003	S-2.0	P	2	07/28/0619:23	1
JG28004	S-4.0	P	4	07/28/0619:44	1
JG28005	S-10.0	P	10	07/28/0620:04	1
JG28006	S-25.0	P	25	07/28/0620:24	1
JG28007	S-30.0	P	30	07/28/0620:44	1
JG28008	ICV	P	100%	07/28/0621:05	1
JG28009	ICB	P	.000	07/28/0621:25	1
JG28010	IPCS	P	82.6%	07/28/0621:45	1
JG28011	PCG007WB	P	.000	07/28/0622:05	1
JG28012	MRL	P	105%	07/28/0622:26	1
JG28013	PCG007WL	P	9.98	07/28/0622:46	1
JG28014	PCG007WC	P	9.93	07/28/0623:06	1
JG28015	G048-01	P	6.77	07/28/0623:26	2
JG28016	G064-01	P	8.19	07/28/0623:47	1
JG28017	G064-02	P	4.34	07/29/0600:07	1
JG28018	G064-03	P	1.79	07/29/0600:27	1
JG28019	G064-04	P	1.28	07/29/0600:47	1
JG28020	G064-05	P	3.77	07/29/0601:08	1
JG28021	CCV1-15	P	95.4%	07/29/0601:28	1
JG28022	G039-01	P	4.19	07/29/0601:48	1
JG28023	G039-04	P	3.96	07/29/0602:08	1
JG28024	G039-05	P	3.95	07/29/0602:29	1
JG28025	G039-05D	P	4.36	07/29/0602:49	1
JG28026	G039-05M	P	13.2	07/29/0603:09	1
JG28027	G039-06	P	6.55	07/29/0603:29	1
JG28028	G039-07	P	6.21	07/29/0603:50	1
JG28029	G039-08	P	2.72	07/29/0604:10	1
JG28030	CCV2-30	P	96.5%	07/29/0604:30	1

ANALYTICAL LOGS

ANALYSIS RUN LOG FOR IC - PERCHLORATE

SOP ☑ EMAX-314.0 Revision No. 2 ☐ Book # A57-012

Start Date 6/15/06 Time 20:57 Ending Date 6/16/06 Time 03:15

BATCH * n/a **

Sample Prep ID	Data File Name	Lab Sample ID	DF	Matrix S	Matrix W	Conductivity, (us/cm)	Notes
* 1	JF15001	IB	1		X		
* 2	002	S-0.0					
* 3	003	S-2.0					
* 4	004	S-4.0					
* 5	005	S-10.0					
* 6	006	S-25.0					
* 7	007	S-30.0					
* 8	008	S-ICV					
* 9	009	ICB					
* 0							
* 1							
* 2							
* 3							
* 4							
* 5							
* 6							
* 7							
* 8							
* 9							
* 0							
* 1							
* 2							
* 3							
* 4							
* 5							
* 6							
* 7							
* 8							
* 9							
* 0							

Instrument Number	57

INITIAL CALIBRATION REFERENCE	
Method File	JK 6/16/06 ~~IC57F15~~ IC57J15
ICAL ID	SW9B-02-826
ICV ID	↓ 827

Standards

Name		ID	Conc. (ug/L)
ICAL	S1	SW9B-02-826	2
	S2	↓	4
	S3		10
	S4		25
	S5		30
ICV		SW9B-02-827	25
CCV-15			
CCV-30			
LCS		JK	6/15/06
MS			
IPC			
CMC			

Comments:

CMC Reading, (us/cm)	QC Criteria (us/cm)	Temp. (°C)
	±30	

Electronic Data Archival	
Location	Date

Analyzed By: JK

This page is checked during the data review process.

FMX LABORATORIES, INC. 1835 W. 213th St. Torrance, CA 90501

90275

ANALYSIS RUN LOG FOR IC - PERCHLORATE

SOP ☑ EMAX-314.0 Revision No. 2 ☐

Book # A57-012

Start Date 7/28/06 Time 17:30 Ending Date 7/29/06 Time 4:30

BATCH * PCG007W **

Sample Prep ID	Data File Name	Lab Sample ID	DF	Matrix S	Matrix W	Conductivity, (us/cm)	Notes
* 1	JE28001	IB	1		X		
* 2	002	S-0.0					
* 3	003	S-2.0					
* 4	004	S-4.0					
* 5	005	S-10.0					
* 6	006	S-25.0					
* 7	007	S-30.0					
* 8	008	ICV					
* 9	009	ICB					
* 0	010	IPCS				3000	
* 1	~~012~~ 011 I= 7/29/06	PCG007WB					* BAH
* 2	012	MEL					
* 3	013	PCG007WL					* BAH
* 4	014	↓ WL	↓				*
* 5	015	G048-01	2				*
* 6	016	G064-01	1			1927	*
* 7	017	02				1594	*
* 8	018	03				903	*
* 9	019	04				1914	*
* 0	020	05				1250	*
* 1	021	CCV1-15					
* 2	022	G039-01				1696	* BAH
* 3	023	04				1694	*
* 4	024	05				1702	*
* 5	025	05D					*
* 6	026	05M					*
* 7	027	06				2330	*
* 8	028	07				2330	*
* 9	029	08				754	*
* 0	030	CCV2-30					

Instrument Number	57

INITIAL CALIBRATION REFERENCE	
Method File	IC57628
ICAL ID	SW9B-02-834
ICV ID	↓ 835

Standards

Name		ID	Conc. (ug/L)
ICAL	S1	SW9B-02-834	2
	S2		4
	S3		10
	S4		25
	S5	↓	30
ICV		SW9B-02-835	25
CCV-15		829	15
CCV-30		830	30
LCS		831	10
MS		805	10
IPC		↓ 832	325/25
CMC		SW3B-02-846	1x13 µg/form

Comments:

CMC Reading, (us/cm)	QC Criteria (us/cm)	Temp. (°C)
1410	±30	25°C

Electronic Data Archival	
Location	Date

Analyzed By: [illegible]

This page is checked during the data review process.

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

6077

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

METHOD 335.2
TOTAL CYANIDE

Six (6) water samples were received on 07/10/06 for Total Cyanide analysis by Method 335.2 in accordance with "Method for Chemical Analysis of Water and Wastewater", EPA 600/4-79-020 (1983).

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. **Duplicate**

   Sample G039-01 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike**

   Sample G039-01M was spiked. %Recovery was within QC limit.

6. **Sample Analysis**

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

METHOD 335.2
TOTAL CYANIDE

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G039

Matrix : WATER
Instrument ID : I70

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	CNG007WB	ND	1	NA	.01	.005	07/21/0610:17	NA	CNG007-12	CNG007-08	CNG007W	NA	NA
LCS1W	CNG007WL	.102	1	NA	.01	.005	07/21/0610:17	NA	CNG007-13	CNG007-08	CNG007W	NA	NA
LCD1W	CNG007WC	.103	1	NA	.01	.005	07/21/0610:17	NA	CNG007-14	CNG007-08	CNG007W	NA	NA
OC2-PMW15-0-17	G039-01	ND	1	NA	.01	.005	07/21/0610:17	NA	CNG007-15	CNG007-08	CNG007W	07/10/06	07/10/06
OC2-PMW15-0-17DUP	G039-01D	ND	1	NA	.01	.005	07/21/0610:17	NA	CNG007-16	CNG007-08	CNG007W	07/10/06	07/10/06
OC2-PMW15-0-17MS	G039-01M	.105	1	NA	.01	.005	07/21/0610:18	NA	CNG007-17	CNG007-08	CNG007W	07/10/06	07/10/06
OC2-PMW15-5-21	G039-04	ND	1	NA	.01	.005	07/21/0610:18	NA	CNG007-18	CNG007-08	CNG007W	07/10/06	07/10/06
OC2-PMW15-1-20	G039-05	ND	1	NA	.01	.005	07/21/0610:19	NA	CNG007-19	CNG007-08	CNG007W	07/10/06	07/10/06
OC2-PMW18A-0-22	G039-06	ND	1	NA	.01	.005	07/21/0610:21	NA	CNG007-22	CNG007-20	CNG007W	07/10/06	07/10/06
OC2-PMW18B-0-23	G039-07	ND	1	NA	.01	.005	07/21/0610:21	NA	CNG007-23	CNG007-20	CNG007W	07/10/06	07/10/06
OC2-PMW18C-0-24	G039-08	ND	1	NA	.01	.005	07/21/0610:21	NA	CNG007-24	CNG007-20	CNG007W	07/10/06	07/10/06

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 335.2
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G039
SAMPLE ID: LCS1W/LCD1W
CONTROL NO.: CNG007WL/C

DATE RECEIVED: NA
DATE EXTRACTED: NA
DATE ANALYZED: 07/21/06 10:17/10:17

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 %
Cyanide	ND	.1	.102	102	.1	.103	103	1	80-120	20

0000

EMAX QUALITY CONTROL DATA
MS ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 335.2
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G039
SAMPLE ID: OC2-PMW15-0-17MS
CONTROL NO.: G039-01M

DATE RECEIVED: 07/10/06
DATE EXTRACTED: NA
DATE ANALYZED: 07/21/06 10:18

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	QC LIMIT (%)
Cyanide	ND	.1	.105	105	75-125

EMAX QUALITY CONTROL DATA
DUPLICATE ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 335.2
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G039
SAMPLE ID: OC2-PMW15-0-17DUP
CONTROL NO.: G039-01D

DATE RECEIVED: 07/10/06
DATE EXTRACTED: NA
DATE ANALYZED: 07/21/06 10:17

ACCESSION:

PARAMETER	SAMPLE (mg/L)	DUP. SAMPLE (mg/L)	RPD (%)	RPD LIMIT (%)
Cyanide	ND	ND	0	20

ANALYSIS RUN LOG
for
CYANIDE

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

Comments:

Book #: A70-CN-007

Instrument No.: 70

Analytical Batch: CN 6007

SOP #	Rev. #
☐ EMAX-9014	0
☐ EMAX-335.1	1
☑ EMAX-335.2	2
☐ EMAX-	

STANDARDS ID	CONC.(µg/L)
S0 Nanopure	0
S1 SM4B-02 - 282	10
S2 ↓	20
S3 ↓	50
S4 ↓	100
S5 ↓	150
S6 SM4B-02 - 282	200
ICV ↓ - 281	100
CCV ↓ - 283	100

REAGENT	ID
Chloramine-T	SW7A-06-047
Pyridine	SW7A-06-158
Barbituric Acid	SW7A-06-698
NaH_2PO_4	SW7B-07-145

Analyzed By: RM

Date: 7/21/06

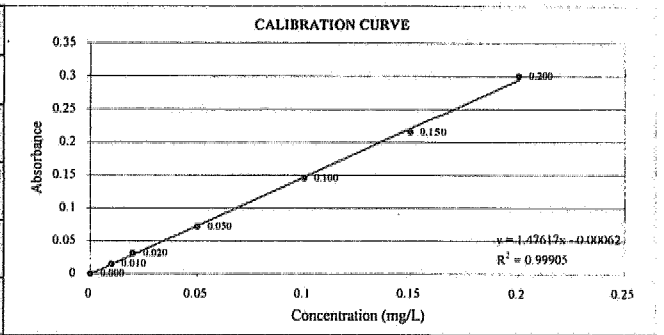
EMAX LABORATORIES, INC.

ANALYSIS FOR CYANIDE

SOP: EMAX-335.2 Rev. 1 Analytical Batch: CNG007 Book #: A70-CN-004 Page: 2

INSTRUMENT ID: 70

Data File Name	Lab Sample ID	λ MN	ABSORBANCE (A)	DATE mm:dd:yy	TIME hh:mm:ss	STD (mg/L)
CNG0071	S0	578	0	07/21/06	10:10:29	0
CNG0072	S1	578	0.015	07/21/06	10:10:35	0.01
CNG0073	S2	578	0.031	07/21/06	10:10:42	0.02
CNG0074	S3	578	0.072	07/21/06	10:10:48	0.05
CNG0075	S4	578	0.145	07/21/06	10:10:57	0.1
CNG0076	S5	578	0.215	07/21/06	10:11:04	0.15
CNG0077	S6	578	0.3	07/21/06	10:11:09	0.2



$r = \sqrt{R^2}$	r (≥0.995)	0.99952
Y=INTERCEPT/SLOPE=		-0.00042
CF=(1/SLOPE)=		0.67743

Data File Name	Lab Sample ID	λ	ABSORBANCE (a)	DATE mm/dd/yy	TIME hh:mm:ss	Sample Amount(S_a) ml | g		%Solids	V_d (ml)	DF	Found Concentration	SAMPLE RESULT		NOTES
CNG0078	ICV	578	0.15	07/21/06	10:15:33	5			5	1	0.10204	0.102	mg/L	
CNG0079	ICB	578	0	07/21/06	10:16:53	5			5	1	0.00042	ND	mg/L	
CNG00710	STD LOW	578	0.027	07/21/06	10:16:58	5			5	1	0.01871	0.0187	mg/L	
CNG00711	STD HIGH	578	0.21	07/21/06	10:17:11	5			5	1	0.14268	0.1427	mg/L	
CNG00712	CNG007WB	578	0	07/21/06	10:17:22	5			5	1	0.00042	ND	mg/L	
CNG00713	CNG007WL	578	0.15	07/21/06	10:17:30	5			5	1	0.10204	0.102	mg/L	
CNG00714	CNG007WC	578	0.152	07/21/06	10:17:44	5			5	1	0.10339	0.1034	mg/L	
CNG00715	G039-01	578	0	07/21/06	10:17:50	5			5	1	0.00042	ND	mg/L	
CNG00716	G039-01D	578	0	07/21/06	10:17:53	5			5	1	0.00042	ND	mg/L	
CNG00717	G039-01M	578	0.155	07/21/06	10:18:30	5			5	1	0.10542	0.1054	mg/L	
CNG00718	G039-04	578	0	07/21/06	10:18:55	5			5	1	0.00042	ND	mg/L	
CNG00719	G039-05	578	0.002	07/21/06	10:19:20	5			5	1	0.00178	ND	mg/L	
CNG00720	CCV1	578	0.156	07/21/06	10:20:02	5			5	1	0.10610	0.1061	mg/L	
CNG00721	CCB1	578	0	07/21/06	10:20:42	5			5	1	0.00042	ND	mg/L	
CNG00722	G039-06	578	0	07/21/06	10:21:16	5			5	1	0.00042	ND	mg/L	
CNG00723	G039-07	578	0.006	07/21/06	10:21:20	5			5	1	0.00449	ND	mg/L	
CNG00724	G039-08	578	0	07/21/06	10:21:22	5			5	1	0.00042	ND	mg/L	
CNG00725	G048-01	578	0.003	07/21/06	10:21:44	5			5	1	0.00246	ND	mg/L	
CNG00726	G048-04	578	0.002	07/21/06	10:22:00	5			5	1	0.00178	ND	mg/L	
CNG00727	G048-05	578	0	07/21/06	10:22:17	5			5	1	0.00042	ND	mg/L	
CNG00728	G048-06	578	0	07/21/06	10:22:33	5			5	1	0.00042	ND	mg/L	
CNG00729	G048-07	578	0	07/21/06	10:22:44	5			5	1	0.00042	ND	mg/L	
CNG00730	G048-08	578	0	07/21/06	10:23:04	5			5	1	0.00042	ND	mg/L	
CNG00731	G048-09	578	0.001	07/21/06	10:23:26	5			5	1	0.00110	ND	mg/L	
CNG00732	CCV2	578	0.158	07/21/06	10:24:10	5			5	1	0.10746	0.1075	mg/L	
CNG00733	CCB2	578	0	07/21/06	10:24:21	5			5	1	0.00042	ND	mg/L	

$$CN = [(A)(CF) - Y] * \left(\frac{V_d}{S_a}\right) * DF$$

Soil Sample Moisture Correction:

$$CN_s = \frac{CN}{\%Solids}$$

Analyzed By: RM

EMAX LABORATORIES, INC.

ANALYSIS FOR CYANIDE QUALITY CONTROL REPORT

Analysis Batch CNG007 Book #: A70-CN-004

INSTRUMENT ID: 70 Page: 2

CALIBRATION CHECK				
STANDARD	RESULT		Expected Value(mg/L)	RECOVERY
ICV	0.1020	mg/L	0.1	102%
STD HIGH	0.1427	mg/L	0.15	95%
STD LOW	0.0187	mg/L	0.02	94%
CCV1	0.1061	mg/L	0.1	106%

LAB CONTROL SAMPLE	Expected Value:	0.1 mg/L		
Lab Sample ID	Result		Recovery	RPD
CNG007WL	0.1020	mg/L	102%	1%
CNG007WC	0.1034	mg/L	103%	

MATRIX QC SAMPLE	Expected Value:	0.1 mg/L		
Lab Sample ID	Result		Recovery	RPD
G039-01	0.0004	mg/L		
G039-01D	0.0004	mg/L	0%	

MATRIX DUPLICATE SAMPLE			
Lab Sample ID	Result		RPD
G039-01	0.0004	mg/L	0%
G039-01D	0.0004	mg/L	
G039-01M	0.1054	mg/L	

Comments:

REPORTING LIMITS		
MDL (Water):	0.005	mg/L
MDL (Soil):	0.2	mg/Kg
RL (Water):	0.01	mg/L
RL (Soil):	1	mg/Kg
Significant Number:	3	

Reviewed by: DM

Date: 7/21/06

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

METHOD 351.3
TKN

Six (6) water samples were received on 07/10/06 for TKN analysis by Method 351.3 in accordance with "Method for Chemical Analysis of Water and Wastewater", EPA 600/4-79-020 (1983).

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. **Duplicate**

   Sample G039-08 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike**

   Sample G039-08 was spiked. %Recovery was within QC limit.

6. **Sample Analysis**

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

METHOD 351.3
TKN

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G039

Matrix : WATER
Instrument ID : I70

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	KNG005WB	ND	1	NA	1	.035	07/20/0617:52	07/20/0608:30	KNG005-13	KNG005-09	KNG005W	NA	07/20/06
LCS1W	KNG005WL	1.12	1	NA	1	.035	07/20/0617:53	07/20/0608:30	KNG005-14	KNG005-09	KNG005W	NA	07/20/06
LCD1W	KNG005WC	1.05	1	NA	1	.035	07/20/0617:53	07/20/0608:30	KNG005-15	KNG005-09	KNG005W	NA	07/20/06
OC2-PMW15-0-17	G039-01	.137J	1	NA	1	.035	07/20/0617:54	07/20/0608:30	KNG005-16	KNG005-09	KNG005W	07/10/06	07/10/06
OC2-PMW15-5-21	G039-04	.317J	1	NA	1	.035	07/20/0617:54	07/20/0608:30	KNG005-17	KNG005-09	KNG005W	07/10/06	07/10/06
OC2-PMW15-1-20	G039-05	.116J	1	NA	1	.035	07/20/0617:54	07/20/0608:30	KNG005-18	KNG005-09	KNG005W	07/10/06	07/10/06
OC2-PMW18A-0-22	G039-06	.0906J	1	NA	1	.035	07/20/0617:54	07/20/0608:30	KNG005-19	KNG005-09	KNG005W	07/10/06	07/10/06
OC2-PMW18B-0-23	G039-07	.224J	1	NA	1	.035	07/20/0617:55	07/20/0608:30	KNG005-20	KNG005-09	KNG005W	07/10/06	07/10/06
OC2-PMW18C-0-24	G039-08	.27J	1	NA	1	.035	07/20/0617:55	07/20/0608:30	KNG005-23	KNG005-21	KNG005W	07/10/06	07/10/06
OC2-PMW18C-0-24DUP	G039-08D	.25J	1	NA	1	.035	07/20/0617:57	07/20/0608:30	KNG005-24	KNG005-21	KNG005W	07/10/06	07/10/06
OC2-PMW18C-0-24MS	G039-08M	1.28	1	NA	1	.035	07/20/0618:02	07/20/0608:30	KNG005-25	KNG005-21	KNG005W	07/10/06	07/10/06

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 351.3
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G039
SAMPLE ID: LCS1W/LCD1W
CONTROL NO.: KNG005WL/C

DATE RECEIVED: 07/20/06
DATE EXTRACTED: 07/20/06 08:30
DATE ANALYZED: 07/20/06 17:53/17:53

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 %
TKN	ND	1	1.12	112	1	1.05	105	6	80-120	20

EMAX QUALITY CONTROL DATA
MS ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 351.3
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G039
SAMPLE ID: OC2-PMW18C-0-24MS
CONTROL NO.: G039-08M

DATE RECEIVED: 07/10/06
DATE EXTRACTED: 07/20/06 08:30
DATE ANALYZED: 07/20/06 18:02

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	QC LIMIT (%)
TKN	.27J	1	1.28	101	75-125

EMAX QUALITY CONTROL DATA
DUPLICATE ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 351.3
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G039
SAMPLE ID: OC2-PMW18C-0-24DUP
CONTROL NO.: G039-08D

DATE RECEIVED: 07/10/06
DATE EXTRACTED: 07/20/06 08:30
DATE ANALYZED: 07/20/06 17:57

ACCESSION:

PARAMETER	SAMPLE (mg/L)	DUP. SAMPLE (mg/L)	RPD (%)	RPD LIMIT (%)
TKN	.27J	.25J	8	20

0050

DISTILLATION LOG FOR NH_3 / DIGESTION AND DISTILLATION FOR TKN

Book # EKN-008

SOP ☑ EMAX-350.2 Rev. No.: 2 ☑ EMAX-351.3 Rev. No.: 2 ☐ KH 7/20/06

Start Date 7/20/06 Time 08:30 End Date 7/20/06 Time 15:45

PREPARATION BATCH # DKN0002.5 KH 7/20/06

Sample Prep ID	Lab Sample ID	Sample pH	NaOH Added (ml)	Boric Acid (ml)	Borate Buffer (ml)	Sample Amount (ml)	Extract Volume (ml)	Notes
*01	KN6 ~~00~~ 5 WB KH 7/20/06	9.5	~~0.4~~ N/A KH 7/19/06	5	~~4~~ N/A KH 7/19/06	50	50	
*02	WL							
*03	WC							
*04	S-~~0.4~~ 0.5 KH 7/20/06							
*05	S-1.6							
*06	G039-01							
*07	04							
*08	05							
*09	06							
*10	07							
*11	08							
*12	08D							
*13	08M							
*14	G048-01							
*15	04							
*16	05							
*17	06							
*18	07							
*19	08							
*20	09							
*21	G048-01							
*22								
*23								
*24								
*25								
*26								

Standards	ID	Amount Added (ml)
ICV/MS	SW2B-03-395	10 ml of 10 ppm
LCS		

Reagent	Lot# / ID
NaOH	N/A
Digestion Mixture	SW7A-07-021
Borate Buffer	N/A
H_3BO_3	SW7B-07-133
Distilling Soln.	SW7B-07-109

Comments:

Prepared By: KH

Standard Added By: KH

Checked By:

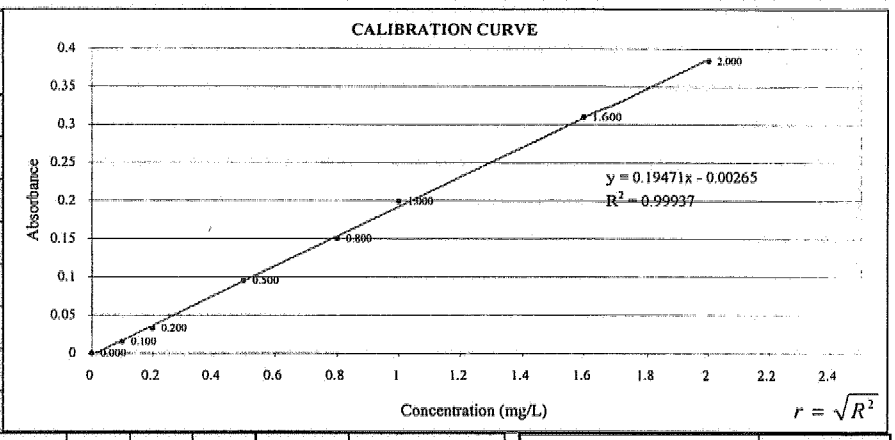
EMAX LABORATORIES, INC. 1835 W. 205th St. Torrance, CA 90501

EMAX LABORATORIES, INC.

ANALYSIS FOR TOTAL KJELDAHL NITROGEN (TKN)

SOP: EMAX-351.2 Rev. 2 Analytical Batch: 06KNG005 Book #: A70-KN-006 Page: 22

Data File Name	Lab Sample ID	λ MN	Absorbance (A)	DATE mm.dd.yy	TIME hh:mm.ss	STD (mg/L)
06KNG005 01	S0	425	0	07/20/06	17:42:16	0
06KNG005 02	S1	425	0.015	07/20/06	17:42:22	0.1
06KNG005 03	S2	425	0.033	07/20/06	17:42:37	0.2
06KNG005 04	S3	425	0.095	07/20/06	17:43:00	0.5
06KNG005 05	S4	425	0.15	07/20/06	17:43:20	0.8
06KNG005 06	S5	425	0.199	07/20/06	17:43:38	1
06KNG005 07	S6	425	0.31	07/20/06	17:43:59	1.6
06KNG005 08	S7	425	0.384	07/20/06	17:44:27	2



$r = \sqrt{R^2}$

Data File Name	Lab Sample ID	λ	A	DATE mm/dd/yy	TIME hh:mm:ss	Sample Amount(S) ml | g		%Solids	V_d (ml)	DF	Found Conc.	SAMPLE RESULT	
06KNG005 09	ICV	425	0.02	07/20/06	17:51:45	50			50	1	0.11632	0.116	mg/L
06KNG005 10	ICB	425	0	07/20/06	17:51:46	50			50	1	0.01361	ND	mg/L
06KNG005 11	STD HIGH	425	0.306	07/20/06	17:51:53	50			50	1	1.58518	1.59	mg/L
06KNG005 12	STD LOW	425	0.097	07/20/06	17:52:45	50			50	1	0.51179	0.512	mg/L
06KNG005 13	KNG005WB	425	0	07/20/06	17:52:56	50			50	1	0.01361	ND	mg/L
06KNG005 14	KNG005WL	425	0.215	07/20/06	17:53:16	50			50	1	1.11782	1.12	mg/L
06KNG005 15	KNG005WC	425	0.201	07/20/06	17:53:39	50			50	1	1.04592	1.05	mg/L
06KNG005 16	G039-01	425	0.024	07/20/06	17:54:05	50			50	1	0.13687	0.137	mg/L
06KNG005 17	G039-04	425	0.059	07/20/06	17:54:17	50			50	1	0.31662	0.317	mg/L
06KNG005 18	G039-05	425	0.02	07/20/06	17:54:31	50			50	1	0.11632	0.116	mg/L
06KNG005 19	G039-06	425	0.015	07/20/06	17:54:44	50			50	1	0.09065	0.0906	mg/L
06KNG005 20	G039-07	425	0.041	07/20/06	17:55:01	50			50	1	0.22418	0.224	mg/L
06KNG005 21	CCV1	425	0.199	07/20/06	17:55:14	50			50	1	1.03565	1.04	mg/L
06KNG005 22	CCB1	425	0	07/20/06	17:55:28	50			50	1	0.01361	ND	mg/L
06KNG005 23	G039-08	425	0.05	07/20/06	17:55:45	50			50	1	0.27040	0.27	mg/L
06KNG005 24	G039-08D	425	0.046	07/20/06	17:57:13	50			50	1	0.24986	0.25	mg/L
06KNG005 25	G039-08M	425	0.247	07/20/06	18:02:04	50			50	1	1.28217	1.28	mg/L
06KNG005 26	G048-01	425	0.016	07/20/06	18:03:30	50			50	1	0.09578	0.0958	mg/L
06KNG005 27	G048-04	425	0.134	07/20/06	18:03:47	50			50	1	0.70181	0.702	mg/L
06KNG005 28	G048-05	425	0.069	07/20/06	18:04:01	50			50	1	0.36798	0.368	mg/L
06KNG005 29	G048-06	425	0.113	07/20/06	18:04:16	50			50	1	0.59396	0.594	mg/L
06KNG005 30	G048-07	425	0.095	07/20/06	18:04:29	50			50	1	0.50152	0.502	mg/L
06KNG005 31	G048-08	425	0.032	07/20/06	18:04:45	50			50	1	0.17796	0.178	mg/L
06KNG005 32	G048-09	425	0.047	07/20/06	18:05:01	50			50	1	0.25499	0.255	mg/L
06KNG005 33	CCV2	425	0.198	07/20/06	18:05:21	50			50	1	1.03051	1.03	mg/L
06KNG005 34	CCB2	425	0	07/20/06	18:05:28	50			50	1	0.01361	ND	mg/L
06KNG005 35	G448-01	425	0.094	07/20/06	18:05:33	50			50	1	0.49638	0.496	mg/L
06KNG005 36	CCV3	425	0.198	07/20/06	18:05:38	50			50	1	1.03051	1.03	mg/L
06KNG005 37	CCB3	425	0	07/20/06	18:05:40	50			50	1	0.01361	ND	mg/L

INSTRUMENT ID:	70
CALIBRATION TABLE	
r (≥0.995)	0.99969
Y=INTERCEPT/SLOPE=	-0.01361
CF=(1/SLOPE)=	5.13587

EMAX QC TABLE

STANDARD	TV (mg/L)	Method Requirement
ICV	1	0.85 - 1.15 mg/L
CCV	1	0.9 - 1.1 mg/L
CCB	0	< MDL
Method Blank	0	< RL
LCS/LCD (Water)	1	0.8 - 1.2 mg/L
MS/MSD (Water)	1	0.8 - 1.2 mg/L
LCS/LCD (Soil)	5	4 - 6 mg/Kg
MS/MSD (Soil)	5	4 - 6 mg/Kg

MISCELLANEOUS INFORMATION

MDL (Water):	0.03	mg/L
MDL (Soil):	0.5	mg/Kg
RL (Water):	0.1	mg/L
RL (Soil):	1	mg/Kg
Significant Number:	3	

$$TKN = [(A)(CF) - Y] * \left(\frac{V_d}{S_a}\right)(DF)$$

COMMENTS:

Analyzed By: KH

Reviewed By:

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

METHOD 370.1
DISSOLVED SILICA

Six (6) water samples were received on 07/10/06 for Dissolved Silica analysis by Method 370.1 in accordance with "Method for Chemical Analysis of Water and Wastewater", EPA 600/4-79-020 (1983).

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. **Duplicate**

   Sample G039-08 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike**

   Sample G039-08 was spiked. %Recovery was within QC limit.

6. **Sample Analysis**

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

METHOD 370.1
DISSOLVED SILICA

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G039

Matrix : WATER
Instrument ID : I70

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	SIG005WB	ND	1	NA	2	1	07/19/0616:24	NA	SIG005-34	SIG005-32	SIG005W	NA	NA
LCS1W	SIG005WL	14.7	1	NA	2	1	07/19/0616:25	NA	SIG005-35	SIG005-32	SIG005W	NA	NA
LCD1W	SIG005WC	14.6	1	NA	2	1	07/19/0616:26	NA	SIG005-36	SIG005-32	SIG005W	NA	NA
OC2-PMW15-0-17	G039-01R	42.0	10	NA	20	10	07/19/0616:28	NA	SIG005-38	SIG005-32	SIG005W	07/10/06	07/10/06
OC2-PMW15-5-21	G039-04R	43.2	10	NA	20	10	07/19/0616:30	NA	SIG005-40	SIG005-32	SIG005W	07/10/06	07/10/06
OC2-PMW15-1-20	G039-05R	40.4	10	NA	20	10	07/19/0616:32	NA	SIG005-42	SIG005-32	SIG005W	07/10/06	07/10/06
OC2-PMW18A-0-22	G039-06R	30.3	2	NA	4	2	07/19/0616:36	NA	SIG005-46	SIG005-44	SIG005W	07/10/06	07/10/06
OC2-PMW18B-0-23	G039-07R	30.2	2	NA	4	2	07/19/0616:38	NA	SIG005-48	SIG005-44	SIG005W	07/10/06	07/10/06
OC2-PMW18C-0-24	G039-08	22.6	1	NA	2	1	07/19/0618:39	NA	SIG005-49	SIG005-44	SIG005W	07/10/06	07/10/06
OC2-PMW18C-0-24DUP	G039-08D	22.5	1	NA	2	1	07/19/0618:40	NA	SIG005-50	SIG005-44	SIG005W	07/10/06	07/10/06
OC2-PMW18C-0-24MS	G039-08G	35.5	2	NA	4	2	07/19/0618:42	NA	SIG005-52	SIG005-44	SIG005W	07/10/06	07/10/06

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 370.1
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G039
SAMPLE ID: LCS1W/LCD1W
CONTROL NO.: SIG005WL/C

DATE RECEIVED: NA
DATE EXTRACTED: NA
DATE ANALYZED: 07/19/06 16:24/16:26

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 %
Dissolved Silica	ND	15	14.7	98	15	14.6	97	1	80-120	20

EMAX QUALITY CONTROL DATA
MS ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 370.1
MATRIX: WATER
% MOISTURE: NA

==========

BATCH NO.: 06G039
SAMPLE ID: OC2-PMW18C-0-24MS
CONTROL NO.: G039-08G

DATE RECEIVED: 07/10/06
DATE EXTRACTED: NA
DATE ANALYZED: 07/19/06 18:42

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	QC LIMIT (%)
Dissolved Silica	22.6	15	35.5	86	75-125

EMAX QUALITY CONTROL DATA
DUPLICATE ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 370.1
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G039
SAMPLE ID: OC2-PMW18C-0-24DUP
CONTROL NO.: G039-08D

DATE RECEIVED: 07/10/06
DATE EXTRACTED: NA
DATE ANALYZED: 07/19/06 18:40

ACCESSION:

PARAMETER	SAMPLE (mg/L)	DUP. SAMPLE (mg/L)	RPD (%)	RPD LIMIT (%)
Dissolved Silica	22.6	22.5	0	20

ANALYSIS LOG FOR DISSOLVED SILICA

SOP EMAX-370.1 ☑ Revision No. 1

Book # A70-SI-003

Starting Date: 7/19/06 Time: 15:51 Ending Date: 7/19/06 Time: 16:50

ANALYTICAL BATCH # SIG004

	Data File Name	Lab Sample ID	Matrix S	Matrix W	Time	Volume Colored	Final Vol.	DF	Absorbance @ 410nm	Silica (mg/L)	Notes
* 1		S-0.0		/	15:51	50	54.5	1	0.000		
* 2		S-2.0			52				0.050		
* 3		S-5.0			53				0.140		
* 4		S-10.0			54				0.265		
* 5		S-15.0			55				0.386		
* 6		S-20.0			56				0.512		
* 7		S-25.0			57				0.624		
* 8		ICV			58				0.372	14.6	
* 9		ICB			59				0.000	ND	
* 0		SIG004WB			16:00				0.000	ND	
* 1		WL			01				0.368	14.4	
* 2		WC			02				0.370	14.5	
* 3		G019-01			03				0.820	overrange	
* 4		01R			04			2X	0.462	36.3	
* 5		05			05			1	1.040	overrange	
* 6		05R			06			10X	0.132	50.0	
* 7		06			07			1	1.045	overrange	
* 8		06R			08			10X	0.129	48.8	
* 9		G027-01			09			1	0.670	overrange	
* 0		CCV1			10				0.382	15.0	
* 1		CCB1			11				0.000	ND	
* 2		G027-~~02~~01R (KW 7/20/06)			12			2X	0.401	31.5	
* 3		03			13			1	0.686	overrange	
* 4		03R			14			2X	0.412	32.3	
* 5		05			15			1	0.686	overrange	
* 6		05R			16			2X	0.416	32.7	
* 7		07			17			1	0.622	24.5	
* 8		08			18			1	1060	overrange	
* 9		08R			19			10X	0.132	49.98≈50.0	
* 0		08D			20			10X	0.133	50.4	

Instrument No: 70		
Standard	ID	Conc. (mg/L)
S0	nanopure	0.0
S1	SW2B-03-487	2.0
S2		5.0
S3		10.0
S4		15.0
S5		20.0
S6		25.0
ICV/MS/LCS	SW2B-03-488	15.0
CCV	487	15.0

Reagent	ID
Coloring Reagent	N/A
Ammonium Molybdate	SW7A-06-220
HCL(1:1)	SW7B-07-150B
Oxalic Acid	(KW 7/20/06) 103A
Sodium Borate	N/A
Potassium Dichromate	

Standard Curve		
r ~~R~~	~~0.99745~~	0.99951
Y	~~0.68019~~	0.26918
CF	~~45.933~~	39.9000

(KW 7/20/06)

Comments: R^2=0.99902

All samples filtered prior to analysis.

Analyzed By: KW

$SiO_{2(mg/L)} = A \times CF$ where: SiO_2 = Concentration of dissolved Si; A = Absorbance; CF = Calibration Factor

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ANALYSIS LOG FOR DISSOLVED SILICA

SOP EMAX-370.1 ☑ Revision No. 1

Book # A70-SI-003

Starting Date: 7/19/06 Time: 15:51 Ending Date: 7/19/06 Time: 16:50

Data File Name	Lab Sample ID	Matrix S	Matrix W	Time	Volume Colored	Final Vol.	DF	Absorbance @ 410nm	Silica (mg/L)	Notes
*31	G027-08M		/	16:21	50	54.5	10X	0.163	62.3	
*2	CCV2			22			1	0.380	14.9	
*3	CCB2			23				0.000	ND	
*4	SIG005WB			24				0.000	ND	
*5	WL			25				0.374	14.7	
*6	WC			26				0.372	14.6	
*7	G039-01			27				0.900	overrange	
*8	01R			28			10X	0.112	42.0	
*9	04			29			1	0.910	overrange	
*0	04R			30			10X	0.115	43.2	
*1	05			31			1	0.885	overrange	
*2	05R			32			10X	0.108	40.4	
*3	06			33			1	0.676	overrange	
*4	CCV3, 06R			34			1	0.382	15.0	
*5	CCB3 07			35			1	0.000	ND	
*6	G039-06R07R			36			2X	0.386	30.3	
*7	07 08			37			1	0.672	overrange	
*8	07R08D			38			2X	KW 7/19/06 ~~0.570~~ 0.385	30.2	
*9	08 08W			39			1	0.572	22.6	
*0	08D 7/19/06			40				0.570	22.5	
*1	08M			41				0.800	overrange	
*2	08G			42			2X	0.452	35.5	
* 3	G064-02			43			1	0.634	overrange	
* 4	02R			44			2X	0.346	27.1	
* 5	03			45			1	0.508	20.0	
* 6	CCV4 ~~05~~			46				0.380	14.9	
* 7	CCB4			47				0.000	ND	
* 8	G064-05			48				0.610	24.1	
* 9	CCV5			49				0.380	14.9	
* 0	CCB5			50				0.000	ND	

ANALYTICAL BATCH # SIG007

Instrument No: 70		
Standard	ID	Conc. (mg/L)
S0	See pg. 55	0.0
S1		2.0
S2		5.0
S3		10.0
S4		15.0
S5		20.0
S6		25.0
ICV/MS/LCS		15.0
CCV		15.0

Reagent	ID
Coloring Reagent	
Ammonium Molybdate	
HCL(1:1)	
Oxalic Acid	
Sodium Borate	
Potassium Dichromate	

Standard Curve	
R^2	
Y	
CF	

Comments:

All samples filtered prior to analysis.

Analyzed By: KW

$SiO_{2(mg/L)} = A \times CF$ where: SiO_2 = Concentration of dissolved Si; A = Absorbance; CF = Calibration Factor

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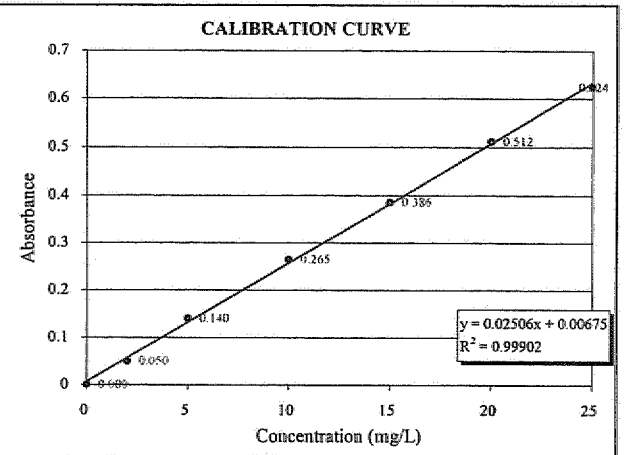
CALIBRATION

Page: ~~52-54~~ 55,56

Analytical Batch: SIG004 Instrument ID: 70 Book #: A70- SI-003

Data File Name	Lab Sample ID	λ MN	ABSORBANCE (A)	DATE mm:dd:yy	TIME hh:mm:ss	STD (mg/L)
SIG004-S0	S0	410	0	07/19/06	15:51:58	0
SIG004-S1	S1	410	0.05	07/19/06	15:52:10	2
SIG004-S2	S2	410	0.14	07/19/06	15:52:32	5
SIG004-S3	S3	410	0.265	07/19/06	15:52:43	10
SIG004-S4	S4	410	0.386	07/19/06	15:53:06	15
SIG004-S5	S5	410	0.512	07/19/06	15:53:22	20
SIG004-S6	S6	410	0.624	07/19/06	15:53:34	25



r $\sqrt{R^2}$	r (≥0.995)	**0.99951**
	Y=Intercept/Slope=	**0.26918**
	CF=(1/Slope)=	**39.90100**

Analyzed by: KW

Reviewed by: [illegible]

0108

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G039**

METHOD 415.1
TOTAL ORGANIC CARBON

Six (6) water samples were received on 07/10/06 for Total Organic Carbon analysis by Method 415.1 in accordance with "Method for Chemical Analysis of Water and Wastewater", EPA 600/4-79-020 (1983).

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. Duplicate

Duplicate sample was not designated in this SDG.

5. Matrix Spike

MS sample was not designated in this SDG.

6. Sample Analysis

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

METHOD 415.1
TOC

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G039

Matrix : WATER
Instrument ID : I62

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	TCG012WB	ND	1	NA	2	.5	07/18/0600:29	NA	TCG012-5	TCG012-2	TCG012W	NA	NA
LCS1W	TCG012WL	24.9	1	NA	2	.5	07/18/0600:39	NA	TCG012-6	TCG012-2	TCG012W	NA	NA
LCD1W	TCG012WC	25	1	NA	2	.5	07/18/0600:49	NA	TCG012-7	TCG012-2	TCG012W	NA	NA
OC2-PMW15-0-17	G039-01	.95J	1	NA	2	.5	07/18/0602:22	NA	TCG012-17	TCG012-14	TCG012W	07/10/06	07/10/06
OC2-PMW15-5-21	G039-04	1.01J	1	NA	2	.5	07/18/0602:31	NA	TCG012-18	TCG012-14	TCG012W	07/10/06	07/10/06
OC2-PMW15-1-20	G039-05	.909J	1	NA	2	.5	07/18/0602:40	NA	TCG012-19	TCG012-14	TCG012W	07/10/06	07/10/06
OC2-PMW18A-0-22	G039-06	2.6	1	NA	2	.5	07/18/0602:49	NA	TCG012-20	TCG012-14	TCG012W	07/10/06	07/10/06
OC2-PMW18B-0-23	G039-07	.974J	1	NA	2	.5	07/18/0602:58	NA	TCG012-21	TCG012-14	TCG012W	07/10/06	07/10/06
OC2-PMW18C-0-24	G039-08	ND	1	NA	2	.5	07/18/0603:07	NA	TCG012-22	TCG012-14	TCG012W	07/10/06	07/10/06

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G039
METHOD: METHOD 415.1

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	TCG012WB	TCG012WL	TCG012WC		
LAB FILE ID:	TCG012-5	TCG012-6	TCG012-7		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	07/18/0600:29	07/18/0600:39	07/18/0600:49	DATE RECEIVED:	NA
PREP. BATCH:	TCG012W	TCG012W	TCG012W		
CALIB. REF:	TCG012-2	TCG012-2	TCG012-2		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
TOC	ND	25	24.9	100	25	25	100	0	80-120	20

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	Type	Analysis	Sample Name	Sample ID	ObjectID	Origin	Dilution	Result	Notes	Comment
1	Standard	NPOC	ICAL	TCG012-1	0A-123	C:\Pro	1.000			
2	Control	NPOC	ICV	TCG012-2	0A-123	C:\Pro	1.000	NPOC:24.63 mg/L	Control valu	
3	Unknown	NPOC	ICB	TCG012-3	0A-123	C:\Pro	1.000	NPOC:0.2071 mg/L		
4	Unknown	NPOC	HCO3/CO3	TCG012-4	0A-123	C:\Pro	1.000	NPOC:0.000 mg/L		
5	Unknown	NPOC	TCG012WB	TCG012-5	0A-123	C:\Pro	1.000	NPOC:0.000 mg/L		
6	Unknown	NPOC	TCG012WL	TCG012-6	0A-123	C:\Pro	1.000	NPOC:24.91 mg/L		
7	Unknown	NPOC	TCG012WC	TCG012-7	0A-123	C:\Pro	1.000	NPOC:25.03 mg/L		
8	Unknown	NPOC	06G048-01	TCG012-8	0A-123	C:\Pro	1.000	NPOC:1.649 mg/L		
9	Unknown	NPOC	06G048-04	TCG012-9	0A-123	C:\Pro	1.000	NPOC:0.5259 mg/L		
10	Unknown	NPOC	06G048-05	TCG012-10	0A-123	C:\Pro	1.000	NPOC:0.7402 mg/L		
11	Unknown	NPOC	06G048-06	TCG012-11	0A-123	C:\Pro	1.000	NPOC:0.6130 mg/L		
12	Unknown	NPOC	06G048-07	TCG012-12	0A-123	C:\Pro	1.000	NPOC:0.6492 mg/L		
13	Unknown	NPOC	06G048-08	TCG012-13	0A-123	C:\Pro	1.000	NPOC:0.5924 mg/L		
14	Control	NPOC	CCV1	TCG012-14	0A-123	C:\Pro	1.000	NPOC:24.81 mg/L	Control valu	
15	Unknown	NPOC	CCB1	TCG012-15	0A-123	C:\Pro	1.000	NPOC:0.000 mg/L		
16	Unknown	NPOC	06G048-09	TCG012-16	0A-123	C:\Pro	1.000	NPOC:0.5987 mg/L		
17	Unknown	NPOC	06G039-01	TCG012-17	0A-123	C:\Pro	1.000	NPOC:0.9495 mg/L		
18	Unknown	NPOC	06G039-04	TCG012-18	0A-123	C:\Pro	1.000	NPOC:1.013 mg/L		
19	Unknown	NPOC	06G039-05	TCG012-19	0A-123	C:\Pro	1.000	NPOC:0.9090 mg/L		
20	Unknown	NPOC	06G039-06	TCG012-20	0A-123	C:\Pro	1.000	NPOC:2.597 mg/L		
21	Unknown	NPOC	06G039-07	TCG012-21	0A-123	C:\Pro	1.000	NPOC:0.9742 mg/L		
22	Unknown	NPOC	06G039-08	TCG012-22	0A-123	C:\Pro	1.000	NPOC:0.3170 mg/L		
23	Unknown	NPOC	06G443-01	TCG012-23	0A-123	C:\Pro	10.00	NPOC:133.6 mg/L		
24	Unknown	NPOC	06G443-01D	TCG012-24	0A-123	C:\Pro	10.00	NPOC:129.4 mg/L		
25	Unknown	NPOC	06G443-01M	TCG012-25	0A-123	C:\Pro	10.00	NPOC:385.3 mg/L		
26	Control	NPOC	CCV2	TCG012-26	0A-123	C:\Pro	1.000	NPOC:26.27 mg/L	Control valu	
27	Unknown	NPOC	CCB2	TCG012-27	0A-123	C:\Pro	1.000	NPOC:0.06636 mg/L		
28	Unknown	NPOC	06G027-01	TCG012-28	0A-123	C:\Pro	1.000	NPOC:1.522 mg/L		
29	Unknown	NPOC	06G027-03	TCG012-29	0A-123	C:\Pro	1.000	NPOC:1.674 mg/L		
30	Unknown	NPOC	06G027-05	TCG012-30	0A-123	C:\Pro	1.000	NPOC:1.527 mg/L		
31	Unknown	NPOC	06G027-07	TCG012-31	0A-123	C:\Pro	1.000	NPOC:0.6402 mg/L		
32	Unknown	NPOC	06G027-08	TCG012-32	0A-123	C:\Pro	1.000	NPOC:1.161 mg/L		
33	Unknown	NPOC	TCG013WB	TCG012-33	0A-123	C:\Pro	1.000	NPOC:0.000 mg/L		
34	Unknown	NPOC	TCG013WL	TCG012-34	0A-123	C:\Pro	1.000	NPOC:26.15 mg/L		
35	Unknown	NPOC	TCG013WC	TCG012-35	0A-123	C:\Pro	1.000	NPOC:26.14 mg/L		
36	Unknown	NPOC	06G019-01	TCG012-36	0A-123	C:\Pro	1.000	NPOC:1.440 mg/L		
37	Unknown	NPOC	06G019-05	TCG012-37	0A-123	C:\Pro	1.000	NPOC:0.6856 mg/L		
38	Control	NPOC	CCV3	TCG012-38	0A-123	C:\Pro	1.000	NPOC:25.82 mg/L	Control valu	
39	Unknown	NPOC	CCB3	TCG012-39	0A-123	C:\Pro	1.000	NPOC:0.000 mg/L		
40	Unknown	NPOC	06G019-06	TCG012-40	0A-123	C:\Pro	1.000	NPOC:0.6504 mg/L		
41	Unknown	NPOC	06G064-01	TCG012-41	0A-123	C:\Pro	1.000	NPOC:32.02 mg/L		
42	Unknown	NPOC	06G064-02	TCG012-42	0A-123	C:\Pro	1.000	NPOC:0.7328 mg/L		
43	Unknown	NPOC	06G064-03	TCG012-43	0A-123	C:\Pro	1.000	NPOC:0.5962 mg/L		
44	Unknown	NPOC	06G064-04	TCG012-44	0A-123	C:\Pro	1.000	NPOC:2.720 mg/L		
45	Unknown	NPOC	06G064-05	TCG012-45	0A-123	C:\Pro	1.000	NPOC:0.7690 mg/L		
46	Control	NPOC	CCV4	TCG012-46	0A-123	C:\Pro	1.000	NPOC:26.14 mg/L	Control valu	
47	Unknown	NPOC	CCB4	TCG012-47	0A-123	C:\Pro	1.000	NPOC:0.000 mg/L		
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66										

Instr.Information

System	toc
Detector	Combustion
Catalyst	Regular Sensitivity
Cell Length	long

Cal. Curve

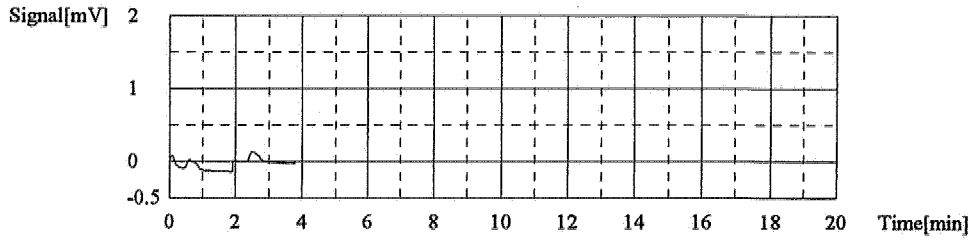
Sample Name:	ICAL
Sample ID:	TCG012-1
Cal. Curve:	TCG012.2006_07_17_22_51_53.cal

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.000	50uL	1	*******		07/17/06 11:00:34 PM
2	0.000	50uL	1	*******		07/17/06 11:02:38 PM

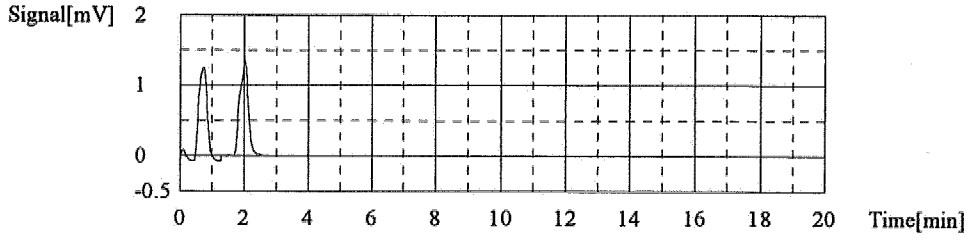
Acid Add.	2.500%
Sp. Time	90.00sec
Mean Area	0.000



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2.505	50uL	10	*******		07/17/06 11:11:07 PM
2	2.518	50uL	10	*******		07/17/06 11:12:33 PM

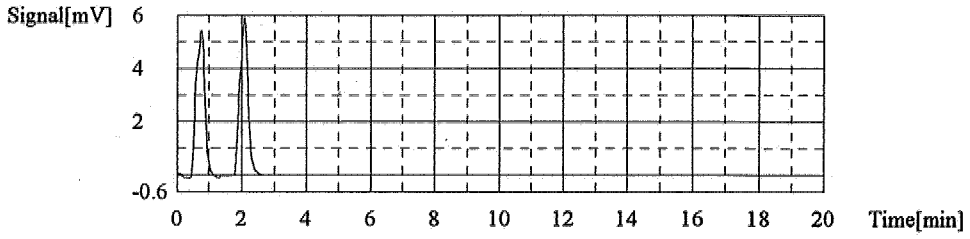
Acid Add.	2.500%
Sp. Time	90.00sec
Mean Area	2.512



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	10.99	50uL	2	*******		07/17/06 11:19:12 PM
2	10.87	50uL	2	*******		07/17/06 11:20:43 PM

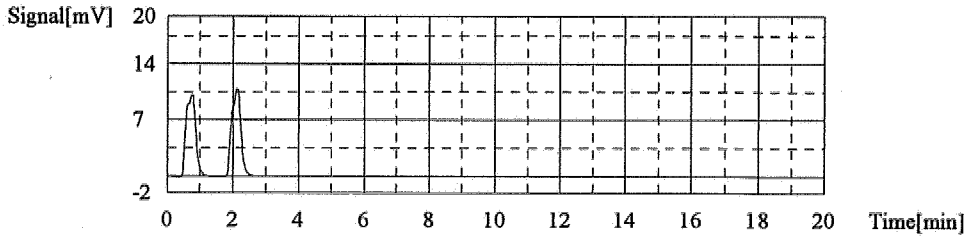
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 10.93



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	21.79	50uL	1	*******		07/17/06 11:26:40 PM
2	21.49	50uL	1	*******		07/17/06 11:28:14 PM

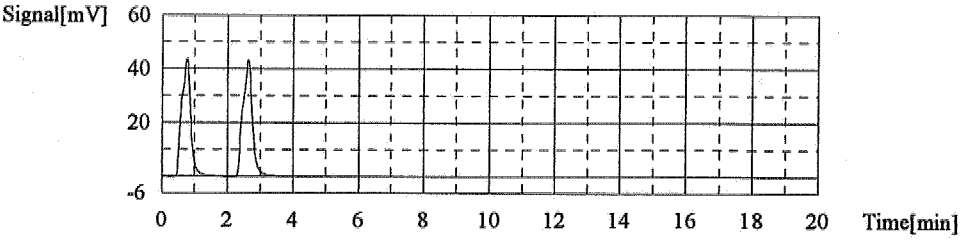
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 21.64



Conc: 40.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	87.40	50uL	2	*******		07/17/06 11:37:18 PM
2	88.01	50uL	2	*******		07/17/06 11:39:21 PM

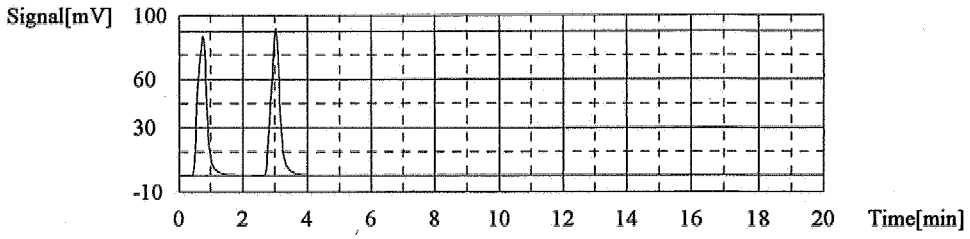
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 87.71



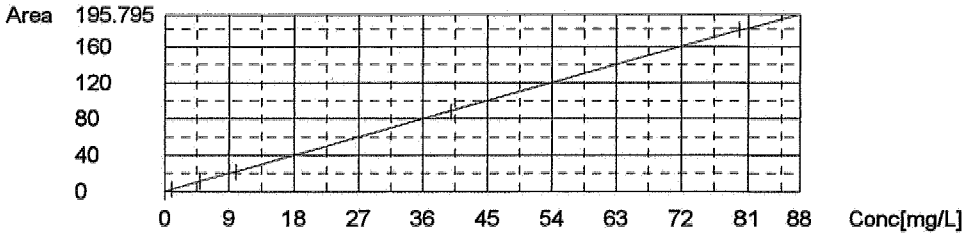
Conc: 80.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	178.2	50uL	1	*******		07/17/06 11:46:12 PM
2	178.4	50uL	1	*******		07/17/06 11:48:33 PM

Acid Add.	2.500%
Sp. Time	90.00sec
Mean Area	178.3



Slope:	2.225
Intercept	0.000
r^2	0.999925



Control Sample

Sample Name:	ICV
Sample ID:	TCG012-2
Method:	TCG012.tpl
Chk. Result	Control value: 24.63 / Control exceeds range!

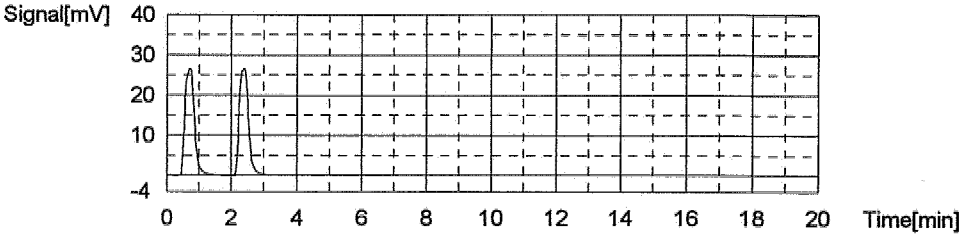
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:24.63 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	55.22	24.82mg/L	50uL	1		TCG012.2006_07_17_22_51_53.cal	07/17/06 11:57:00 PM
2	54.38	24.44mg/L	50uL	1		TCG012.2006_07_17_22_51_53.cal	07/17/06 11:58:46 PM

Mean Area	54.80
Mean Conc.	24.63mg/L



Sample

Sample Name: ICB
Sample ID: TCG012-3
Origin: TCG012.met
Chk. Result

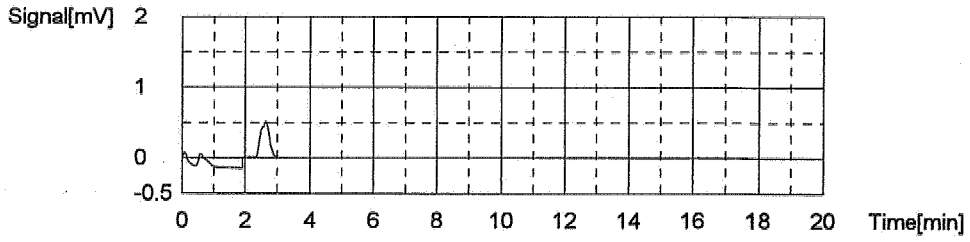
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2071 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	50uL	1		TCG012.2006_07_17_22_51_53.cal	07/18/06 12:07:11 AM
2	0.9216	0.4142mg/L	50uL	1		TCG012.2006_07_17_22_51_53.cal	07/18/06 12:08:29 AM

Mean Area 0.4608
Mean Conc. 0.2071mg/L



Sample

Sample Name: HCO3/CO3
Sample ID: TCG012-4
Origin: TCG012.met
Chk. Result

Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.000 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	50uL	1		TCG012.2006_07_17_22_51_53.cal	07/18/06 12:16:54 AM
2	0.000	0.000mg/L	50uL	1		TCG012.2006_07_17_22_51_53.cal	07/18/06 12:18:58 AM

ANALYSIS RUN LOG FOR TOC

SOP: ☐ EMAX-9060 Revision No. 1 ☑ EMAX-415.1 Revision No. 1 ☐

Book # A62-008

Start Date: 7/17/06 Time: 23:00 EndingDate: 7/18/06 Time: 08:16

Sample Prep. ID	Data File Name	Lab Sample ID	DF	Matrix S	Matrix W	Run Time	Notes
* 1	TC6012						NPOC Run
* 2							pH<2
* 3							
* 4							
* 5							
* 6							
* 7							
* 8							
* 9							
* 0							
* 1							
* 2							
* 3							
* 4							
* 5							
* 6							
* 7							
* 8							
* 9							
* 0							
* 1							
* 2							
* 3							
* 4							
* 5							
* 6							
* 7							
* 8							
* 9							
* 0							

SEE ATTACHED INSTRUMENT SEQ. JK 7/17/06

ANALYTICAL BATCH # TC6012W MX TC6012W

Instrument No.	62
INITIAL CALIBRATION REFERENCE	
Method File	TC6012
ICAL ID	SW10B-01-716
ICV ID	↓ 717

STANDARDS ID	Conc.(mg/L)
S_0 Nanopure	0
S_1 SW10B-01-716	1
S_2	5
S_3	10
S_4	40
S_5	80
S_6 7/17/06	
ICV/LCS SW10B-01-717	25
CCV ↓ 718	25

Comments:

Analyzed By: JK

page is checked during data review.

EMAX LABORATORIES, INC. 1835 W 208th St. Torrance, CA 90501

	Type	Analysis	Sample Name	Sample ID	ObjectID	Origin	Dilution	Result	Notes	Comment
1	Standard	NPOC	ICAL	TCG012-1	0A-123	C:\Pro	1.000			
2	Control	NPOC	ICV	TCG012-2	0A-123	C:\Pro	1.000			
3	Unknown	NPOC	ICB	TCG012-3	0A-123	C:\Pro	1.000			
4	Unknown	NPOC	HCO3/CO3	TCG012-4	0A-123	C:\Pro	1.000			
5	Unknown	NPOC	TCG012WB	TCG012-5	0A-123	C:\Pro	1.000			
6	Unknown	NPOC	TCG012WL	TCG012-6	0A-123	C:\Pro	1.000			
7	Unknown	NPOC	TCG012WC	TCG012-7	0A-123	C:\Pro	1.000			
8	Unknown	NPOC	06G048-01	TCG012-8	0A-123	C:\Pro	1.000			
9	Unknown	NPOC	06G048-04	TCG012-9	0A-123	C:\Pro	1.000			
10	Unknown	NPOC	06G048-05	TCG012-10	0A-123	C:\Pro	1.000			
11	Unknown	NPOC	06G048-06	TCG012-11	0A-123	C:\Pro	1.000			
12	Unknown	NPOC	06G048-07	TCG012-12	0A-123	C:\Pro	1.000			
13	Unknown	NPOC	06G048-08	TCG012-13	0A-123	C:\Pro	1.000			
14	Control	NPOC	CCV1	TCG012-14	0A-123	C:\Pro	1.000			
15	Unknown	NPOC	CCB1	TCG012-15	0A-123	C:\Pro	1.000			
16	Unknown	NPOC	06G048-09	TCG012-16	0A-123	C:\Pro	1.000			
17	Unknown	NPOC	06G039-01	TCG012-17	0A-123	C:\Pro	1.000			
18	Unknown	NPOC	06G039-04	TCG012-18	0A-123	C:\Pro	1.000			
19	Unknown	NPOC	06G039-05	TCG012-19	0A-123	C:\Pro	1.000			
20	Unknown	NPOC	06G039-06	TCG012-20	0A-123	C:\Pro	1.000			
21	Unknown	NPOC	06G039-07	TCG012-21	0A-123	C:\Pro	1.000			
22	Unknown	NPOC	06G039-08	TCG012-22	0A-123	C:\Pro	1.000			
23	Unknown	NPOC	06G443-01	TCG012-23	0A-123	C:\Pro	10.00			
24	Unknown	NPOC	06G443-01D	TCG012-24	0A-123	C:\Pro	10.00			
25	Unknown	NPOC	06G443-01M	TCG012-25	0A-123	C:\Pro	10.00			
26	Control	NPOC	CCV2	TCG012-26	0A-123	C:\Pro	1.000			
27	Unknown	NPOC	CCB2	TCG012-27	0A-123	C:\Pro	1.000			
28	Unknown	NPOC	06G027-01	TCG012-28	0A-123	C:\Pro	1.000			
29	Unknown	NPOC	06G027-03	TCG012-29	0A-123	C:\Pro	1.000			
30	Unknown	NPOC	06G027-05	TCG012-30	0A-123	C:\Pro	1.000			
31	Unknown	NPOC	06G027-07	TCG012-31	0A-123	C:\Pro	1.000			
32	Unknown	NPOC	06G027-08	TCG012-32	0A-123	C:\Pro	1.000			
33	Unknown	NPOC	TCG013WB	TCG012-33	0A-123	C:\Pro	1.000			
34	Unknown	NPOC	TCG013WL	TCG012-34	0A-123	C:\Pro	1.000			
35	Unknown	NPOC	TCG013WC	TCG012-35	0A-123	C:\Pro	1.000			
36	Unknown	NPOC	06G019-01	TCG012-36	0A-123	C:\Pro	1.000			
37	Unknown	NPOC	06G019-05	TCG012-37	0A-123	C:\Pro	1.000			
38	Control	NPOC	CCV3	TCG012-38	0A-123	C:\Pro	1.000			
39	Unknown	NPOC	CCB3	TCG012-39	0A-123	C:\Pro	1.000			
40	Unknown	NPOC	06G019-06	TCG012-40	0A-123	C:\Pro	1.000			
41	Unknown	NPOC	06G064-01	TCG012-41	0A-123	C:\Pro	1.000			
42	Unknown	NPOC	06G064-02	TCG012-42	0A-123	C:\Pro	1.000			
43	Unknown	NPOC	06G064-03	TCG012-43	0A-123	C:\Pro	1.000			
44	Unknown	NPOC	06G064-04	TCG012-44	0A-123	C:\Pro	1.000			
45	Unknown	NPOC	06G064-05	TCG012-45	0A-123	C:\Pro	1.000			
46	Control	NPOC	CCV4	TCG012-46	0A-123	C:\Pro	1.000			
47	Unknown	NPOC	CCB4	TCG012-47	0A-123	C:\Pro	1.000			
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7/17/06

LABORATORY REPORT FOR

ARCADIS

OMEGA CHEMICAL

N-NITROSODIMETHYLAMINE BY GC/MS

SDG#: 06G039

Your Project #: 06G039
Site: ARCADIS, OMEGA CHEMICALS

Attention: Richard Beauvil
EMAX LABORATORIES INC
1835 W 205TH ST
TORRANCE, CA
USA 90501

Report Date: 2006/07/31

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A670791
Received: 2006/07/14, 12:00

Sample Matrix: Water
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Nitrosamines in Water by HRMS	6	2006/07/17	2006/07/28	Ont SOP 0121, 0710	EPA 607 / 1625 mod

MAXXAM ANALYTICS INC.

MARY-ANNE JOHNSON, B.A, B.Sc.
Project Manager

MAJ/maj
encl.

Total cover pages: 1

6740 Campobello Road, Mississauga, Ontario Canada L5N 2L8 Tel: 905-817-5700 Toll free:800-563-6266 Fax: 905-817-5777

Maxxam Job #: A670791
Report Date: 2006/07/31

EMAX LABORATORIES INC
Client Project #: 06G039
Project name: ARCADIS, OMEGA CHEMICALS
Sampler Initials:

SEMI-VOLATILE ORGANICS BY HRMS (WATER)

Maxxam ID		N11594	N11595	N11596		
Sampling Date		2006/07/10 09:40	2006/07/10 09:40	2006/07/10 09:40		
	Units	**OC2-PMW15-0-17**	**OC2-PMW15-5-21**	**OC2-PMW15-1-20**	**RDL**	**QC Batch**
N-Nitrosodimethylamine	ng/L	4.21	3.13	4.04	2.00	1013406
Surrogate Recovery (%)						
D6-N-Nitrosodimethylamine	%	24	22	25		1013406

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		N11597	N11598	N11599		
Sampling Date		2006/07/10 15:50	2006/07/10 15:10	2006/07/10 16:30		
	Units	**OC2-PMW18A-0-22**	**OC2-PMW18B-0-23**	**OC2-PMW18C-0-24**	**RDL**	**QC Batch**
N-Nitrosodimethylamine	ng/L	ND	ND	ND	2.00	1013406
Surrogate Recovery (%)						
D6-N-Nitrosodimethylamine	%	18	26	23		1013406

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

6740 Campobello Road, Mississauga, Ontario Canada L5N 2L8 Tel: 905-817-5700 Toll free:800-563-6266 Fax: 905-817-5777

Maxxam Job #: A670791
Report Date: 2006/07/31

EMAX LABORATORIES INC
Client Project #: 06G039
Project name: ARCADIS, OMEGA CHEMICALS
Sampler Initials:

GENERAL COMMENTS

Results relate only to the items tested.

6740 Campobello Road, Mississauga, Ontario Canada L5N 2L8 Tel: 905-817-5700 Toll free:800-563-6266 Fax: 905-817-5777

EMAX LABORATORIES INC
Attention: Richard Beauvil
Client Project #: 06G039
P.O. #:
Project name: ARCADIS, OMEGA CHEMICALS

Quality Assurance Report

Maxxam Job Number: GA670791

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1013406 EM	Spiked Blank	D6-N-Nitrosodimethylamine	2006/07/28		32	%	10 - 81
		N-Nitrosodimethylamine	2006/07/28		112	%	65 - 135
	RPD	N-Nitrosodimethylamine	2006/07/28	9.5		%	25
	Method Blank	D6-N-Nitrosodimethylamine	2006/07/28		35	%	10 - 81
		N-Nitrosodimethylamine	2006/07/28	ND, RDL=2.00		ng/L	

ND = Not detected
RPD = Relative Percent Difference
SPIKE = Fortified sample

6740 Campobello Road, Mississauga, Ontario Canada L5N 2L8 Tel: 905-817-5700 Toll free:800-563-6266 Fax: 905-817-5777

Maxxam Job #: A670791
Report Date: 2006/07/31

EMAX LABORATORIES INC
Client Project #: 06G039
Project name: ARCADIS, OMEGA CHEMICALS
Sampler Initials:

SEMI-VOLATILE ORGANICS BY HRMS (WATER)

Maxxam ID		N11594	N11595	N11596	N11597	N11598
Sampling Date		7/10/06 9:40	7/10/06 9:40	7/10/06 9:40	7/10/06 15:50	7/10/06 15:10
	Units	**OC2-PMW15-0-17**	**OC2-PMW15-5-21**	**OC2-PMW15-1-20**	**OC2-PMW18A-0-22**	**OC2-PMW18B-0-23**
N-Nitrosodimethylamine	ng/L	4.21	3.13	4.04	ND	ND
Surrogate Recovery (%)						
D6-N-Nitrosodimethylamine	%	24	22	25	18	26

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

N11599		
7/10/06 16:30		
OC2-PMW18C-0-24	**RDL**	**QC Batch**
ND	2	1013406
23		1013406