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CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G073**

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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: 08-04-2006
EMAX Batch No.: 06G073

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 07/13/06.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
OC2-PMW19-0-37	G073-01	07/13/06	WATER	1,4-DIOXANE BY 8270 SIM
				CYANIDE TOTAL
				SILICA, DISSOLVED
				METALS, DISSOLVED BY ICP-MS
				MERCURY DISSOLVED
				SEMIVOLATILE ORGANICS SIM
				TKN
				SEMIVOLATILE ORGANICS BY GCMS
OC2-PMW17A-0-38	G073-02	07/13/06	WATER	1,4-DIOXANE BY 8270 SIM
				CYANIDE TOTAL
				SILICA, DISSOLVED
				METALS, DISSOLVED BY ICP-MS
				MERCURY DISSOLVED
				SEMIVOLATILE ORGANICS SIM
				TKN
				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

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. * 06G073
PROJECT CODE: CA000646.0001

CLIENT: ARCADIS
PROJECT: CA000646.0001 - Omega Chem. OU-2
COORDINATOR: Ron Halperin
TEL: 949-294-1532 FAX: EMAIL: rhalperin@arcadis-us.com
SEND REPORT TO: Ron Halperin
COMPANY: ARCADIS
ADDRESS: 1400 N. Harbor Blvd, #700, Fullerton, CA 92835
EMAX PM: Richard B

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: SVOCs - 8270 C; 1,4 Dioxane; Dissolved TAL Metals; TKN; Cyanide

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	SVOCs (IC)	1,4 Dioxane (IC)	Dissolved TAL Metals (IC)	TKN (HS)	Cyanide (SH)	COMMENTS
1	OU2-DMW19-0-37		7/13/06	15:00	1	125	Poly	GW						X	
2	"		↓	↓	1	500	Poly	↓					X		
3					1	500	Poly					X			Undiltered/Unpreserved
4					1	1 lt	Amber				X				
5			↓	↓	1	1 lt	Amber	↓		X					
6															
7															
8															
9															
0															

Instructions: Dissolved TAL Metals + Boron + Silicon by 6010/7000, 200.8 & 245.1 - Undiltered/unpreserved
Lab to filter
E-mail PDF + Excel files to Ron H

Cooler #	Temp. (°C)
1	2.5

Sample #s

SAMPLER

RELINQUISHED BY	Date	Time	RECEIVED BY
[signature]	7/13/06	16:20	[signature]
[signature]	7/13/06	1850	[signature]

COURIER/AIRBILL

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.

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. * 06G073
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 #700, Fullerton, CA 92835
EMAX PM: Richard B

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	SAMPLING DATE	SAMPLING TIME	CONTAINER NO.	CONTAINER SIZE	CONTAINER TYPE	MATRIX CODE	QC	SVOCs - 8270C (IC)	1,4-Dioxane (IC)	Dissolved TAL Metals (IC)	TKN (HS)	Cyanide (IC)			COMMENTS
1	OC2-PMW17A-0-38		7/13/06	15:45	1	250	Poly							X			Unpreserved!
2					1	500							X				
3					1	500						X					Unpreserved/unfiltered
4					1	1lt	Amber				X						
5					1	1lt				X							
6																	
7																	
8																	
9																	
0																	

Instructions: For Dissolved TAL Metals see PS 1
Note Cyanide Not Preserved - to be preserved by lab

Cooler # | Temp. (°C) | Sample #s

SAMPLER | COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
[signature]	7/13/06	16:20	[signature]
[signature]	7/13/06	1850	[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.

SAMPLE RECEIPT FORM 1

Type of Delivery	Delivered By/Airbill	ECN	06G073
☑ EMAX Courier	SEE Core	Recepient	I PATEL
☐ Client Delivery		Date	7-13-06
☐ Third Party		Time	1850

COC Inspection

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

Packaging Inspection

Container	☑ Cooler	☐ Box	☐	☐
Condition	☐ Custody Seal	☑ Intact	☐ Damaged	☐
Packaging	☐ Bubble Pack	☐ Styrofoam	☑ Sufficient	☑ Plastic Bag
Temperatures	☑ Cooler 1 2.5 c	☑ Cooler 2 ____	☐ Cooler 3 ____	☐ Cooler 4 ____
	☐ Cooler 5 ____	☐ Cooler 6 ____	☐ Cooler 7 ____	☐ Cooler 8 ____
	☐ Cooler 9 ____	☐ Cooler 10 ____	☐ Cooler 11 ____	☐ Cooler 12 ____

Comments:

LSCID	Client ID	Discrepancy	Corrective Action
01	OC2-PMW19-	0-37 ID on label Reads as OC2-PMW-0-37 (on SVOC Container). ID ON 1,4 DIOXANE LABEL READS OC2-PMW-0-34	CN Container Pres/Noch Upon Receipt. 7-13-06
02	OC2-PMW17A	-0-38 No Time on all the Containers - Rec'd (2) Containers for SVOCs.	

LSCID : Lab Sample Container ID

REVIEWS

Sample Labeling [signature] Date 7-13-06

SRF [signature] Date 7/13/06

PM [signature] Date 7/14/06.

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

SDG#: 06G073

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G073**

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

Two (2) water samples were received on 07/13/06 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. : 06G073
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	SVG017WB	1	NA	07/20/0615:33	07/17/0613:00	RGX118	REX298	SVG017W	Method Blank
LCS1W	SVG017WL	1	NA	07/20/0615:59	07/17/0613:00	RGX119	REX298	SVG017W	Lab Control Sample (LCS)
LCD1W	SVG017WC	1	NA	07/20/0616:24	07/17/0613:00	RGX120	REX298	SVG017W	LCS Duplicate
OC2-PMW19-0-37	G073-01	.94	NA	07/20/0621:51	07/17/0613:00	RGX133	REX298	SVG017W	Field Sample
OC2-PMW17A-0-38	G073-02	.94	NA	07/20/0622:17	07/17/0613:00	RGX134	REX298	SVG017W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

Client	: ARCADIS	Date Collected:	07/13/06
Project	: OMEGA CHEMICAL	Date Received:	07/13/06
Batch No.	: 06G073	Date Extracted:	07/17/06 13:00
Sample ID:	OC2-PMW19-0-37	Date Analyzed:	07/20/06 21:51
Lab Samp ID:	G073-01	Dilution Factor:	.94
Lab File ID:	RGX133	Matrix :	WATER
Ext Btch ID:	SVG017W	% 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	76	30-150
2-FLUOROBIPHENYL	71	30-130
2-FLUOROPHENOL	59	20-130
NITROBENZENE-D5	63	30-130
PHENOL-D5	61	30-130
TERPHENYL-D14	75	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:	07/13/06
Project	: OMEGA CHEMICAL	Date Received:	07/13/06
Batch No.	: 06G073	Date Extracted:	07/17/06 13:00
Sample ID:	OC2-PMW17A-0-38	Date Analyzed:	07/20/06 22:17
Lab Samp ID:	G073-02	Dilution Factor:	.94
Lab File ID:	RGX134	Matrix :	WATER
Ext Btch ID:	SVG017W	% 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	78	30-150
2-FLUOROBIPHENYL	62	30-130
2-FLUOROPHENOL	52	20-130
NITROBENZENE-D5	54	30-130
PHENOL-D5	56	30-130
TERPHENYL-D14	71	30-130

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

QC SUMMARIES

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

Client	: ARCADIS	Date Collected:	NA
Project	: OMEGA CHEMICAL	Date Received:	07/17/06
Batch No.	: 06G073	Date Extracted:	07/17/06 13:00
Sample ID:	MBLK1W	Date Analyzed:	07/20/06 15:33
Lab Samp ID:	SVG017WB	Dilution Factor:	1
Lab File ID:	RGX118	Matrix :	WATER
Ext Btch ID:	SVG017W	% 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	53	40-140
2-FLUOROBIPHENYL	48	40-130
2-FLUOROPHENOL	41	30-130
NITROBENZENE-D5	41	40-130
PHENOL-D5	44	30-130
TERPHENYL-D14	88	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.: 06G073
METHOD: METHOD 3520C/8270C

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	SVG017WB	SVG017WL	SVG017WC		
LAB FILE ID:	RGX118	RGX119	RGX120		
DATE EXTRACTED:	07/17/0613:00	07/17/0613:00	07/17/0613:00	DATE COLLECTED:	NA
DATE ANALYZED:	07/20/0615:33	07/20/0615:59	07/20/0616:24	DATE RECEIVED:	07/17/06
PREP. BATCH:	SVG017W	SVG017W	SVG017W		
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	60.6	76	80	58.5	73	3	40-130	30
2-Chlorophenol	ND	80	40.3	50	80	38.5	48	4	30-130	30
4-Chloro-3-Methylphenol	ND	80	48.7	61	80	48	60	1	40-130	30
4-Nitrophenol	ND	80	57.4	72	80	59.3	74	3	30-130	30
Acenaphthene	ND	80	47.4	59	80	44.9	56	5	40-130	30
Phenol	ND	80	41.5	52	80	37.9	47	9	20-130	30
Pyrene	ND	80	61.3	77	80	62.2	78	2	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	103	68	150	112	74	40-140
2-Fluorobiphenyl	50	32.5	65	50	31	62	40-130
2-Fluorophenol	150	71.8	48	150	70.2	47	30-130
Nitrobenzene-d5	50	26.8	54	50	28.9	58	40-130
Phenol-d5	150	79	53	150	77	51	30-130
Terphenyl-d14	50	46.6	93	50	49.6	99	50-130

LABORATORY REPORT FOR

ARCADIS

OMEGA CHEMICAL

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

SDG#: 06G073

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G073**

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

Two (2) water samples were received on 07/13/06 for Semi Volatile Organic 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.

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. : 06G073
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	SVG017WB	1	NA	07/20/0616:29	07/17/0613:00	RGZ094	RFZ008	SBG017W	Method Blank
LCS1W	SVG017WL	8	NA	07/20/0616:47	07/17/0613:00	RGZ095	RFZ008	SBG017W	Lab Control Sample (LCS)
LCD1W	SVG017WC	8	NA	07/20/0617:06	07/17/0613:00	RGZ096	RFZ008	SBG017W	LCS Duplicate
OC2-PMW19-0-37	G073-01	.94	NA	07/20/0620:33	07/17/0613:00	RGZ107	RFZ008	SBG017W	Field Sample
OC2-PMW17A-0-38	G073-02	.94	NA	07/20/0620:52	07/17/0613:00	RGZ108	RFZ008	SBG017W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

Client	: ARCADIS	Date Collected:	07/13/06
Project	: OMEGA CHEMICAL	Date Received:	07/13/06
Batch No.	: 06G073	Date Extracted:	07/17/06 13:00
Sample ID:	OC2-PMW19-0-37	Date Analyzed:	07/20/06 20:33
Lab Samp ID:	G073-01	Dilution Factor:	.94
Lab File ID:	RGZ107	Matrix :	WATER
Ext Btch ID:	SBG017W	% 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	4.2	1.9	.94
HEXACHLOROBENZENE	ND	.94	.47
PENTACHLOROPHENOL	ND	.94	.47

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	58	30-130
PHENOL-D5	69	30-130

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

Client	: ARCADIS	Date Collected:	07/13/06
Project	: OMEGA CHEMICAL	Date Received:	07/13/06
Batch No.	: 06G073	Date Extracted:	07/17/06 13:00
Sample ID:	OC2-PMW17A-0-38	Date Analyzed:	07/20/06 20:52
Lab Samp ID:	G073-02	Dilution Factor:	.94
Lab File ID:	RGZ108	Matrix :	WATER
Ext Btch ID:	SBG017W	% 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	3.3	1.9	.94
HEXACHLOROBENZENE	ND	.94	.47
PENTACHLOROPHENOL	ND	.94	.47

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	56	30-130
PHENOL-D5	56	30-130

QC SUMMARIES

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

Client	: ARCADIS	Date Collected:	NA
Project	: OMEGA CHEMICAL	Date Received:	07/17/06
Batch No.	: 06G073	Date Extracted:	07/17/06 13:00
Sample ID:	MBLK1W	Date Analyzed:	07/20/06 16:29
Lab Samp ID:	SVG017WB	Dilution Factor:	1
Lab File ID:	RGZ094	Matrix :	WATER
Ext Btch ID:	SBG017W	% 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	1J	2	1
HEXACHLOROBENZENE	ND	1	.5
PENTACHLOROPHENOL	ND	1	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	72	30-130
PHENOL-D5	47	30-130

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G073
METHOD: METHOD 3520C/8270C SIM

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	8	8		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	SVG017WB	SVG017WL	SVG017WC		
LAB FILE ID:	RGZ094	RGZ095	RGZ096		
DATE EXTRACTED:	07/17/0613:00	07/17/0613:00	07/17/0613:00	DATE COLLECTED:	NA
DATE ANALYZED:	07/20/0616:29	07/20/0616:47	07/20/0617:06	DATE RECEIVED:	07/17/06
PREP. BATCH:	SBG017W	SBG017W	SBG017W		
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	41.7	52	80	44.7	56	7	50-130	30
bis(2-Ethylhexyl)phthalate	1J	80	48.8	60	80	51.4	63	5	30-150	30
Hexachlorobenzene	ND	80	41.9	52	80	45.1	56	7	20-130	30
Pentachlorophenol	ND	80	49.5	62	80	54.8	68	10	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	28.3	57	50	30.6	61	30-130
Phenol-d5	150	62.5	42	150	65	43	30-130

LABORATORY REPORT FOR

ARCADIS

OMEGA CHEMICAL

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

SDG#: 06G073

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G073**

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

Two (2) water samples were received on 07/13/06 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. % RPD was 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. : 06G073
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	SVG015WB	1	NA	07/19/0613:47	07/14/0612:00	RGK047	RFK067	SVG015W	Method Blank
LCS1W	SVG015WL	1	NA	07/19/0613:58	07/14/0612:00	RGK048	RFK067	SVG015W	Lab Control Sample (LCS)
LCD1W	SVG015WC	1	NA	07/19/0614:08	07/14/0612:00	RGK049	RFK067	SVG015W	LCS Duplicate
OC2-PMW19-0-37	G073-01	.94	NA	07/19/0616:09	07/14/0612:00	RGK060	RFK067	SVG015W	Field Sample
OC2-PMW17A-0-38	G073-02	.94	NA	07/19/0616:20	07/14/0612:00	RGK061	RFK067	SVG015W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

Client	: ARCADIS	Date Collected:	07/13/06
Project	: OMEGA CHEMICAL	Date Received:	07/13/06
Batch No.	: 06G073	Date Extracted:	07/14/06 12:00
Sample ID:	OC2-PMW19-0-37	Date Analyzed:	07/19/06 16:09
Lab Samp ID:	G073-01	Dilution Factor:	.94
Lab File ID:	RGK060	Matrix :	WATER
Ext Btch ID:	SVG015W	% 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	70	18-132

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

Client	: ARCADIS	Date Collected:	07/13/06
Project	: OMEGA CHEMICAL	Date Received:	07/13/06
Batch No.	: 06G073	Date Extracted:	07/14/06 12:00
Sample ID:	OC2-PMW17A-0-38	Date Analyzed:	07/19/06 16:20
Lab Samp ID:	G073-02	Dilution Factor:	.94
Lab File ID:	RGK061	Matrix :	WATER
Ext Btch ID:	SVG015W	% Moisture :	NA
Calib. Ref.:	RFK067	Instrument ID :	T-052

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,4-DIOXANE	65	1.9	.94

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
BROMOBENZENE	69	18-132

QC SUMMARIES

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

Client	: ARCADIS	Date Collected:	NA
Project	: OMEGA CHEMICAL	Date Received:	07/14/06
Batch No.	: 06G073	Date Extracted:	07/14/06 12:00
Sample ID:	MBLK1W	Date Analyzed:	07/19/06 13:47
Lab Samp ID:	SVG015WB	Dilution Factor:	1
Lab File ID:	RGK047	Matrix :	WATER
Ext Btch ID:	SVG015W	% 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	48	18-132

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G073
METHOD: METHOD 3520C/8270C SIM

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	SVG015WB	SVG015WL	SVG015WC		
LAB FILE ID:	RGK047	RGK048	RGK049		
DATE EXTRACTED:	07/14/0612:00	07/14/0612:00	07/14/0612:00	DATE COLLECTED:	NA
DATE ANALYZED:	07/19/0613:47	07/19/0613:58	07/19/0614:08	DATE RECEIVED:	07/14/06
PREP. BATCH:	SVG015W	SVG015W	SVG015W		
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	16.2	41	40	23	58	35*	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	16.1	40	40	20.9	52	18-132

LABORATORY REPORT FOR

ARCADIS

OMEGA CHEMICAL

DISSOLVED
METALS / MERCURY

SDG#: 06G073

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G073**

METHOD 6020A
DISSOLVED METALS BY ICP-MS

Two (2) water samples were received on 07/13/06 for Dissolved Metals analysis by Method 6020A 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 G073-01 was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

5. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

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. : 06G073
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	IMG012WB	1	NA	07/25/0614:20	07/19/0613:45	98G24016	98G24014	IMG012W	Method Blank
LCS1W	IMG012WL	1	NA	07/25/0614:29	07/19/0613:45	98G24017	98G24014	IMG012W	Lab Control Sample (LCS)
LCD1W	IMG012WC	1	NA	07/25/0614:37	07/19/0613:45	98G24018	98G24014	IMG012W	LCS Duplicate
OC2-PMW19-0-37AS	G073-01A	1	NA	07/25/0615:13	07/19/0613:45	98G24019	98G24014	IMG012W	Analytical Spike Sample
OC2-PMW19-0-37	G073-01	1	NA	07/25/0615:22	07/19/0613:45	98G24020	98G24014	IMG012W	Field Sample
OC2-PMW19-0-37DL	G073-01J	5	NA	07/25/0615:30	07/19/0613:45	98G24021	98G24014	IMG012W	Diluted Sample
OC2-PMW17A-0-38	G073-02	1	NA	07/25/0615:39	07/19/0613:45	98G24022	98G24014	IMG012W	Field Sample

FN - Filename
% Moist - Percent Moisture

METHOD 6020A
DISSOLVED METALS BY ICP-MS

Client	: ARCADIS	Date Collected:	07/13/06
Project	: OMEGA CHEMICAL	Date Received:	07/13/06
SDG NO.	: 06G073	Date Extracted:	07/19/06 13:45
Sample ID:	OC2-PMW19-0-37	Date Analyzed:	07/25/06 15:22
Lab Samp ID:	G073-01	Dilution Factor:	1
Lab File ID:	98G24020	Matrix :	WATER
Ext Btch ID:	IMG012W	% Moisture :	NA
Calib. Ref.:	98G24014	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Aluminum	ND	1000	200
Antimony	.382J	.5	.25
Arsenic	1.56	.5	.25
Barium	15.6	.5	.25
Beryllium	ND	.5	.25
Boron	398	10	5
Cadmium	ND	1	.5
Calcium	188000	1000	200
Chromium	.36J	.5	.25
Cobalt	1.94	.5	.25
Copper	1.76	.5	.25
Iron	ND	1000	200
Lead	ND	1	.5
Magnesium	57600	1000	200
Manganese	1100	1	.5
Molybdenum	35.3	2	1
Nickel	4.82	.5	.25
Potassium	6880	1000	200
Selenium	ND	1	.5
Silver	ND	1	.5
Sodium	159000	1000	200
Thallium	ND	1	.5
Vanadium	1.93	1	.5
Zinc	38.5	10	5

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
SDG NO.: 06G073
METHOD: METHOD 6020A

MATRIX:	WATER		% MOISTURE:	NA
DILTN FACTR:	1	1		
SAMPLE ID:	OC2-PMW19-0-37			
CONTROL NO.:	G073-01	G073-01A		
LAB FILE ID:	98G24020	98G24019		
DATIME EXTRCTD:	07/19/0613:45	07/19/0613:45	DATE COLLECTED:	07/13/06
DATIME ANALYZD:	07/25/0615:22	07/25/0615:13	DATE RECEIVED:	07/13/06
PREP. BATCH:	IMG012W	IMG012W		
CALIB. REF:	98G24014	98G24014		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Aluminum	ND	5000	4990	100	75-125
Antimony	.382J	50	50	99	75-125
Arsenic	1.56	50	52.6	102	75-125
Barium	15.6	50	66.1	101	75-125
Beryllium	ND	50	52.4	105	75-125
Boron	398	50	454	112	75-125
Cadmium	ND	50	49	98	75-125
Calcium	188000	5000	199000	220*	75-125
Chromium	.36J	50	50.4	100	75-125
Cobalt	1.94	50	50.1	96	75-125
Copper	1.76	50	49.6	96	75-125
Iron	ND	5000	5110	102	75-125
Lead	ND	50	51.7	103	75-125
Magnesium	57600	5000	62200	93	75-125
Manganese	1100	50	1150	98	75-125
Molybdenum	35.3	50	86.3	102	75-125
Nickel	4.82	50	52.9	96	75-125
Potassium	6880	5000	11900	100	75-125
Selenium	ND	50	51.9	104	75-125
Silver	ND	50	47.2	94	75-125
Sodium	159000	5000	169000	186*	75-125
Thallium	ND	50	52	104	75-125
Vanadium	1.93	50	53.1	102	75-125
Zinc	38.5	50	86.2	96	75-125

METHOD 6020A
DISSOLVED METALS BY ICP-MS

Client	: ARCADIS	Date Collected:	07/13/06
Project	: OMEGA CHEMICAL	Date Received:	07/13/06
SDG NO.	: 06G073	Date Extracted:	07/19/06 13:45
Sample ID:	OC2-PMW17A-0-38	Date Analyzed:	07/25/06 15:39
Lab Samp ID:	G073-02	Dilution Factor:	1
Lab File ID:	98G24022	Matrix :	WATER
Ext Btch ID:	IMG012W	% Moisture :	NA
Calib. Ref.:	98G24014	Instrument ID :	EMAXTI98

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Aluminum	ND	1000	200
Antimony	.577	.5	.25
Arsenic	4.01	.5	.25
Barium	99.5	.5	.25
Beryllium	ND	.5	.25
Boron	378	10	5
Cadmium	ND	1	.5
Calcium	142000	1000	200
Chromium	4.2	.5	.25
Cobalt	3	.5	.25
Copper	6.7	.5	.25
Iron	ND	1000	200
Lead	ND	1	.5
Magnesium	41400	1000	200
Manganese	2190	1	.5
Molybdenum	12.9	2	1
Nickel	5.99	.5	.25
Potassium	6410	1000	200
Selenium	6.16	1	.5
Silver	ND	1	.5
Sodium	194000	1000	200
Thallium	ND	1	.5
Vanadium	5.07	1	.5
Zinc	35.5	10	5

METHOD 6020A
DISSOLVED METALS BY ICP-MS

Client	: ARCADIS	Date Collected:	NA
Project	: OMEGA CHEMICAL	Date Received:	07/19/06
SDG NO.	: 06G073	Date Extracted:	07/19/06 13:45
Sample ID:	MBLK1W	Date Analyzed:	07/25/06 14:20
Lab Samp ID:	IMG012WB	Dilution Factor:	1
Lab File ID:	98G24016	Matrix :	WATER
Ext Btch ID:	IMG012W	% Moisture :	NA
Calib. Ref.:	98G24014	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	240J	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.: 06G073
METHOD: METHOD 6020A

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1W				
CONTROL NO.:	IMG012WB	IMG012WL	IMG012WC		
LAB FILE ID:	98G24016	98G24017	98G24018		
DATIME EXTRCTD:	07/19/0613:45	07/19/0613:45	07/19/0613:45	DATE COLLECTED:	NA
DATIME ANALYZD:	07/25/0614:20	07/25/0614:29	07/25/0614:37	DATE RECEIVED:	07/19/06
PREP. BATCH:	IMG012W	IMG012W	IMG012W		
CALIB. REF:	98G24014	98G24014	98G24014		

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	5070	101	5000	5010	100	1	80-120	20
Antimony	ND	50	52.3	105	50	52	104	1	80-120	20
Arsenic	ND	50	50.5	101	50	50.6	101	0	80-120	20
Barium	ND	50	50.4	101	50	50	100	1	80-120	20
Beryllium	ND	50	51.6	103	50	50.6	101	2	80-120	20
Boron	ND	50	48.6	97	50	48	96	1	80-120	20
Cadmium	ND	50	49.4	99	50	48.8	98	1	80-120	20
Calcium	ND	5000	5150	103	5000	5090	102	1	80-120	20
Chromium	ND	50	49.1	98	50	49.6	99	1	80-120	20
Cobalt	ND	50	53.3	107	50	52.5	105	1	80-120	20
Copper	ND	50	48.9	98	50	49.5	99	1	80-120	20
Iron	ND	5000	5170	103	5000	5080	102	2	80-120	20
Lead	ND	50	50	100	50	49.8	100	0	80-120	20
Magnesium	ND	5000	5050	101	5000	5010	100	1	80-120	20
Manganese	ND	50	52.2	104	50	51.2	102	2	80-120	20
Molybdenum	ND	50	50.5	101	50	50.7	101	0	80-120	20
Nickel	ND	50	49.2	98	50	49.5	99	1	80-120	20
Potassium	ND	5000	4930	99	5000	4930	99	0	80-120	20
Selenium	ND	50	52.1	104	50	51.5	103	1	80-120	20
Silver	ND	50	56.5	113	50	54.2	108	4	80-120	20
Sodium	240J	5000	5140	98	5000	5060	96	2	80-120	20
Thallium	ND	50	48.8	98	50	48.9	98	0	80-120	20
Vanadium	ND	50	49.1	98	50	50.1	100	2	80-120	20
Zinc	ND	50	53.5	107	50	54.6	109	2	80-120	20

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G073
METHOD: METHOD 6020A

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	5		
SAMPLE ID:	OC2-PMW19-0-37	OC2-PMW19-0-37		
EMAX SAMP ID:	G073-01	G073-01J		
LAB FILE ID:	98G24020	98G24021		
DATE EXTRACTED:	07/19/0613:45	07/19/0613:45	DATE COLLECTED:	07/13/06
DATE ANALYZED:	07/25/0615:22	07/25/0615:30	DATE RECEIVED:	07/13/06
PREP. BATCH:	IMG012W	IMG012W		
CALIB. REF:	98G24014	98G24014		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Aluminum	ND	ND	0	10
Antimony	.382J	ND	NA	10
Arsenic	1.56	1.61J	NA	10
Barium	15.6	16.3	4	10
Beryllium	ND	ND	0	10
Boron	398	422	6	10
Cadmium	ND	ND	0	10
Calcium	188000	201000	7	10
Chromium	.36J	ND	NA	10
Cobalt	1.94	2.03J	NA	10
Copper	1.76	4.78	172*	10
Iron	ND	ND	0	10
Lead	ND	ND	0	10
Magnesium	57600	61000	6	10
Manganese	1100	1230	12*	10
Molybdenum	35.3	35.3	0	10
Nickel	4.82	9.14	90*	10
Potassium	6880	7410	8	10
Selenium	ND	ND	0	10
Silver	ND	ND	0	10
Sodium	159000	171000	7	10
Thallium	ND	ND	0	10
Vanadium	1.93	3.28J	NA	10
Zinc	38.5	75.3	96*	10

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G073**

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Two (2) water samples were received on 07/13/06 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 from another SDG G064-02 was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

5. Matrix Spike/Matrix Spike Duplicate

No MS/MSD sample was designated in this SDG.

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. : 06G073
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	HGG025WB	1	NA	07/21/0613:56	07/20/0616:00	M47G021010	M47G021008	HGG025W	Method Blank
LCS1W	HGG025WL	1	NA	07/21/0613:58	07/20/0616:00	M47G021011	M47G021008	HGG025W	Lab Control Sample (LCS)
LCD1W	HGG025WC	1	NA	07/21/0614:00	07/20/0616:00	M47G021012	M47G021008	HGG025W	LCS Duplicate
OC2-PMW17B-0-38AS	G064-02A	1	NA	07/21/0614:02	07/20/0616:00	M47G021013	M47G021008	HGG025W	Analytical Spike Sample
OC2-PMW17B-0-38	G064-02	1	NA	07/21/0614:04	07/20/0616:00	M47G021014	M47G021008	HGG025W	Field Sample
OC2-PMW17B-0-38DL	G064-02J	5	NA	07/21/0614:06	07/20/0616:00	M47G021015	M47G021008	HGG025W	Diluted Sample
OC2-PMW19-0-37	G073-01	1	NA	07/21/0614:25	07/20/0616:00	M47G021024	M47G021020	HGG025W	Field Sample
OC2-PMW17A-0-38	G073-02	1	NA	07/21/0614:27	07/20/0616:00	M47G021025	M47G021020	HGG025W	Field Sample

FN - Filename
% Moist - Percent Moisture

METHOD 7470A
DISSOLVED MERCURY BY COLD VAPOR

Client : ARCADIS
Project : OMEGA CHEMICAL
Batch No. : 06G073

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	HGG025WB	ND	1	NA	.5	.1	07/21/0613:56	07/20/0616:00	M47G021010	M47G021008	HGG025W	NA	07/20/06
LCS1W	HGG025WL	4.87	1	NA	.5	.1	07/21/0613:58	07/20/0616:00	M47G021011	M47G021008	HGG025W	NA	07/20/06
LCD1W	HGG025WC	4.83	1	NA	.5	.1	07/21/0614:00	07/20/0616:00	M47G021012	M47G021008	HGG025W	NA	07/20/06
OC2-PMW19-0-37	G073-01	ND	1	NA	.5	.1	07/21/0614:25	07/20/0616:00	M47G021024	M47G021020	HGG025W	07/13/06	07/13/06
OC2-PMW17A-0-38	G073-02	ND	1	NA	.5	.1	07/21/0614:27	07/20/0616:00	M47G021025	M47G021020	HGG025W	07/13/06	07/13/06

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EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
SDG NO.: 06G073
METHOD: METHOD 7470A

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1W				
CONTROL NO.:	HGG025WB	HGG025WL	HGG025WC		
LAB FILE ID:	M47G021010	M47G021011	M47G021012		
DATIME EXTRCTD:	07/20/0616:00	07/20/0616:00	07/20/0616:00	DATE COLLECTED:	NA
DATIME ANALYZD:	07/21/0613:56	07/21/0613:58	07/21/0614:00	DATE RECEIVED:	07/20/06
PREP. BATCH:	HGG025W	HGG025W	HGG025W		
CALIB. REF:	M47G021008	M47G021008	M47G021008		

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	4.87	97	5	4.83	97	1	80-120	20

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
BATCH NO.: 06G073
METHOD: METHOD 7470A

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	5		
SAMPLE ID:	OC2-PMW17B-0-38	OC2-PMW17B-0-38DL		
EMAX SAMP ID:	G064-02	G064-02J		
LAB FILE ID:	M47G021014	M47G021015		
DATE EXTRACTED:	07/20/0616:00	07/20/0616:00	DATE COLLECTED:	07/12/06
DATE ANALYZED:	07/21/0614:04	07/21/0614:06	DATE RECEIVED:	07/12/06
PREP. BATCH:	HGG025W	HGG025W		
CALIB. REF:	M47G021008	M47G021008		

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.: 06G073
METHOD: METHOD 7470A

MATRIX:	WATER		% MOISTURE:	NA
DILTN FACTR:	1	1		
SAMPLE ID:	OC2-PMW17B-0-38			
CONTROL NO.:	G064-02	G064-02A		
LAB FILE ID:	M47G021014	M47G021013		
DATIME EXTRCTD:	07/20/0616:00	07/20/0616:00	DATE COLLECTED:	07/12/06
DATIME ANALYZD:	07/21/0614:04	07/21/0614:02	DATE RECEIVED:	07/12/06
PREP. BATCH:	HGG025W	HGG025W		
CALIB. REF:	M47G021008	M47G021008		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Dissolved Mercury	ND	2	1.88	94	85-115

LABORATORY REPORT FOR

ARCADIS

OMEGA CHEMICAL

WET CHEMICAL ANALYSES

SDG#: 06G073

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G073**

METHOD 335.2
TOTAL CYANIDE

Two (2) water samples were received on 07/13/06 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 G073-02 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike**

   Sample G073-02 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. : 06G073

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	CNG008WB	ND	1	NA	.01	.005	07/24/0611:02	07/24/0608:00	CNG008-12	CNG008-08	CNG008W	NA	07/24/06
LCS1W	CNG008WL	.0995	1	NA	.01	.005	07/24/0611:02	07/24/0608:00	CNG008-13	CNG008-08	CNG008W	NA	07/24/06
LCD1W	CNG008WC	.101	1	NA	.01	.005	07/24/0611:02	07/24/0608:00	CNG008-14	CNG008-08	CNG008W	NA	07/24/06
OC2-PMW19-0-37	G073-01	ND	1	NA	.01	.005	07/24/0611:03	07/24/0608:00	CNG008-18	CNG008-08	CNG008W	07/13/06	07/13/06
OC2-PMW17A-0-38	G073-02	ND	1	NA	.01	.005	07/24/0611:03	07/24/0608:00	CNG008-19	CNG008-08	CNG008W	07/13/06	07/13/06
OC2-PMW17A-0-38DUP	G073-02D	ND	1	NA	.01	.005	07/24/0611:04	07/24/0608:00	CNG008-22	CNG008-20	CNG008W	07/13/06	07/13/06
OC2-PMW17A-0-38MS	G073-02M	.103	1	NA	.01	.005	07/24/0611:04	07/24/0608:00	CNG008-23	CNG008-20	CNG008W	07/13/06	07/13/06

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 335.2
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G073
SAMPLE ID: LCS1W/LCD1W
CONTROL NO.: CNG008WL/C

DATE RECEIVED: 07/24/06
DATE EXTRACTED: 07/24/06 08:00
DATE ANALYZED: 07/24/06 11:02/11:02

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	.0995	100	.1	.101	101	2	80-120	20

EMAX QUALITY CONTROL DATA
MS ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 335.2
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G073
SAMPLE ID: OC2-PMW17A-0-38MS
CONTROL NO.: G073-02M

DATE RECEIVED: 07/13/06
DATE EXTRACTED: 07/24/06 08:00
DATE ANALYZED: 07/24/06 11:04

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	QC LIMIT (%)
Cyanide	ND	.1	.103	103	75-125

EMAX QUALITY CONTROL DATA
DUPLICATE ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 335.2
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G073
SAMPLE ID: OC2-PMW17A-0-38DUP
CONTROL NO.: G073-02D

DATE RECEIVED: 07/13/06
DATE EXTRACTED: 07/24/06 08:00
DATE ANALYZED: 07/24/06 11:04

ACCESSION:

PARAMETER	SAMPLE (mg/L)	DUP. SAMPLE (mg/L)	RPD (%)	RPD LIMIT (%)
Cyanide	ND	ND	0	20

CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G073**

METHOD 351.3
TKN

Two (2) water samples were received on 07/13/06 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 G073-02 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike**

   Sample G073-02 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. : 06G073

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	KNG006WB	ND	1	NA	1	.035	07/25/0616:35	07/24/0609:30	KNG006-13	KNG006-09	KNG006W	NA	07/24/06
LCS1W	KNG006WL	1.1	1	NA	1	.035	07/25/0616:36	07/24/0609:30	KNG006-14	KNG006-09	KNG006W	NA	07/24/06
LCD1W	KNG006WC	1.01	1	NA	1	.035	07/25/0616:36	07/24/0609:30	KNG006-15	KNG006-09	KNG006W	NA	07/24/06
OC2-PMW19-0-37	G073-01	.553J	1	NA	1	.035	07/25/0616:36	07/24/0609:30	KNG006-16	KNG006-09	KNG006W	07/13/06	07/13/06
OC2-PMW17A-0-38	G073-02	.593J	1	NA	1	.035	07/25/0616:37	07/24/0609:30	KNG006-17	KNG006-09	KNG006W	07/13/06	07/13/06
OC2-PMW17A-0-38DUP	G073-02D	.607J	1	NA	1	.035	07/25/0616:37	07/24/0609:30	KNG006-18	KNG006-09	KNG006W	07/13/06	07/13/06
OC2-PMW17A-0-38MS	G073-02M	1.61	1	NA	1	.035	07/25/0616:37	07/24/0609:30	KNG006-19	KNG006-09	KNG006W	07/13/06	07/13/06

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 351.3
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G073
SAMPLE ID: LCS1W/LCD1W
CONTROL NO.: KNG006WL/C

DATE RECEIVED: 07/24/06
DATE EXTRACTED: 07/24/06 09:30
DATE ANALYZED: 07/25/06 16:36/16:36

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	1.1	110	1	1.01	101	9	80-120	20

EMAX QUALITY CONTROL DATA
MS ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 351.3
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G073
SAMPLE ID: OC2-PMW17A-0-38MS
CONTROL NO.: G073-02M

DATE RECEIVED: 07/13/06
DATE EXTRACTED: 07/24/06 09:30
DATE ANALYZED: 07/25/06 16:37

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	QC LIMIT (%)
TKN	.593J	1	1.61	102	75-125

EMAX QUALITY CONTROL DATA
DUPLICATE ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 351.3
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G073
SAMPLE ID: OC2-PMW17A-0-38DUP
CONTROL NO.: G073-02D

DATE RECEIVED: 07/13/06
DATE EXTRACTED: 07/24/06 09:30
DATE ANALYZED: 07/25/06 16:37

ACCESSION:

PARAMETER	SAMPLE (mg/L)	DUP. SAMPLE (mg/L)	RPD (%)	RPD LIMIT (%)
TKN	.593J	.607J	NA	20

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CASE NARRATIVE

CLIENT: **ARCADIS**

PROJECT: **OMEGA CHEMICAL**

SDG: **06G073**

METHOD 370.1
DISSOLVED SILICA

Two (2) water samples were received on 07/13/06 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 blanks were free of contamination at the reporting limit.

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

   Lab control results were within QC limit.

4. **Duplicate**

   Samples G073-01 and -02 were analyzed for duplicate. %RPDs were within QC limit.

5. **Matrix Spike**

   Samples G073-01 and -02 were spiked. %Recoveries were 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. : 06G073

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	SIG007WB	ND	1	NA	2	1	07/19/0617:39	NA	SIG007-10	SIG007-08	SIG007W	NA	NA
LCS1W	SIG007WL	14.7	1	NA	2	1	07/19/0617:40	NA	SIG007-11	SIG007-08	SIG007W	NA	NA
OC2-PMW17A-0-38	G073-02R	25.5	2	NA	4	2	07/19/0617:43	NA	SIG007-14	SIG007-08	SIG007W	07/13/06	07/13/06
OC2-PMW17A-0-38DUP	G073-02D	25.6	2	NA	4	2	07/19/0617:44	NA	SIG007-15	SIG007-08	SIG007W	07/13/06	07/13/06
OC2-PMW17A-0-38MS	G073-02M	37.9	2	NA	4	2	07/19/0617:47	NA	SIG007-18	SIG007-16	SIG007W	07/13/06	07/13/06
MBLK2W	SIG008WB	ND	1	NA	2	1	07/24/0613:04	NA	SIG008-10	SIG008-08	SIG008W	NA	NA
LCS2W	SIG008WL	14.8	1	NA	2	1	07/24/0613:05	NA	SIG008-11	SIG008-08	SIG008W	NA	NA
OC2-PMW19-0-37	G073-01R	25.6	2	NA	4	2	07/24/0613:07	NA	SIG008-13	SIG008-08	SIG008W	07/13/06	07/13/06
OC2-PMW19-0-37DUP	G073-01D	25.7	2	NA	4	2	07/24/0613:08	NA	SIG008-14	SIG008-08	SIG008W	07/13/06	07/13/06
OC2-PMW19-0-37MS	G073-01M	37.5	2	NA	4	2	07/24/0613:09	NA	SIG008-15	SIG008-08	SIG008W	07/13/06	07/13/06

EMAX QUALITY CONTROL DATA
LCS ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 370.1
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G073
SAMPLE ID: LCS1W
CONTROL NO.: SIG007WL

DATE RECEIVED: NA
DATE EXTRACTED: NA
DATE ANALYZED: 07/19/06 17:40

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	LCS RSLT (mg/L)	LCS % REC	QC LIMIT (%)
Dissolved Silica	ND	15.00	14.70	98	80-120

EMAX QUALITY CONTROL DATA
LCS ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 370.1
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G073
SAMPLE ID: LCS2W
CONTROL NO.: SIG008WL

DATE RECEIVED: NA
DATE EXTRACTED: NA
DATE ANALYZED: 07/24/06 13:05

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	LCS RSLT (mg/L)	LCS % REC	QC LIMIT (%)
Dissolved Silica	ND	15	14.8	99	80-120

1659

EMAX QUALITY CONTROL DATA
MS ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 370.1
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G073
SAMPLE ID: OC2-PMW19-0-37MS
CONTROL NO.: G073-01M

DATE RECEIVED: 07/13/06
DATE EXTRACTED: NA
DATE ANALYZED: 07/24/06 13:09

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	QC LIMIT (%)
Dissolved Silica	25.6	15	37.5	79	75-125

EMAX QUALITY CONTROL DATA
MS ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 370.1
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G073
SAMPLE ID: OC2-PMW17A-0-38MS
CONTROL NO.: G073-02M

DATE RECEIVED: 07/13/06
DATE EXTRACTED: NA
DATE ANALYZED: 07/19/06 17:47

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	QC LIMIT (%)
Dissolved Silica	25.50	15.00	37.90	83	75-125

0915

EMAX QUALITY CONTROL DATA
DUPLICATE ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 370.1
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G073
SAMPLE ID: OC2-PMW19-0-37DUP
CONTROL NO.: G073-01D

DATE RECEIVED: 07/13/06
DATE EXTRACTED: NA
DATE ANALYZED: 07/24/06 13:08

ACCESSION:

PARAMETER	SAMPLE (mg/L)	DUP. SAMPLE (mg/L)	RPD (%)	RPD LIMIT (%)
Dissolved Silica	25.6	25.7	0	20

EMAX QUALITY CONTROL DATA
DUPLICATE ANALYSIS

CLIENT: ARCADIS
PROJECT: OMEGA CHEMICAL
METHOD: METHOD 370.1
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 06G073
SAMPLE ID: OC2-PMW17A-0-38DUP
CONTROL NO.: G073-02D

DATE RECEIVED: 07/13/06
DATE EXTRACTED: NA
DATE ANALYZED: 07/19/06 17:44

ACCESSION:

PARAMETER	SAMPLE (mg/L)	DUP. SAMPLE (mg/L)	RPD (%)	RPD LIMIT (%)
Dissolved Silica	25.50	25.60	0	20