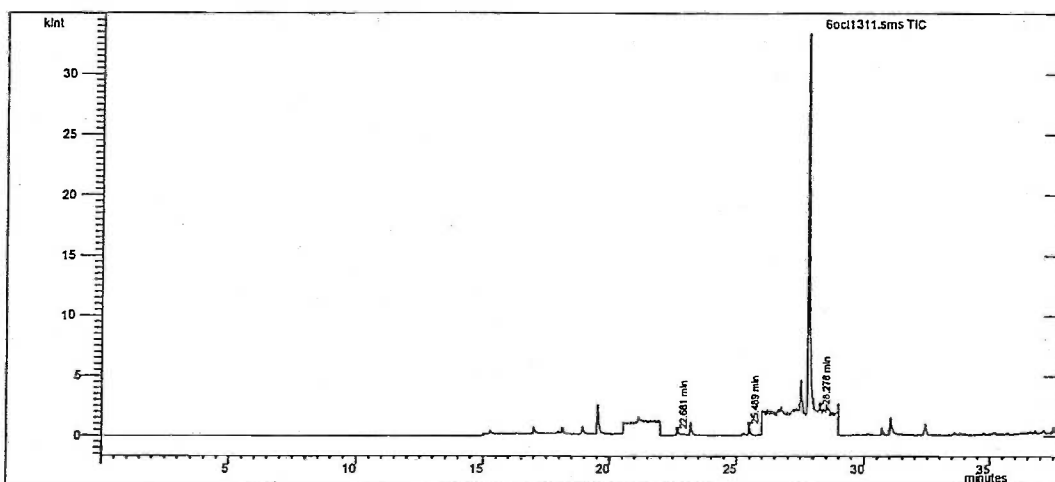


8260B Volatile Organics

Associated Labs

GCMS # 6

Data File Name: c:\varianws\data\6oct12\6oct1311.sms Calc Method: C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name: 0.02ppb tcp ccv Acquisition Date: 10/26/2012 10:30:26 AM
Inj. Notes: w#12100901 Operator Name: RyanP



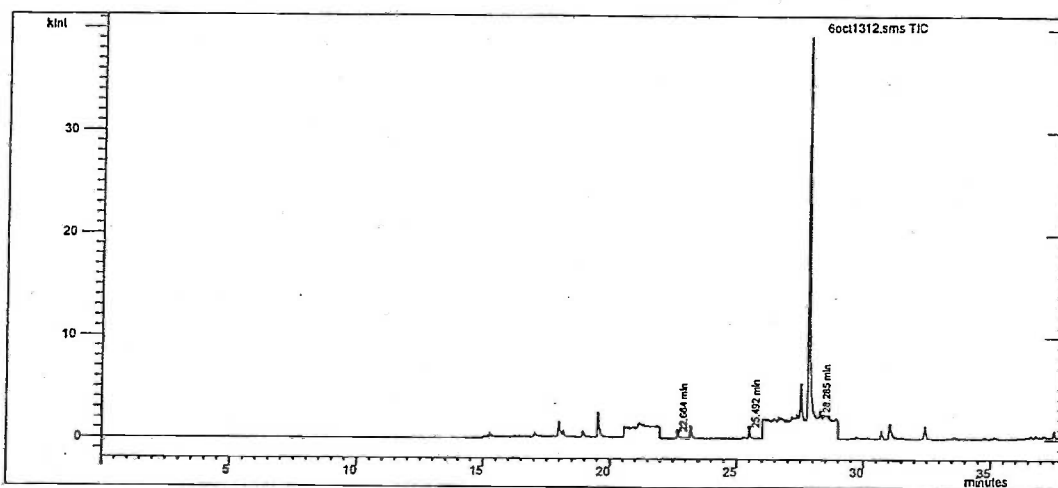
RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.489	117.0+82.0	Chlorobenzene-d5(1S2)	998	2619	1.000
28.278	75.0	1,2,3 - TCP	1000	2499	0.018
22.661	98.0+70.0	Toluene-d8 (Surr 3)	970	1255	1.257

8260B Volatile Organics

Associated Labs

GCMS # 6

Data File Name: c:\varianws\data\6oct12\6oct1312.sms Calc Method: C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name: 0.02ppb tcp lcs Acquisition Date: 10/26/2012 11:52:15 AM
Inj. Notes: w#12100902 Operator Name: RyanP



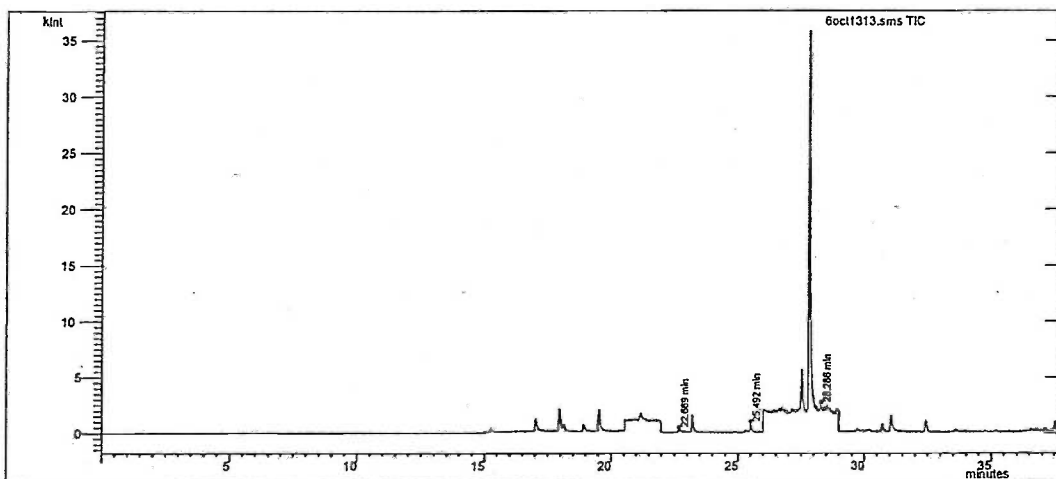
RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.492	117.0+82.0	Chlorobenzene-d5(1S2)	999	2831	1.000
28.285	75.0	1,2,3 - TCP	1000	2478	0.016
22.664	98.0+70.0	Toluene-d8 (Surr 3)	998	1413	1.309

8260B Volatile Organics

Associated Labs

GCMS # 6

Data File Name: c:\varianws\data\6oct12\6oct1313.sms Calc Method: C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name: 0.02ppb tcp lcsd Acquisition Date: 10/26/2012 12:50:15 PM
Inj. Notes: w#12100902 Operator Name: RyanP



RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.492	117.0+82.0	Chlorobenzene-d5(IS2)	999	2496	1.000
28.286	75.0	1,2,3 - TCP	1000	2488	0.019
22.669	98.0+70.0	Toluene-d8 (Surr 3)	944	1104	1.160

8260B Volatile Organics

Associated Labs

GCMS # 6

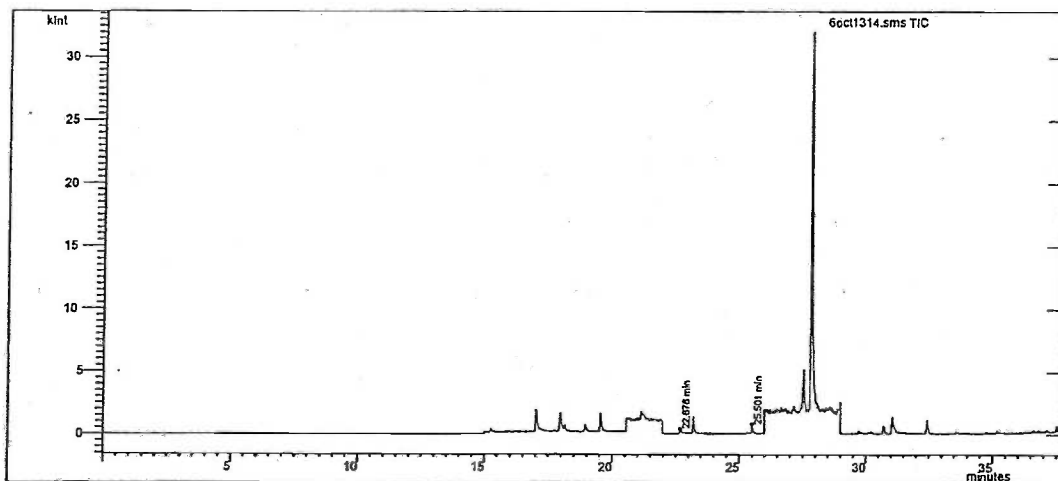
Data File Name: c:\varianws\data\6oct12\6oct1314.sms Calc Method: C:\VarianWS\methods\TCP-Q_102212.mth

Sample Name: method blank

Acquisition Date: 10/26/2012 1:47:30 PM

Inj. Notes:

Operator Name: RyanP



RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.501	117.0+82.0	Chlorobenzene-d5(IS2)	999	2112	1.000
22.676	98.0+70.0	Toluene-d8 (Surr 3)	971	852	1.058

Varian Star Workstation - RecalcList Tue Oct 23 08:54:41 2012

RecalcList: C:\Documents and Settings\ragtimerye\Desktop\temp recalc.rcl

Created: Tue Sep 11 16:52:55 2012

Modified: Tue Oct 23 08:34:46 2012

TCP Q-102212

Line	Sample Name	Data File	Recalc Notes
1	rinse	c:\varianws\data\6oct12\6Oct1263.SMS	none
2	0.005ppb tcp ic	c:\varianws\data\6oct12\6Oct1264.SMS	none
3	0.01ppb tcp ic	c:\varianws\data\6oct12\6Oct1265.SMS	none
4	0.02ppb tcp ic	c:\varianws\data\6oct12\6Oct1266.SMS	none
5	0.05ppb tcp ic	c:\varianws\data\6oct12\6Oct1267.SMS	none
6	0.1ppb tcp ic	c:\varianws\data\6oct12\6Oct1268.SMS	none
7	rinse	c:\varianws\data\6oct12\6Oct1269.SMS	none
8	rinse	c:\varianws\data\6oct12\6Oct1270.SMS	none
9	0.02ppb tcp ccv	c:\varianws\data\6oct12\6Oct1271.SMS	none

ALAB: 00391

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LMC-PET-00000788

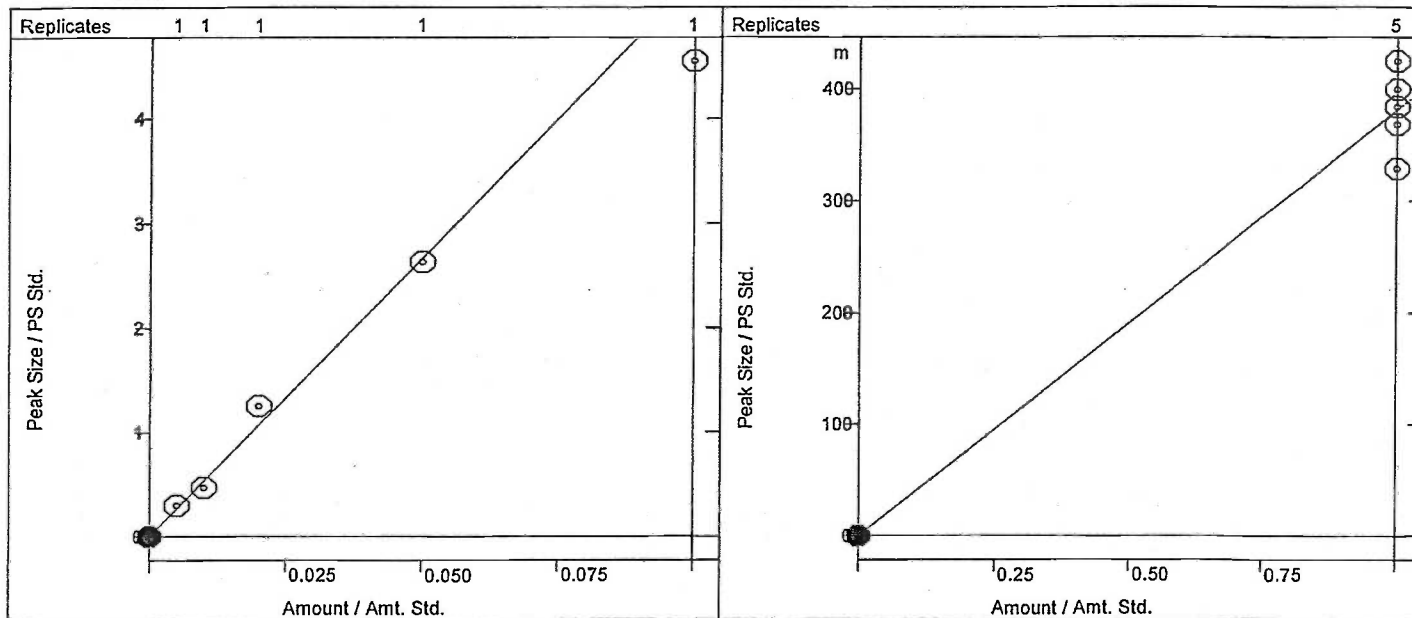
Method:	c:\varianws\methods\tcp-q_102212.mth	Last Calibration:	10/23/2012 9:40 AM
Recalc Method:	...p-q_102212.mth	Cmpd. Table Updated:	10/23/2012 9:42 AM
Sample List:	N/A	Detector:	2000 Mass Spec
Sequence:	N/A	Workstation Version:	Version 6.9
MS Workstation		Calibration Type:	Internal Standard Analysis
Peak Measurement:	Area		

1,2,3 - TCP

Curve Fit: Linear, Origin: Force, Weight: 1/nX2
 Resp. Fact. RSD: 14.10%, Coeff. Det.(r2): 0.990412
 $y = +53.3889x$

Toluene-d8 (Surr 3)

Curve Fit: Linear, Origin: Include (Ignore), Weight: 1/nX2
 Resp. Fact. RSD: 9.450%, Coeff. Det.(r2): 0.958893
 $y = +0.3813x + 1.1102e-16$



ALAB : 00392

8260B Volatile Organics

Associated Labs

GCMS # 6

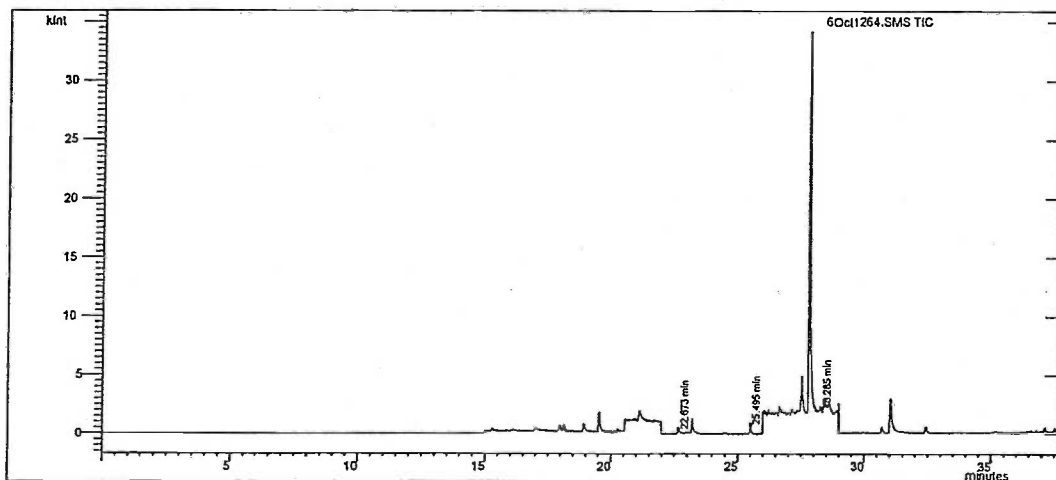
Data File Name: c:\varianws\data\6oct12\6Oct1264.SMS Calc Method: C:\VarianWS\methods\TCP-Q_102212.mth

Sample Name: 0.005ppb tcp ic

Acquisition Date: 10/22/2012 2:00:44 PM

Inj. Notes:

Operator Name: RyanP



RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.495	117.0+82.0	Chlorobenzene-d5(IS2)	998	2092	1.000
28.285	75.0	1,2,3 - TCP	1000	621	0.006
22.673	98.0+70.0	Toluene-d8 (Surr 3)	919	688	0.862

ALAB : 00393

8260B Volatile Organics

Associated Labs

GCMS # 6

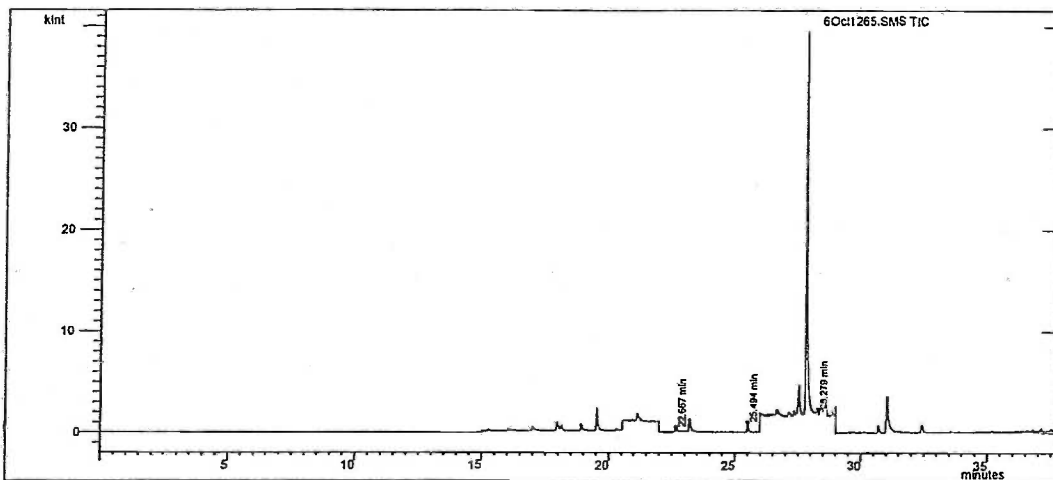
Data File Name: c:\varianws\data\6oct12\6Oct1265.SMS Calc Method: C:\VarianWS\methods\TCP-Q_102212.mth

Sample Name: 0.01ppb tcp ic

Acquisition Date: 10/22/2012 3:00:07 PM

Inj. Notes:

Operator Name: RyanP



RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.494	117.0+82.0	Chlorobenzene-d5(IS2)	999	2434	1.000
28.279	75.0	1,2,3 - TCP	1000	1139	0.009
22.667	98.0+70.0	Toluene-d8 (Surr 3)	944	1035	1.115

ALAB : 00394

8260B Volatile Organics

Associated Labs

GCMS # 6

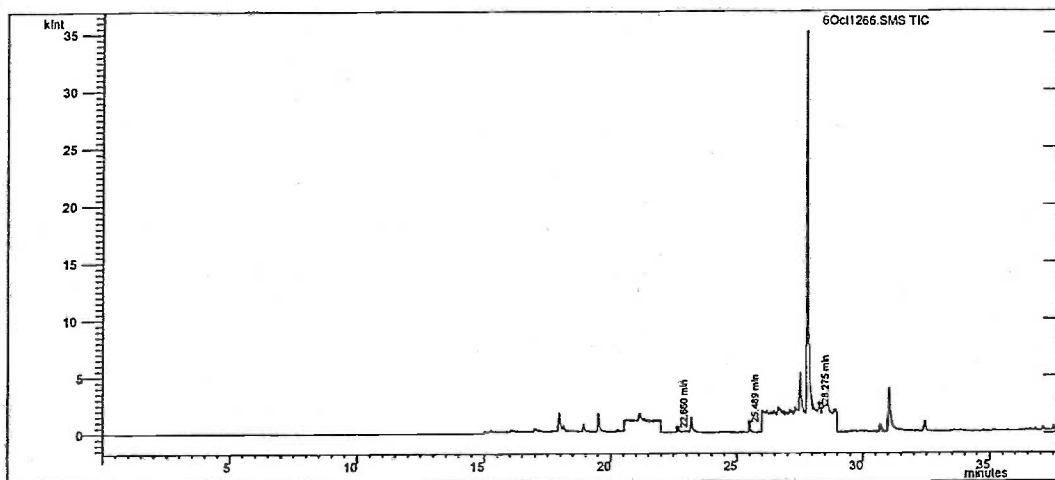
Data File Name: c:\varianws\data\6oct12\6Oct1266.SMS Calc Method: C:\VarianWS\methods\TCP-Q_102212.mth

Sample Name: 0.02ppb tcp ic

Acquisition Date: 10/22/2012 4:03:26 PM

Inj. Notes:

Operator Name: RyanP



RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.489	117.0+82.0	Chlorobenzene-d5(IS2)	998	2205	1.000
28.275	75.0	1,2,3 - TCP	1000	2760	0.023
22.660	98.0+70.0	Toluene-d8 (Surr 3)	955	812	0.966

8260B Volatile Organics

Associated Labs

GCMS # 6

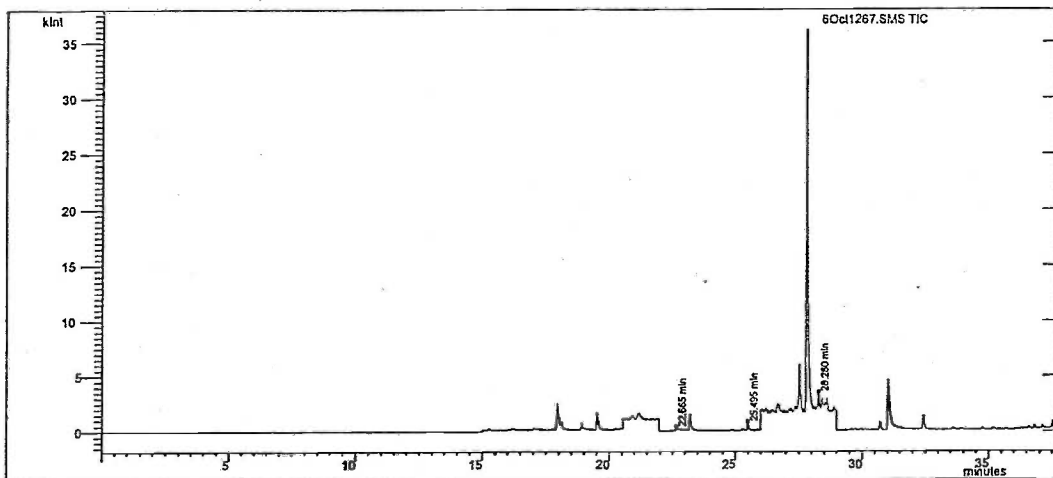
Data File Name: c:\varianws\data\6oct12\6Oct1267.SMS Calc Method: C:\VarianWS\methods\TCP-Q_102212.mth

Sample Name: 0.05ppb tcp ic

Acquisition Date: 10/22/2012 5:05:50 PM

Inj. Notes:

Operator Name: RyanP



RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.495	117.0+82.0	Chlorobenzene-d5(IS2)	998	2183	1.000
28.280	75.0	1,2,3 - TCP	1000	5548	0.048
22.665	98.0+70.0	Toluene-d8 (Surr 3)	892	873	1.049

8260B Volatile Organics

Associated Labs

GCMS # 6

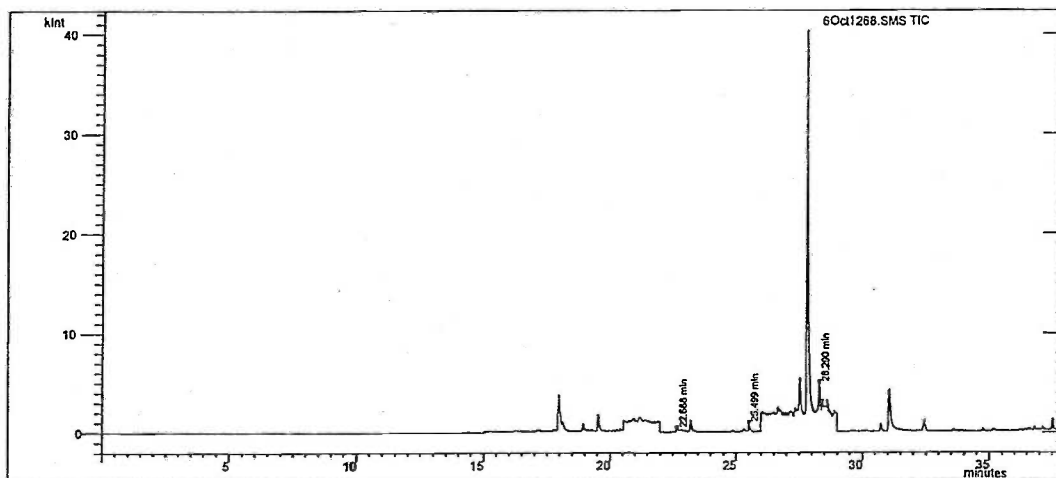
Data File Name: c:\varianws\data\6oct12\6Oct1268.SMS Calc Method: C:\VarianWS\methods\TCP-Q_102212.mth

Sample Name: 0.1ppb tcp ic

Acquisition Date: 10/22/2012 6:11:48 PM

Inj. Notes:

Operator Name: RyanP



RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.499	117.0+82.0	Chlorobenzene-d5(IS2)	999	2444	1.000
28.290	75.0	1,2,3 - TCP	1000	11238	0.086
22.668	98.0+70.0	Toluene-d8 (Surr 3)	873	949	1.018

8260B Volatile Organics

Associated Labs

GCMS # 6

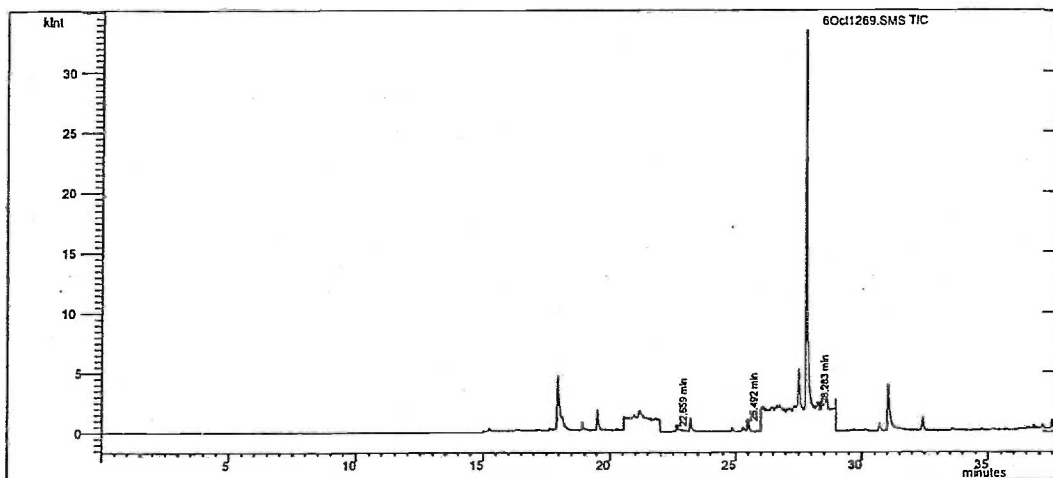
Data File Name: c:\varianws\data\6oct12\6Oct1269.SMS Calc Method: C:\Varian\WS\methods\TCP-Q_102212.mth

Sample Name: rinse

Acquisition Date: 10/22/2012 7:08:34 PM

Inj. Notes:

Operator Name: RyanP



RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.492	117.0+82.0	Chlorobenzene-d5(IS2)	999	2075	1.000
28.283	75.0	1,2,3 - TCP	1000	1236	0.011
22.659	98.0+70.0	Toluene-d8 (Surr 3)	949	774	0.978

ALAB : 00398

8260B Volatile Organics

Associated Labs

GCMS # 6

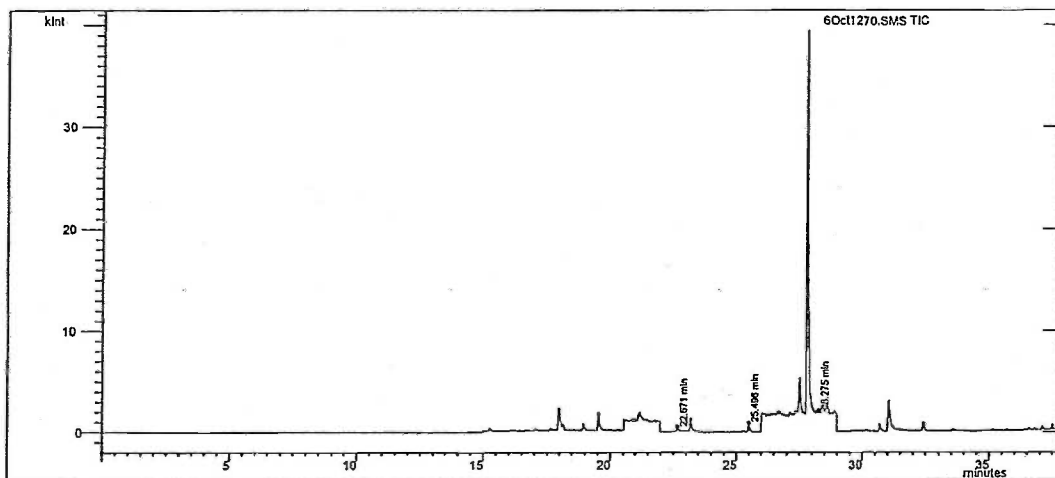
Data File Name: c:\varianwsl\data\6oct12\6Oct1270.SMS Calc Method: C:\VarianWS\methods\TCP-Q_102212.mth

Sample Name: rinse

Acquisition Date: 10/22/2012 8:05:38 PM

Inj. Notes:

Operator Name: RyanP



RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.496	117.0+82.0	Chlorobenzene-d5(IS2)	999	2288	1.000
28.275	75.0	1,2,3 - TCP	1000	729	0.006
22.671	98.0+70.0	Toluene-d8 (Surr 3)	887	817	0.937

ALAB : 00399

8260B Volatile Organics

Associated Labs

GCMS # 6

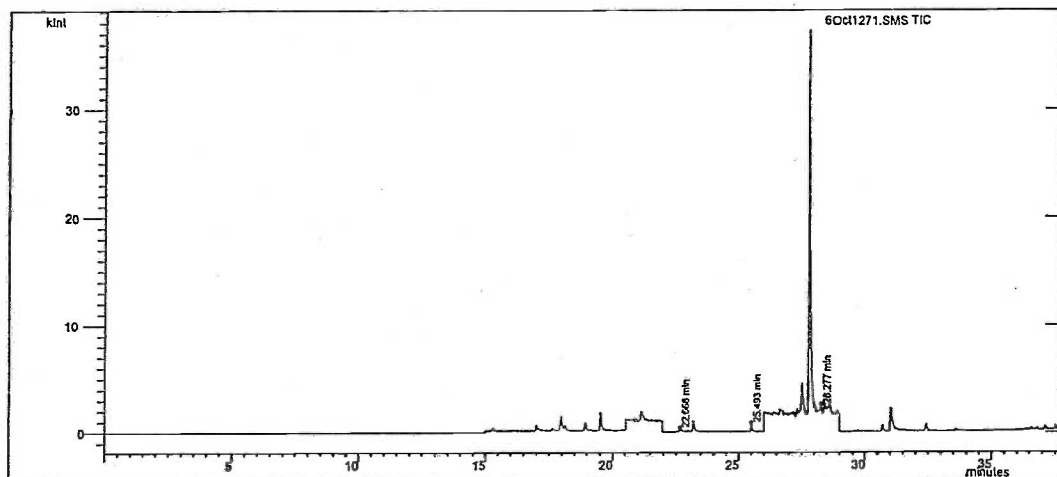
Data File Name: c:\varianws\data\6oct12\6Oct1271.SMS Calc Method: C:\VarianWS\methods\TCP-Q_102212.mth

Sample Name: 0.02ppb tcp ccv

Acquisition Date: 10/22/2012 9:02:30 PM

Inj. Notes: w#12100901

Operator Name: RyanP



RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.493	117.0+82.0	Chlorobenzene-d5(IS2)	999	2394	1.000
28.277	75.0	1,2,3 - TCP	1000	2663	0.021
22.668	98.0+70.0	Toluene-d8 (Surr 3)	927	925	1.014

ALAB : 00400



ASSOCIATED LABORATORIES

806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714 538-1209

CLIENT: ARCADIS

LAB REQUEST: 312080

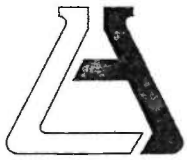
ATTN: Leah Levy

PROJECT: BOU Burbank

FULL DATAPACKAGE

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SM 2510-B Specific Conductance	Page 58-59
SM 2540-C Total Dissolved Solids	Page 60-63
EPA 218.6 Hexavalent Chromium	Page 64-115
EPA 300.0 Anions	Page 116-146
SM 4500-H+B pH	Page 147-150
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EPA 8270M 1,4-Dioxane	Page 398-447



ASSOCIATED LABORATORIES

806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714 538-1209

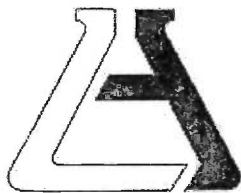
ARCADIS
BOU Burbank Project
ALAB # 312080
Level III Data Package

ALAB Project Manger: Danielle Roberts
ALAB Laboratory Director: Ed Behare PhD
ALAB Quality Control Manager: Hongling Cao

ALAB : 00001

CONFIDENTIAL

LMC-PET-00000799



Associated Laboratories

806 N. Batavia - Orange, CA 92868
Tel (714)771-6900 Fax (714)538-1209
www.associatedlabs.com
Info@associatedlabs.com



Client: ARCADIS
Address: 3750 Schauffele Ave., Suite 225
Long Beach, CA 90808
Attn: Leah Levy

Comments: BOU Burbank
B0038189.0000.00001

Lab Request: 312080
Report Date: 10/31/2012
Date Received: 10/12/2012
Client ID: 14099

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

<u>Sample #</u>	<u>Client Sample ID</u>
312080-001	B-1-CW25
312080-002	TB101212
312080-003	MW-1
312080-004	MW-2
312080-005	C-1-CW03
312080-006	C-1-CW02
312080-007	C-1-CW03 Duplicate
312080-008	Equipment Blank
312080-009	B-5-CW03
312080-010	B-5-CW03 Duplicate
312080-011	B-1-CW13
312080-012	B-1-CW13 Duplicate
312080-013	B-1-CW12
312080-014	B-1-CW12 Duplicate
312080-015	MW-3

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Behare, Ph.D.
Lab Director

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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TESTING & CONSULTING

Chemical
Microbiological
Environmental

ALAB : 00002

CONFIDENTIAL

LMC-PET-00000800

Matrix: Water
Sampled: 10/11/2012 16:35
Sample #: 312080-001

Client: ARCADIS
Site:
Client Sample #: B-1-CW25

Collector: Client
Notes:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8260 NELAC	Prep Method: EPA 5030B							QCBatchID: QC1130740
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/21/12	nicollez	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/21/12	nicollez	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/21/12	nicollez	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/21/12	nicollez	
1,1,2-Trichlorotrifluoroethane	0.5	1	0.119	0.5	ug/L	10/21/12	nicollez	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/21/12	nicollez	
1,1-Dichloroethene	0.8	1	0.13	0.5	ug/L	10/21/12	nicollez	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/21/12	nicollez	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/21/12	nicollez	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/21/12	nicollez	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/21/12	nicollez	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/21/12	nicollez	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/21/12	nicollez	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/21/12	nicollez	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/21/12	nicollez	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/21/12	nicollez	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/21/12	nicollez	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/21/12	nicollez	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/21/12	nicollez	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/21/12	nicollez	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/21/12	nicollez	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/21/12	nicollez	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/21/12	nicollez	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/21/12	nicollez	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/21/12	nicollez	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/21/12	nicollez	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/21/12	nicollez	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/21/12	nicollez	
Acetone	ND	1	0.2	10	ug/L	10/21/12	nicollez	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/21/12	nicollez	
Benzene	ND	1	0.071	0.5	ug/L	10/21/12	nicollez	
Bromobenzene	ND	1	0.073	1	ug/L	10/21/12	nicollez	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/21/12	nicollez	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/21/12	nicollez	
Bromoform	ND	1	0.053	0.5	ug/L	10/21/12	nicollez	
Bromomethane	ND	1	0.13	1	ug/L	10/21/12	nicollez	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/21/12	nicollez	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/21/12	nicollez	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/21/12	nicollez	
Chloroethane	ND	1	0.4	0.5	ug/L	10/21/12	nicollez	
Chloroform	0.9	1	0.044	0.5	ug/L	10/21/12	nicollez	
Chloromethane	ND	1	0.055	0.5	ug/L	10/21/12	nicollez	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/21/12	nicollez	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/21/12	nicollez	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/21/12	nicollez	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/21/12	nicollez	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/21/12	nicollez	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/21/12	nicollez	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/21/12	nicollez	
Ethyl-terbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/21/12	nicollez	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

Analytical Results Report

Lab Request 312080 Page 2 of 33



ALAB : 000003

CONFIDENTIAL

LMC-PET-00000801

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/11/2012 16:35	Site:	Notes:
Sample #: 312080-001	Client Sample #: B-1-CW25	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/21/12	nicollez	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/21/12	nicollez	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/21/12	nicollez	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/21/12	nicollez	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/21/12	nicollez	
Naphthalene	ND	1	0.061	0.5	ug/L	10/21/12	nicollez	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/21/12	nicollez	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/21/12	nicollez	
o-Xylene	ND	1	0.075	0.5	ug/L	10/21/12	nicollez	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/21/12	nicollez	
Styrene	ND	1	0.088	0.5	ug/L	10/21/12	nicollez	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/21/12	nicollez	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/21/12	nicollez	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/21/12	nicollez	
Tetrachloroethene	650	10	1.5	5	ug/L	10/21/12	nicollez	
Toluene	ND	1	0.078	0.5	ug/L	10/21/12	nicollez	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/21/12	nicollez	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/21/12	nicollez	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/21/12	nicollez	
Trichloroethene	78	1	0.078	0.5	ug/L	10/21/12	nicollez	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/21/12	nicollez	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/21/12	nicollez	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/21/12	nicollez	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	115	70-145	
4-Bromofluorobenzene (SUR)	113	70-145	
Dibromodifluoromethane (SUR)	104	70-145	
Toluene-d8 (SUR)	100	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 000004

CONFIDENTIAL

LMC-PET-00000802

Matrix: Water
Sampled: 10/12/2012 07:10
Sample #: 312080-002

Client: ARCADIS
Site:
Client Sample #: TB101212

Collector: Client
Notes:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8260 NELAC		Prep Method: EPA 5030B		QCBatchID: QC1130740				
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/20/12	liaoyuanz	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/20/12	liaoyuanz	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/20/12	liaoyuanz	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/20/12	liaoyuanz	
1,1,2-Trichlorotrifluoroethane	ND	1	0.119	0.5	ug/L	10/20/12	liaoyuanz	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/20/12	liaoyuanz	
1,1-Dichloroethene	ND	1	0.13	0.5	ug/L	10/20/12	liaoyuanz	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/20/12	liaoyuanz	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/20/12	liaoyuanz	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/20/12	liaoyuanz	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/20/12	liaoyuanz	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/20/12	liaoyuanz	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/20/12	liaoyuanz	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/20/12	liaoyuanz	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/20/12	liaoyuanz	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/20/12	liaoyuanz	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/20/12	liaoyuanz	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/20/12	liaoyuanz	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/20/12	liaoyuanz	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/20/12	liaoyuanz	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/20/12	liaoyuanz	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/20/12	liaoyuanz	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/20/12	liaoyuanz	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/20/12	liaoyuanz	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/20/12	liaoyuanz	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/20/12	liaoyuanz	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/20/12	liaoyuanz	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/20/12	liaoyuanz	
Acetone	ND	1	0.2	10	ug/L	10/20/12	liaoyuanz	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	liaoyuanz	
Benzene	ND	1	0.071	0.5	ug/L	10/20/12	liaoyuanz	
Bromobenzene	ND	1	0.073	1	ug/L	10/20/12	liaoyuanz	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/20/12	liaoyuanz	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/20/12	liaoyuanz	
Bromoform	ND	1	0.053	0.5	ug/L	10/20/12	liaoyuanz	
Bromomethane	ND	1	0.13	1	ug/L	10/20/12	liaoyuanz	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/20/12	liaoyuanz	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/20/12	liaoyuanz	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/20/12	liaoyuanz	
Chloroethane	ND	1	0.4	0.5	ug/L	10/20/12	liaoyuanz	
Chloroform	ND	1	0.044	0.5	ug/L	10/20/12	liaoyuanz	
Chloromethane	ND	1	0.055	0.5	ug/L	10/20/12	liaoyuanz	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/20/12	liaoyuanz	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/20/12	liaoyuanz	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	liaoyuanz	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/20/12	liaoyuanz	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/20/12	liaoyuanz	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/20/12	liaoyuanz	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/20/12	liaoyuanz	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/20/12	liaoyuanz	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



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ALAB : 000005

CONFIDENTIAL

LMC-PET-00000803

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 07:10	Site:	Notes:
Sample #: 312080-002	Client Sample #: TB101212	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/20/12	liaoyuanz	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/20/12	liaoyuanz	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/20/12	liaoyuanz	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/20/12	liaoyuanz	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/20/12	liaoyuanz	
Naphthalene	ND	1	0.061	0.5	ug/L	10/20/12	liaoyuanz	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/20/12	liaoyuanz	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/20/12	liaoyuanz	
o-Xylene	ND	1	0.075	0.5	ug/L	10/20/12	liaoyuanz	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/20/12	liaoyuanz	
Styrene	ND	1	0.088	0.5	ug/L	10/20/12	liaoyuanz	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/20/12	liaoyuanz	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/20/12	liaoyuanz	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/20/12	liaoyuanz	
Tetrachloroethene	ND	1	0.15	0.5	ug/L	10/20/12	liaoyuanz	
Toluene	ND	1	0.078	0.5	ug/L	10/20/12	liaoyuanz	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/20/12	liaoyuanz	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/20/12	liaoyuanz	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	liaoyuanz	
Trichloroethene	ND	1	0.078	0.5	ug/L	10/20/12	liaoyuanz	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/20/12	liaoyuanz	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	liaoyuanz	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/20/12	liaoyuanz	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	113	70-145	
4-Bromofluorobenzene (SUR)	116	70-145	
Dibromodifluoromethane (SUR)	105	70-145	
Toluene-d8 (SUR)	102	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



ASSOCIATED LABORATORIES

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ALAB : 000006

CONFIDENTIAL

LMC-PET-00000804

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 08:30	Site:	Notes:
Sample #: 312080-003	Client Sample #: MW-1	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6 Prep Method: EPA 218.6 QCBatchID: QC1130697								
Hexavalent Chromium	0.9 J	1	0.1	1	ug/L	10/19/12	rybechay	
Method: EPA 300.0 Prep Method: Method QCBatchID: QC1130565								
Nitrate, as NO3	94.2	5	0.4	2.2	mg/L	10/13/12	wei	
Nitrate, as Nitrogen	21.3	5	0.3	0.5	mg/L	10/13/12	wei	
Nitrite, as NO2	ND	1	0.12	0.33	mg/L	10/13/12	wei	
Nitrite, as Nitrogen	ND	1	0.018	0.1	mg/L	10/13/12	wei	
Method: EPA 6010 NELAC Prep Method: EPA 3010A/Filtered QCBatchID: QC1130591								
Chromium	0.005 J	1	0.002	0.01	mg/L	10/17/12	nina	
Thallium	ND	1	0.003	0.005	mg/L	10/17/12	nina	
Method: EPA 8260 NELAC Prep Method: EPA 5030B QCBatchID: QC1130740								
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,1-Trichloroethane	1.8	1	0.063	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,2-Trichlorotrifluoroethane	4.2	1	0.119	0.5	ug/L	10/21/12	Liaoyuanz	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
1,1-Dichloroethene	31	1	0.13	0.5	ug/L	10/21/12	Liaoyuanz	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,3-Trichloropropane	6.9	1	0.073	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dichloroethane	1.1	1	0.066	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/21/12	Liaoyuanz	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/21/12	Liaoyuanz	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/21/12	Liaoyuanz	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/21/12	Liaoyuanz	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/21/12	Liaoyuanz	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/21/12	Liaoyuanz	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/21/12	Liaoyuanz	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/21/12	Liaoyuanz	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/21/12	Liaoyuanz	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/21/12	Liaoyuanz	
Acetone	ND	1	0.2	10	ug/L	10/21/12	Liaoyuanz	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
Benzene	ND	1	0.071	0.5	ug/L	10/21/12	Liaoyuanz	
Bromobenzene	ND	1	0.073	1	ug/L	10/21/12	Liaoyuanz	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Bromoform	ND	1	0.053	0.5	ug/L	10/21/12	Liaoyuanz	
Bromomethane	ND	1	0.13	1	ug/L	10/21/12	Liaoyuanz	
Carbon Tetrachloride	3.0	1	0.045	0.5	ug/L	10/21/12	Liaoyuanz	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/21/12	Liaoyuanz	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/21/12	Liaoyuanz	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 000007

CONFIDENTIAL

LMC-PET-00000805

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 08:30	Site:	Notes:
Sample #: 312080-003	Client Sample #: MW-1	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Chloroethane	ND	1	0.4	0.5	ug/L	10/21/12	Liaoyuanz	
Chloroform	3.5	1	0.044	0.5	ug/L	10/21/12	Liaoyuanz	
Chloromethane	ND	1	0.055	0.5	ug/L	10/21/12	Liaoyuanz	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/21/12	Liaoyuanz	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/21/12	Liaoyuanz	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/21/12	Liaoyuanz	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/21/12	Liaoyuanz	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/21/12	Liaoyuanz	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/21/12	Liaoyuanz	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/21/12	Liaoyuanz	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/21/12	Liaoyuanz	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/21/12	Liaoyuanz	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/21/12	Liaoyuanz	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/21/12	Liaoyuanz	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/21/12	Liaoyuanz	
Naphthalene	ND	1	0.061	0.5	ug/L	10/21/12	Liaoyuanz	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/21/12	Liaoyuanz	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/21/12	Liaoyuanz	
o-Xylene	ND	1	0.075	0.5	ug/L	10/21/12	Liaoyuanz	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/21/12	Liaoyuanz	
Styrene	ND	1	0.088	0.5	ug/L	10/21/12	Liaoyuanz	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/21/12	Liaoyuanz	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/21/12	Liaoyuanz	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/21/12	Liaoyuanz	
Tetrachloroethene	110	1	0.15	0.5	ug/L	10/21/12	Liaoyuanz	
Toluene	ND	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/21/12	Liaoyuanz	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/21/12	Liaoyuanz	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/21/12	Liaoyuanz	
Trichloroethene	55	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/21/12	Liaoyuanz	
Analyte	% Recovery		Limits	Notes				
1,2-Dichloroethane-d4 (SUR)	115		70-145					
4-Bromofluorobenzene (SUR)	110		70-145					
Dibromodifluoromethane (SUR)	104		70-145					
Toluene-d8 (SUR)	104		70-145					

Method: EPA 8270M	Prep Method: EPA 3535	QCBatchID: QC1130590
1,4-Dioxane	4.9	1 0.12 1 ug/L 10/16/12 qnguyen

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 000008

CONFIDENTIAL

LMC-PET-00000806

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 10:40	Site:	Notes:
Sample #: 312080-004	Client Sample #: MW-2	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6	Prep Method: EPA 218.6							QCBatchID: QC1130697
Hexavalent Chromium	6.82	1	0.1	1	ug/L	10/19/12	rybechay	
Method: EPA 300.0	Prep Method: Method							QCBatchID: QC1130565
Nitrate, as NO3	118	5	0.4	2.2	mg/L	10/13/12	wei	
Nitrate, as Nitrogen	26.7	5	0.3	0.5	mg/L	10/13/12	wei	
Nitrite, as NO2	ND	1	0.12	0.33	mg/L	10/13/12	wei	
Nitrite, as Nitrogen	ND	1	0.018	0.1	mg/L	10/13/12	wei	
Method: EPA 6010 NELAC	Prep Method: EPA 3010A/Filtered							QCBatchID: QC1130591
Chromium	0.012	1	0.002	0.01	mg/L	10/17/12	nina	
Thallium	ND	1	0.003	0.005	mg/L	10/17/12	nina	
Method: EPA 8260 NELAC	Prep Method: EPA 5030B							QCBatchID: QC1130740
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,1-Trichloroethane	1.9	1	0.063	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,2-Trichlorotrifluoroethane	2.5	1	0.119	0.5	ug/L	10/21/12	Liaoyuanz	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
1,1-Dichloroethene	20	1	0.13	0.5	ug/L	10/21/12	Liaoyuanz	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,3-Trichloropropane	0.9	1	0.073	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dichloroethane	3.6	1	0.066	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/21/12	Liaoyuanz	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/21/12	Liaoyuanz	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/21/12	Liaoyuanz	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/21/12	Liaoyuanz	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/21/12	Liaoyuanz	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/21/12	Liaoyuanz	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/21/12	Liaoyuanz	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/21/12	Liaoyuanz	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/21/12	Liaoyuanz	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/21/12	Liaoyuanz	
Acetone	ND	1	0.2	10	ug/L	10/21/12	Liaoyuanz	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
Benzene	ND	1	0.071	0.5	ug/L	10/21/12	Liaoyuanz	
Bromobenzene	ND	1	0.073	1	ug/L	10/21/12	Liaoyuanz	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Bromoform	ND	1	0.053	0.5	ug/L	10/21/12	Liaoyuanz	
Bromomethane	ND	1	0.13	1	ug/L	10/21/12	Liaoyuanz	
Carbon Tetrachloride	5.5	1	0.045	0.5	ug/L	10/21/12	Liaoyuanz	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/21/12	Liaoyuanz	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/21/12	Liaoyuanz	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



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Analytical Results Report

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ALAB : 000009

CONFIDENTIAL

LMC-PET-00000807

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 10:40	Site:	Notes:
Sample #: 312080-004	Client Sample #: MW-2	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Chloroethane	ND	1	0.4	0.5	ug/L	10/21/12	Liaoyuanz	
Chloroform	3.8	1	0.044	0.5	ug/L	10/21/12	Liaoyuanz	
Chloromethane	ND	1	0.055	0.5	ug/L	10/21/12	Liaoyuanz	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/21/12	Liaoyuanz	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/21/12	Liaoyuanz	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/21/12	Liaoyuanz	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/21/12	Liaoyuanz	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/21/12	Liaoyuanz	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/21/12	Liaoyuanz	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/21/12	Liaoyuanz	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/21/12	Liaoyuanz	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/21/12	Liaoyuanz	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/21/12	Liaoyuanz	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/21/12	Liaoyuanz	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/21/12	Liaoyuanz	
Naphthalene	ND	1	0.061	0.5	ug/L	10/21/12	Liaoyuanz	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/21/12	Liaoyuanz	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/21/12	Liaoyuanz	
o-Xylene	ND	1	0.075	0.5	ug/L	10/21/12	Liaoyuanz	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/21/12	Liaoyuanz	
Styrene	ND	1	0.088	0.5	ug/L	10/21/12	Liaoyuanz	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/21/12	Liaoyuanz	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/21/12	Liaoyuanz	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/21/12	Liaoyuanz	
Tetrachloroethene	92	1	0.15	0.5	ug/L	10/21/12	Liaoyuanz	
Toluene	ND	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/21/12	Liaoyuanz	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/21/12	Liaoyuanz	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/21/12	Liaoyuanz	
Trichloroethene	78	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/21/12	Liaoyuanz	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	111	70-145	
4-Bromofluorobenzene (SUR)	110	70-145	
Dibromodifluoromethane (SUR)	102	70-145	
Toluene-d8 (SUR)	103	70-145	

Method: EPA 8270M	Prep Method: EPA 3535					QCBatchID: QC1130590	
1,4-Dioxane	ND	1	0.12	1	ug/L	10/16/12	qnguyen

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB: 00010

CONFIDENTIAL

LMC-PET-00000808

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 13:00	Site:	Notes:
Sample #: 312080-005	Client Sample #: C-1-CW03	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6	Prep Method: EPA 218.6							QCBatchID: QC1130697
Hexavalent Chromium	0.4 J	1	0.1	1	ug/L	10/19/12	rybechay	
Method: EPA 6010 NELAC	Prep Method: EPA 3010A/Filtered							QCBatchID: QC1130591
Chromium	0.003 J	1	0.002	0.01	mg/L	10/17/12	nina	
Method: EPA 8260 NELAC	Prep Method: EPA 5030B							QCBatchID: QC1130740
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/20/12	Liaoyuanz	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/20/12	Liaoyuanz	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/20/12	Liaoyuanz	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/20/12	Liaoyuanz	
1,1,2-Trichlorotrifluoroethane	ND	1	0.119	0.5	ug/L	10/20/12	Liaoyuanz	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/20/12	Liaoyuanz	
1,1-Dichloroethene	ND	1	0.13	0.5	ug/L	10/20/12	Liaoyuanz	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/20/12	Liaoyuanz	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/20/12	Liaoyuanz	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/20/12	Liaoyuanz	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/20/12	Liaoyuanz	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/20/12	Liaoyuanz	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/20/12	Liaoyuanz	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/20/12	Liaoyuanz	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/20/12	Liaoyuanz	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/20/12	Liaoyuanz	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/20/12	Liaoyuanz	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/20/12	Liaoyuanz	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/20/12	Liaoyuanz	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/20/12	Liaoyuanz	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/20/12	Liaoyuanz	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/20/12	Liaoyuanz	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/20/12	Liaoyuanz	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/20/12	Liaoyuanz	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/20/12	Liaoyuanz	
Acetone	ND	1	0.2	10	ug/L	10/20/12	Liaoyuanz	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	Liaoyuanz	
Benzene	ND	1	0.071	0.5	ug/L	10/20/12	Liaoyuanz	
Bromobenzene	ND	1	0.073	1	ug/L	10/20/12	Liaoyuanz	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
Bromoform	ND	1	0.053	0.5	ug/L	10/20/12	Liaoyuanz	
Bromomethane	ND	1	0.13	1	ug/L	10/20/12	Liaoyuanz	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/20/12	Liaoyuanz	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/20/12	Liaoyuanz	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/20/12	Liaoyuanz	
Chloroethane	ND	1	0.4	0.5	ug/L	10/20/12	Liaoyuanz	
Chloroform	0.6	1	0.044	0.5	ug/L	10/20/12	Liaoyuanz	
Chloromethane	ND	1	0.055	0.5	ug/L	10/20/12	Liaoyuanz	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/20/12	Liaoyuanz	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/20/12	Liaoyuanz	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	Liaoyuanz	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



ASSOCIATED LABORATORIES

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ALAB : 00011

CONFIDENTIAL

LMC-PET-00000809

Matrix: Water
 Sampled: 10/12/2012 13:00
 Sample #: 312080-005

Client: ARCADIS
 Site:
 Client Sample #: C-1-CW03

Collector: Client
 Notes:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Dibromomethane	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/20/12	Liaoyuanz	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/20/12	Liaoyuanz	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/20/12	Liaoyuanz	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/20/12	Liaoyuanz	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/20/12	Liaoyuanz	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/20/12	Liaoyuanz	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/20/12	Liaoyuanz	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/20/12	Liaoyuanz	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/20/12	Liaoyuanz	
Naphthalene	ND	1	0.061	0.5	ug/L	10/20/12	Liaoyuanz	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/20/12	Liaoyuanz	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/20/12	Liaoyuanz	
o-Xylene	ND	1	0.075	0.5	ug/L	10/20/12	Liaoyuanz	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/20/12	Liaoyuanz	
Styrene	ND	1	0.088	0.5	ug/L	10/20/12	Liaoyuanz	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/20/12	Liaoyuanz	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/20/12	Liaoyuanz	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/20/12	Liaoyuanz	
Tetrachloroethene	4.9	1	0.15	0.5	ug/L	10/20/12	Liaoyuanz	
Toluene	ND	1	0.078	0.5	ug/L	10/20/12	Liaoyuanz	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/20/12	Liaoyuanz	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/20/12	Liaoyuanz	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	Liaoyuanz	
Trichloroethene	ND	1	0.078	0.5	ug/L	10/20/12	Liaoyuanz	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	Liaoyuanz	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/20/12	Liaoyuanz	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	112	70-145	
4-Bromofluorobenzene (SUR)	108	70-145	
Dibromodifluoromethane (SUR)	104	70-145	
Toluene-d8 (SUR)	100	70-145	

Method: EPA 8260M

Prep Method: EPA 5030B

QCBatchID: QC1130929

1,2,3-Trichloropropane	ND	1	0.005	0.005	ug/L	10/26/12	akk
<u>Analyte</u>	<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>		
Toluene-d8 (SUR)	104		50-150				

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

Analytical Results Report

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ALAB: 00012

CONFIDENTIAL

LMC-PET-00000810

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 14:10	Site:	Notes:
Sample #: 312080-006	Client Sample #: C-1-CW02	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6	Prep Method: EPA 218.6							QCBatchID: QC1130697
Hexavalent Chromium	ND	1	0.1	1	ug/L	10/19/12	rybechay	
Method: EPA 6010 NELAC	Prep Method: EPA 3010A/Filtered							QCBatchID: QC1130591
Chromium	ND	1	0.002	0.01	mg/L	10/17/12	nina	
Method: EPA 8260 NELAC	Prep Method: EPA 5030B							QCBatchID: QC1130740
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/20/12	Liaoyuanz	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/20/12	Liaoyuanz	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/20/12	Liaoyuanz	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/20/12	Liaoyuanz	
1,1,2-Trichlorotrifluoroethane	ND	1	0.119	0.5	ug/L	10/20/12	Liaoyuanz	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/20/12	Liaoyuanz	
1,1-Dichloroethene	ND	1	0.13	0.5	ug/L	10/20/12	Liaoyuanz	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/20/12	Liaoyuanz	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/20/12	Liaoyuanz	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/20/12	Liaoyuanz	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/20/12	Liaoyuanz	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/20/12	Liaoyuanz	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/20/12	Liaoyuanz	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/20/12	Liaoyuanz	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/20/12	Liaoyuanz	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/20/12	Liaoyuanz	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/20/12	Liaoyuanz	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/20/12	Liaoyuanz	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/20/12	Liaoyuanz	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/20/12	Liaoyuanz	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/20/12	Liaoyuanz	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/20/12	Liaoyuanz	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/20/12	Liaoyuanz	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/20/12	Liaoyuanz	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/20/12	Liaoyuanz	
Acetone	ND	1	0.2	10	ug/L	10/20/12	Liaoyuanz	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	Liaoyuanz	
Benzene	ND	1	0.071	0.5	ug/L	10/20/12	Liaoyuanz	
Bromobenzene	ND	1	0.073	1	ug/L	10/20/12	Liaoyuanz	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
Bromoform	ND	1	0.053	0.5	ug/L	10/20/12	Liaoyuanz	
Bromomethane	ND	1	0.13	1	ug/L	10/20/12	Liaoyuanz	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/20/12	Liaoyuanz	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/20/12	Liaoyuanz	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/20/12	Liaoyuanz	
Chloroethane	ND	1	0.4	0.5	ug/L	10/20/12	Liaoyuanz	
Chloroform	ND	1	0.044	0.5	ug/L	10/20/12	Liaoyuanz	
Chloromethane	ND	1	0.055	0.5	ug/L	10/20/12	Liaoyuanz	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/20/12	Liaoyuanz	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/20/12	Liaoyuanz	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	Liaoyuanz	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 00013

CONFIDENTIAL

LMC-PET-00000811

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 14:10	Site:	Notes:
Sample #: 312080-006	Client Sample #: C-1-CW02	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Dibromomethane	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/20/12	Liaoyuanz	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/20/12	Liaoyuanz	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/20/12	Liaoyuanz	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/20/12	Liaoyuanz	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/20/12	Liaoyuanz	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/20/12	Liaoyuanz	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/20/12	Liaoyuanz	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/20/12	Liaoyuanz	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/20/12	Liaoyuanz	
Naphthalene	ND	1	0.061	0.5	ug/L	10/20/12	Liaoyuanz	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/20/12	Liaoyuanz	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/20/12	Liaoyuanz	
o-Xylene	ND	1	0.075	0.5	ug/L	10/20/12	Liaoyuanz	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/20/12	Liaoyuanz	
Styrene	ND	1	0.088	0.5	ug/L	10/20/12	Liaoyuanz	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/20/12	Liaoyuanz	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/20/12	Liaoyuanz	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/20/12	Liaoyuanz	
Tetrachloroethene	0.7	1	0.15	0.5	ug/L	10/20/12	Liaoyuanz	
Toluene	ND	1	0.078	0.5	ug/L	10/20/12	Liaoyuanz	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/20/12	Liaoyuanz	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/20/12	Liaoyuanz	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	Liaoyuanz	
Trichloroethene	ND	1	0.078	0.5	ug/L	10/20/12	Liaoyuanz	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	Liaoyuanz	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/20/12	Liaoyuanz	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	114	70-145	
4-Bromofluorobenzene (SUR)	108	70-145	
Dibromodifluoromethane (SUR)	104	70-145	
Toluene-d8 (SUR)	105	70-145	

Method: EPA 8260M		Prep Method: EPA 5030B				QCBatchID: QC1130929		
1,2,3-Trichloropropane		ND	1	0.005	0.005	ug/L	10/26/12	akk
<u>Analyte</u>		<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>		
Toluene-d8 (SUR)		103		50-150				

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 000014

CONFIDENTIAL

LMC-PET-00000812

Matrix: Water
Sampled: 10/12/2012 13:04
Sample #: 312080-007

Client: ARCADIS
Site:
Client Sample #: C-1-CW03 Duplicate

Collector: Client
Notes:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8260 NELAC		Prep Method: EPA 5030B		QCBatchID: QC1130740				
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/20/12	Liaoyuanz	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/20/12	Liaoyuanz	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/20/12	Liaoyuanz	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/20/12	Liaoyuanz	
1,1,2-Trichlorotrifluoroethane	ND	1	0.119	0.5	ug/L	10/20/12	Liaoyuanz	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/20/12	Liaoyuanz	
1,1-Dichloroethene	ND	1	0.13	0.5	ug/L	10/20/12	Liaoyuanz	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/20/12	Liaoyuanz	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/20/12	Liaoyuanz	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/20/12	Liaoyuanz	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/20/12	Liaoyuanz	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/20/12	Liaoyuanz	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/20/12	Liaoyuanz	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/20/12	Liaoyuanz	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/20/12	Liaoyuanz	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/20/12	Liaoyuanz	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/20/12	Liaoyuanz	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/20/12	Liaoyuanz	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/20/12	Liaoyuanz	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/20/12	Liaoyuanz	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/20/12	Liaoyuanz	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/20/12	Liaoyuanz	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/20/12	Liaoyuanz	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/20/12	Liaoyuanz	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/20/12	Liaoyuanz	
Acetone	ND	1	0.2	10	ug/L	10/20/12	Liaoyuanz	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	Liaoyuanz	
Benzene	ND	1	0.071	0.5	ug/L	10/20/12	Liaoyuanz	
Bromobenzene	ND	1	0.073	1	ug/L	10/20/12	Liaoyuanz	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
Bromoform	ND	1	0.053	0.5	ug/L	10/20/12	Liaoyuanz	
Bromomethane	ND	1	0.13	1	ug/L	10/20/12	Liaoyuanz	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/20/12	Liaoyuanz	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/20/12	Liaoyuanz	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/20/12	Liaoyuanz	
Chloroethane	ND	1	0.4	0.5	ug/L	10/20/12	Liaoyuanz	
Chloroform	0.5	1	0.044	0.5	ug/L	10/20/12	Liaoyuanz	
Chloromethane	ND	1	0.055	0.5	ug/L	10/20/12	Liaoyuanz	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/20/12	Liaoyuanz	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/20/12	Liaoyuanz	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	Liaoyuanz	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/20/12	Liaoyuanz	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/20/12	Liaoyuanz	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/20/12	Liaoyuanz	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/20/12	Liaoyuanz	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00015

CONFIDENTIAL

LMC-PET-00000813

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 13:04	Site:	Notes:
Sample #: 312080-007	Client Sample #: C-1-CW03 Duplicate	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/20/12	Liaoyuanz	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/20/12	Liaoyuanz	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/20/12	Liaoyuanz	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/20/12	Liaoyuanz	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/20/12	Liaoyuanz	
Naphthalene	ND	1	0.061	0.5	ug/L	10/20/12	Liaoyuanz	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/20/12	Liaoyuanz	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/20/12	Liaoyuanz	
o-Xylene	ND	1	0.075	0.5	ug/L	10/20/12	Liaoyuanz	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/20/12	Liaoyuanz	
Styrene	ND	1	0.088	0.5	ug/L	10/20/12	Liaoyuanz	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/20/12	Liaoyuanz	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/20/12	Liaoyuanz	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/20/12	Liaoyuanz	
Tetrachloroethene	5.6	1	0.15	0.5	ug/L	10/20/12	Liaoyuanz	
Toluene	ND	1	0.078	0.5	ug/L	10/20/12	Liaoyuanz	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/20/12	Liaoyuanz	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/20/12	Liaoyuanz	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	Liaoyuanz	
Trichloroethene	ND	1	0.078	0.5	ug/L	10/20/12	Liaoyuanz	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/20/12	Liaoyuanz	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	Liaoyuanz	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/20/12	Liaoyuanz	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	111	70-145	
4-Bromofluorobenzene (SUR)	106	70-145	
Dibromodifluoromethane (SUR)	99	70-145	
Toluene-d8 (SUR)	103	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



ASSOCIATED LABORATORIES

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ALAB : 00016

CONFIDENTIAL

LMC-PET-00000814

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 15:15	Site:	Notes:
Sample #: 312080-008	Client Sample #: Equipment Blank	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 200.7	Prep Method: EPA 3010A						QCBatchID: QC1130599	
Calcium	0.102	1	0.038	0.1	mg/L	10/17/12	nina	
Magnesium	0.045 J	1	0.016	0.1	mg/L	10/17/12	nina	J
Method: EPA 218.6	Prep Method: EPA 218.6						QCBatchID: QC1130697	
Hexavalent Chromium	ND	1	0.1	1	ug/L	10/19/12	rybechay	
Method: EPA 300.0	Prep Method: Method						QCBatchID: QC1130565	
Nitrate, as NO3	ND	1	0.08	0.44	mg/L	10/13/12	wei	
Nitrate, as Nitrogen	ND	1	0.06	0.1	mg/L	10/13/12	wei	
Nitrite, as NO2	ND	1	0.12	0.33	mg/L	10/13/12	wei	
Nitrite, as Nitrogen	ND	1	0.018	0.1	mg/L	10/13/12	wei	
Fluoride	ND	1	0.04	0.2	mg/L	10/13/12	wei	
Method: EPA 6010 NELAC	Prep Method: EPA 3010A/Filtered						QCBatchID: QC1130591	
Chromium	ND	1	0.002	0.01	mg/L	10/17/12	nina	
Thallium	ND	1	0.003	0.005	mg/L	10/17/12	nina	
Method: EPA 8260 NELAC	Prep Method: EPA 5030B						QCBatchID: QC1130740	
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,2-Trichlorotrifluoroethane	ND	1	0.119	0.5	ug/L	10/21/12	Liaoyuanz	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
1,1-Dichloroethene	ND	1	0.13	0.5	ug/L	10/21/12	Liaoyuanz	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/21/12	Liaoyuanz	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/21/12	Liaoyuanz	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/21/12	Liaoyuanz	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/21/12	Liaoyuanz	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/21/12	Liaoyuanz	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/21/12	Liaoyuanz	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/21/12	Liaoyuanz	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/21/12	Liaoyuanz	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/21/12	Liaoyuanz	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/21/12	Liaoyuanz	
Acetone	ND	1	0.2	10	ug/L	10/21/12	Liaoyuanz	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
Benzene	ND	1	0.071	0.5	ug/L	10/21/12	Liaoyuanz	
Bromobenzene	ND	1	0.073	1	ug/L	10/21/12	Liaoyuanz	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Bromoform	ND	1	0.053	0.5	ug/L	10/21/12	Liaoyuanz	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00017

CONFIDENTIAL

LMC-PET-00000815

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 15:15	Site:	Notes:
Sample #: 312080-008	Client Sample #: Equipment Blank	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Bromomethane	ND	1	0.13	1	ug/L	10/21/12	Liaoyuanz	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/21/12	Liaoyuanz	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/21/12	Liaoyuanz	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/21/12	Liaoyuanz	
Chloroethane	ND	1	0.4	0.5	ug/L	10/21/12	Liaoyuanz	
Chloroform	ND	1	0.044	0.5	ug/L	10/21/12	Liaoyuanz	
Chloromethane	ND	1	0.055	0.5	ug/L	10/21/12	Liaoyuanz	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/21/12	Liaoyuanz	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/21/12	Liaoyuanz	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/21/12	Liaoyuanz	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/21/12	Liaoyuanz	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/21/12	Liaoyuanz	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/21/12	Liaoyuanz	
Ethyl-tertiarybutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/21/12	Liaoyuanz	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/21/12	Liaoyuanz	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/21/12	Liaoyuanz	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/21/12	Liaoyuanz	
Methylene chloride	2.6	1	0.15	0.5	ug/L	10/21/12	Liaoyuanz	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/21/12	Liaoyuanz	
Naphthalene	ND	1	0.061	0.5	ug/L	10/21/12	Liaoyuanz	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/21/12	Liaoyuanz	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/21/12	Liaoyuanz	
o-Xylene	ND	1	0.075	0.5	ug/L	10/21/12	Liaoyuanz	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/21/12	Liaoyuanz	
Styrene	ND	1	0.088	0.5	ug/L	10/21/12	Liaoyuanz	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/21/12	Liaoyuanz	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/21/12	Liaoyuanz	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/21/12	Liaoyuanz	
Tetrachloroethene	ND	1	0.15	0.5	ug/L	10/21/12	Liaoyuanz	
Toluene	ND	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/21/12	Liaoyuanz	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/21/12	Liaoyuanz	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/21/12	Liaoyuanz	
Trichloroethene	ND	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/21/12	Liaoyuanz	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	111	70-145	
4-Bromofluorobenzene (SUR)	115	70-145	
Dibromodifluoromethane (SUR)	107	70-145	
Toluene-d8 (SUR)	103	70-145	

Method: EPA 8260M	Prep Method: EPA 5030B	QCBatchID: QC1130844
1,2,3-Trichloropropane	ND	1 0.005 0.005 ug/L 10/24/12 akk

Analyte	% Recovery	Limits	Notes
Toluene-d8 (SUR)	114	50-150	

Method: SM 2320-B	Prep Method: Method	QCBatchID: QC1130783
Bicarbonate (HCO3)	ND	1 1 5 mg/L 10/23/12 dung
Carbonate (CO3)	ND	1 0.7 5 mg/L 10/23/12 dung

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00018

CONFIDENTIAL

LMC-PET-00000816

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 15:15	Site:	Notes:
Sample #: 312080-008	Client Sample #: Equipment Blank	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Hydroxide (OH)	ND	1	0.3	5	mg/L	10/23/12	dung	
Total Alkalinity (as CaCO3)	ND	1	1.8	5	mg/L	10/23/12	dung	
Method: SM 2510-B	Prep Method: Method						QCBatchID:	
Specific Conductance	1.00	1	0.86	1	umhos/cm	10/23/12	ame	
Method: SM 2540-C	Prep Method: Method						QCBatchID: QC1130545	
Total Dissolved Solids	ND	1	5.7	10	mg/L	10/15/12	rvenal	
Method: SM 4500-H+B	Prep Method: Method						QCBatchID:	
pH	6.55	1			pH Units	10/15/12	robert	
Method: SM 4500-Si-C	Prep Method: Method						QCBatchID: QC1130568	
Silica	ND	1	0.1	1	mg/L	10/16/12	cathy	
Method: SM 5310B	Prep Method: Method						QCBatchID: QC1130670	
Total Organic Carbon (TOC)	ND	1	0.1	0.5	mg/L	10/19/12	quang	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 00019

CONFIDENTIAL

LMC-PET-00000817

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 15:05	Site:	Notes:
Sample #: 312080-009	Client Sample #: B-5-CW03	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6	Prep Method: EPA 218.6							QCBatchID: QC1130697
Hexavalent Chromium	1.41	1	0.1	1	ug/L	10/19/12	rybechay	
Method: EPA 6010 NELAC	Prep Method: EPA 3010A/Filtered							QCBatchID: QC1130591
Chromium	0.007 J	1	0.002	0.01	mg/L	10/17/12	nina	
Method: EPA 8260 NELAC	Prep Method: EPA 5030B							QCBatchID: QC1130740
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,2-Trichloroethane	6.2	1	0.045	0.5	ug/L	10/21/12	Liaoyuanz	
1,1,2-Trichlorotrifluoroethane	0.7	1	0.119	0.5	ug/L	10/21/12	Liaoyuanz	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
1,1-Dichloroethene	ND	1	0.13	0.5	ug/L	10/21/12	Liaoyuanz	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,3-Trichloropropane	21	1	0.073	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/21/12	Liaoyuanz	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/21/12	Liaoyuanz	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/21/12	Liaoyuanz	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/21/12	Liaoyuanz	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/21/12	Liaoyuanz	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/21/12	Liaoyuanz	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/21/12	Liaoyuanz	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/21/12	Liaoyuanz	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/21/12	Liaoyuanz	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/21/12	Liaoyuanz	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/21/12	Liaoyuanz	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/21/12	Liaoyuanz	
Acetone	ND	1	0.2	10	ug/L	10/21/12	Liaoyuanz	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
Benzene	ND	1	0.071	0.5	ug/L	10/21/12	Liaoyuanz	
Bromobenzene	ND	1	0.073	1	ug/L	10/21/12	Liaoyuanz	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Bromoform	ND	1	0.053	0.5	ug/L	10/21/12	Liaoyuanz	
Bromomethane	ND	1	0.13	1	ug/L	10/21/12	Liaoyuanz	
Carbon Tetrachloride	2.1	1	0.045	0.5	ug/L	10/21/12	Liaoyuanz	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/21/12	Liaoyuanz	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/21/12	Liaoyuanz	
Chloroethane	ND	1	0.4	0.5	ug/L	10/21/12	Liaoyuanz	
Chloroform	4.0	1	0.044	0.5	ug/L	10/21/12	Liaoyuanz	
Chloromethane	ND	1	0.055	0.5	ug/L	10/21/12	Liaoyuanz	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/21/12	Liaoyuanz	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/21/12	Liaoyuanz	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/21/12	Liaoyuanz	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



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ALAB : 00020

CONFIDENTIAL

LMC-PET-00000818

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 15:05	Site:	Notes:
Sample #: 312080-009	Client Sample #: B-5-CW03	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Dibromomethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/21/12	Liaoyuanz	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/21/12	Liaoyuanz	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/21/12	Liaoyuanz	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/21/12	Liaoyuanz	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/21/12	Liaoyuanz	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/21/12	Liaoyuanz	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/21/12	Liaoyuanz	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/21/12	Liaoyuanz	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/21/12	Liaoyuanz	
Naphthalene	ND	1	0.061	0.5	ug/L	10/21/12	Liaoyuanz	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/21/12	Liaoyuanz	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/21/12	Liaoyuanz	
o-Xylene	ND	1	0.075	0.5	ug/L	10/21/12	Liaoyuanz	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/21/12	Liaoyuanz	
Styrene	ND	1	0.088	0.5	ug/L	10/21/12	Liaoyuanz	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/21/12	Liaoyuanz	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/21/12	Liaoyuanz	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/21/12	Liaoyuanz	
Tetrachloroethene	14	1	0.15	0.5	ug/L	10/21/12	Liaoyuanz	
Toluene	ND	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/21/12	Liaoyuanz	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/21/12	Liaoyuanz	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/21/12	Liaoyuanz	
Trichloroethene	11	1	0.078	0.5	ug/L	10/21/12	Liaoyuanz	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/21/12	Liaoyuanz	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/21/12	Liaoyuanz	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/21/12	Liaoyuanz	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	111	70-145	
4-Bromofluorobenzene (SUR)	119	70-145	
Dibromodifluoromethane (SUR)	106	70-145	
Toluene-d8 (SUR)	101	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



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ALAB : 00021

CONFIDENTIAL

LMC-PET-00000819

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 15:07	Site:	Notes:
Sample #: <u>312080-010</u>	Client Sample #: B-5-CW03 Duplicate	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6	Prep Method: EPA 218.6							QCBatchID: QC1130697
Hexavalent Chromium	1.39	1	0.1	1	ug/L	10/19/12	rybechay	
Method: EPA 6010 <i>NELAC</i>	Prep Method: EPA 3010A/Filtered							QCBatchID: QC1130591
Chromium	0.004 J	1	0.002	0.01	mg/L	10/17/12	nina	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 00022

CONFIDENTIAL

LMC-PET-00000820

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 11:55	Site:	Notes:
Sample #: 312080-011	Client Sample #: B-1-CW13	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8260 NELAC	Prep Method: EPA 5030B							QCBatchID: QC1130740
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/20/12	liaoyuanz	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/20/12	liaoyuanz	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/20/12	liaoyuanz	
1,1,2-Trichloroethane	0.8	1	0.045	0.5	ug/L	10/20/12	liaoyuanz	
1,1,2-Trichlorotrifluoroethane	4.0	1	0.119	0.5	ug/L	10/20/12	liaoyuanz	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/20/12	liaoyuanz	
1,1-Dichloroethene	6.1	1	0.13	0.5	ug/L	10/20/12	liaoyuanz	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/20/12	liaoyuanz	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/20/12	liaoyuanz	
1,2,3-Trichloropropane	17	1	0.073	0.5	ug/L	10/20/12	liaoyuanz	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/20/12	liaoyuanz	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/20/12	liaoyuanz	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/20/12	liaoyuanz	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/20/12	liaoyuanz	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/20/12	liaoyuanz	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/20/12	liaoyuanz	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/20/12	liaoyuanz	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/20/12	liaoyuanz	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/20/12	liaoyuanz	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/20/12	liaoyuanz	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/20/12	liaoyuanz	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/20/12	liaoyuanz	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/20/12	liaoyuanz	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/20/12	liaoyuanz	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/20/12	liaoyuanz	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/20/12	liaoyuanz	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/20/12	liaoyuanz	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/20/12	liaoyuanz	
Acetone	ND	1	0.2	10	ug/L	10/20/12	liaoyuanz	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	liaoyuanz	
Benzene	ND	1	0.071	0.5	ug/L	10/20/12	liaoyuanz	
Bromobenzene	ND	1	0.073	1	ug/L	10/20/12	liaoyuanz	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/20/12	liaoyuanz	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/20/12	liaoyuanz	
Bromoform	ND	1	0.053	0.5	ug/L	10/20/12	liaoyuanz	
Bromomethane	ND	1	0.13	1	ug/L	10/20/12	liaoyuanz	
Carbon Tetrachloride	2.3	1	0.045	0.5	ug/L	10/20/12	liaoyuanz	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/20/12	liaoyuanz	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/20/12	liaoyuanz	
Chloroethane	ND	1	0.4	0.5	ug/L	10/20/12	liaoyuanz	
Chloroform	17	1	0.044	0.5	ug/L	10/20/12	liaoyuanz	
Chloromethane	ND	1	0.055	0.5	ug/L	10/20/12	liaoyuanz	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/20/12	liaoyuanz	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/20/12	liaoyuanz	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	liaoyuanz	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/20/12	liaoyuanz	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/20/12	liaoyuanz	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/20/12	liaoyuanz	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/20/12	liaoyuanz	
Ethyl-terbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/20/12	liaoyuanz	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00023

CONFIDENTIAL

LMC-PET-00000821

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 11:55	Site:	Notes:
Sample #: 312080-011	Client Sample #: B-1-CW13	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/20/12	liaoyuanz	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/20/12	liaoyuanz	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/20/12	liaoyuanz	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/20/12	liaoyuanz	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/20/12	liaoyuanz	
Naphthalene	ND	1	0.061	0.5	ug/L	10/20/12	liaoyuanz	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/20/12	liaoyuanz	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/20/12	liaoyuanz	
o-Xylene	ND	1	0.075	0.5	ug/L	10/20/12	liaoyuanz	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/20/12	liaoyuanz	
Styrene	ND	1	0.088	0.5	ug/L	10/20/12	liaoyuanz	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/20/12	liaoyuanz	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/20/12	liaoyuanz	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/20/12	liaoyuanz	
Tetrachloroethene	290	10	1.5	5	ug/L	10/20/12	liaoyuanz	
Toluene	ND	1	0.078	0.5	ug/L	10/20/12	liaoyuanz	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/20/12	liaoyuanz	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/20/12	liaoyuanz	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	liaoyuanz	
Trichloroethene	310	10	0.78	5	ug/L	10/20/12	liaoyuanz	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/20/12	liaoyuanz	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	liaoyuanz	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/20/12	liaoyuanz	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	108	70-145	
4-Bromofluorobenzene (SUR)	108	70-145	
Dibromodifluoromethane (SUR)	100	70-145	
Toluene-d8 (SUR)	106	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



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ALAB : 00024

CONFIDENTIAL

LMC-PET-00000822

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 11:57	Site:	Notes:
Sample #: 312080-012	Client Sample #: B-1-CW13 Duplicate	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8260 NELAC	Prep Method: EPA 5030B							QCBatchID: QC1130740
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/20/12	nicollez	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/20/12	nicollez	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/20/12	nicollez	
1,1,2-Trichloroethane	0.8	1	0.045	0.5	ug/L	10/20/12	nicollez	
1,1,2-Trichlorotrifluoroethane	3.9	1	0.119	0.5	ug/L	10/20/12	nicollez	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/20/12	nicollez	
1,1-Dichloroethene	5.0	1	0.13	0.5	ug/L	10/20/12	nicollez	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
1,2,3-Trichloropropane	16	1	0.073	0.5	ug/L	10/20/12	nicollez	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/20/12	nicollez	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/20/12	nicollez	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/20/12	nicollez	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/20/12	nicollez	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/20/12	nicollez	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/20/12	nicollez	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/20/12	nicollez	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/20/12	nicollez	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/20/12	nicollez	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/20/12	nicollez	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/20/12	nicollez	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/20/12	nicollez	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/20/12	nicollez	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/20/12	nicollez	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/20/12	nicollez	
Acetone	ND	1	0.2	10	ug/L	10/20/12	nicollez	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
Benzene	ND	1	0.071	0.5	ug/L	10/20/12	nicollez	
Bromobenzene	ND	1	0.073	1	ug/L	10/20/12	nicollez	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
Bromoform	ND	1	0.053	0.5	ug/L	10/20/12	nicollez	
Bromomethane	ND	1	0.13	1	ug/L	10/20/12	nicollez	
Carbon Tetrachloride	2.3	1	0.045	0.5	ug/L	10/20/12	nicollez	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/20/12	nicollez	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/20/12	nicollez	
Chloroethane	ND	1	0.4	0.5	ug/L	10/20/12	nicollez	
Chloroform	16	1	0.044	0.5	ug/L	10/20/12	nicollez	
Chloromethane	ND	1	0.055	0.5	ug/L	10/20/12	nicollez	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/20/12	nicollez	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/20/12	nicollez	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	nicollez	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/20/12	nicollez	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/20/12	nicollez	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/20/12	nicollez	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/20/12	nicollez	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 00025

CONFIDENTIAL

LMC-PET-00000823

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 11:57	Site:	Notes:
Sample #: 312080-012	Client Sample #: B-1-CW13 Duplicate	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/20/12	nicollez	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/20/12	nicollez	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/20/12	nicollez	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/20/12	nicollez	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/20/12	nicollez	
Naphthalene	ND	1	0.061	0.5	ug/L	10/20/12	nicollez	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/20/12	nicollez	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/20/12	nicollez	
o-Xylene	ND	1	0.075	0.5	ug/L	10/20/12	nicollez	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/20/12	nicollez	
Styrene	ND	1	0.088	0.5	ug/L	10/20/12	nicollez	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/20/12	nicollez	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/20/12	nicollez	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/20/12	nicollez	
Tetrachloroethene	280	10	1.5	5	ug/L	10/20/12	nicollez	
Toluene	ND	1	0.078	0.5	ug/L	10/20/12	nicollez	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/20/12	nicollez	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/20/12	nicollez	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	nicollez	
Trichloroethene	280	10	0.78	5	ug/L	10/20/12	nicollez	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/20/12	nicollez	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	109	70-145	
4-Bromofluorobenzene (SUR)	109	70-145	
Dibromodifluoromethane (SUR)	99	70-145	
Toluene-d8 (SUR)	104	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 000026

CONFIDENTIAL

LMC-PET-00000824

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 09:33	Site:	Notes:
Sample #: 312080-013	Client Sample #: B-1-CW12	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 200.7		Prep Method: EPA 3010A				QCBatchID: QC1130599		
Calcium	119	1	0.038	0.1	mg/L	10/17/12	nina	
Magnesium	36.8	1	0.016	0.1	mg/L	10/17/12	nina	
Method: EPA 218.6		Prep Method: EPA 218.6				QCBatchID: QC1130697		
Hexavalent Chromium	12.8	1	0.1	1	ug/L	10/19/12	rybechay	
Method: EPA 300.0		Prep Method: Method				QCBatchID: QC1130565		
Chloride	64.1	1	0.1	1	mg/L	10/13/12	wei	
Sulfate	88.0	1	0.12	1	mg/L	10/13/12	wei	
Nitrate, as NO3	56.7	2	0.16	0.88	mg/L	10/13/12	wei	
Nitrate, as Nitrogen	12.8	2	0.12	0.2	mg/L	10/13/12	wei	
Nitrite, as NO2	ND	1	0.12	0.33	mg/L	10/13/12	wei	
Nitrite, as Nitrogen	ND	1	0.018	0.1	mg/L	10/13/12	wei	
Fluoride	0.39	1	0.04	0.2	mg/L	10/13/12	wei	
Method: EPA 6010 NELAC		Prep Method: EPA 3010A/Filtered				QCBatchID: QC1130591		
Chromium	0.017	1	0.002	0.01	mg/L	10/17/12	nina	
Method: EPA 8260 NELAC		Prep Method: EPA 5030B				QCBatchID: QC1130740		
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/20/12	nicollez	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/20/12	nicollez	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/20/12	nicollez	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/20/12	nicollez	
1,1,2-Trichlorotrifluoroethane	ND	1	0.119	0.5	ug/L	10/20/12	nicollez	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/20/12	nicollez	
1,1-Dichloroethene	7.8	1	0.13	0.5	ug/L	10/20/12	nicollez	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/20/12	nicollez	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/20/12	nicollez	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/20/12	nicollez	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/20/12	nicollez	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/20/12	nicollez	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/20/12	nicollez	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/20/12	nicollez	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/20/12	nicollez	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/20/12	nicollez	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/20/12	nicollez	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/20/12	nicollez	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/20/12	nicollez	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/20/12	nicollez	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/20/12	nicollez	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/20/12	nicollez	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/20/12	nicollez	
Acetone	ND	1	0.2	10	ug/L	10/20/12	nicollez	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
Benzene	ND	1	0.071	0.5	ug/L	10/20/12	nicollez	
Bromobenzene	ND	1	0.073	1	ug/L	10/20/12	nicollez	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



ASSOCIATED LABORATORIES

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ALAB : 00027

CONFIDENTIAL

LMC-PET-00000825

Matrix: Water
 Sampled: 10/12/2012 09:33
 Sample #: 312080-013

Client: ARCADIS
 Site:
 Client Sample #: B-1-CW12

Collector: Client
 Notes:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Bromoform	ND	1	0.053	0.5	ug/L	10/20/12	nicollez	
Bromomethane	ND	1	0.13	1	ug/L	10/20/12	nicollez	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/20/12	nicollez	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/20/12	nicollez	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/20/12	nicollez	
Chloroethane	ND	1	0.4	0.5	ug/L	10/20/12	nicollez	
Chloroform	1.8	1	0.044	0.5	ug/L	10/20/12	nicollez	
Chloromethane	ND	1	0.055	0.5	ug/L	10/20/12	nicollez	
cis-1,2-Dichloroethene	5.3	1	0.055	0.5	ug/L	10/20/12	nicollez	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/20/12	nicollez	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	nicollez	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/20/12	nicollez	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/20/12	nicollez	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/20/12	nicollez	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/20/12	nicollez	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/20/12	nicollez	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/20/12	nicollez	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/20/12	nicollez	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/20/12	nicollez	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/20/12	nicollez	
Naphthalene	ND	1	0.061	0.5	ug/L	10/20/12	nicollez	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/20/12	nicollez	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/20/12	nicollez	
o-Xylene	ND	1	0.075	0.5	ug/L	10/20/12	nicollez	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/20/12	nicollez	
Styrene	ND	1	0.088	0.5	ug/L	10/20/12	nicollez	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/20/12	nicollez	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/20/12	nicollez	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/20/12	nicollez	
Tetrachloroethene	38	1	0.15	0.5	ug/L	10/20/12	nicollez	
Toluene	ND	1	0.078	0.5	ug/L	10/20/12	nicollez	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/20/12	nicollez	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/20/12	nicollez	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	nicollez	
Trichloroethene	110	1	0.078	0.5	ug/L	10/20/12	nicollez	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/20/12	nicollez	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	106	70-145	
4-Bromofluorobenzene (SUR)	106	70-145	
Dibromodifluoromethane (SUR)	98	70-145	
Toluene-d8 (SUR)	105	70-145	

Method: EPA 8260M Prep Method: EPA 5030B QCBatchID: QC1130967
 1,2,3-Trichloropropane ND 1 0.005 0.005 ug/L 10/29/12 akk

Analyte	% Recovery	Limits	Notes
Toluene-d8 (SUR)	99	50-150	

Method: SM 2320-B Prep Method: Method QCBatchID: QC1130512
 Bicarbonate (HCO3) 360 1 1 5 mg/L 10/15/12 hanhkhong

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 00028

CONFIDENTIAL

LMC-PET-00000826

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 09:33	Site:	Notes:
Sample #: 312080-013	Client Sample #: B-1-CW12	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Carbonate (CO3)	ND	1	0.7	5	mg/L	10/15/12	hanhkhong	
Hydroxide (OH)	ND	1	0.3	5	mg/L	10/15/12	hanhkhong	
Total Alkalinity (as CaCO3)	295	1	1.8	5	mg/L	10/15/12	hanhkhong	
Method: SM 2510-B	Prep Method: Method						QCBatchID:	
Specific Conductance	959	1	0.86	1	umhos/cm	10/23/12	ame	
Method: SM 2540-C	Prep Method: Method						QCBatchID: QC1130545	
Total Dissolved Solids	508	1	5.7	10	mg/L	10/15/12	rvenal	
Method: SM 4500-H+B	Prep Method: Method						QCBatchID:	
pH	7.59	1			pH Units	10/13/12	dung	
Method: SM 4500-Si-C	Prep Method: Method						QCBatchID: QC1130568	
Silica	33.8	5	0.5	5	mg/L	10/16/12	cathy	
Method: SM 5310B	Prep Method: Method						QCBatchID: QC1130670	
Total Organic Carbon (TOC)	ND	1	0.1	0.5	mg/L	10/16/12	quang	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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Matrix: Water
Sampled: 10/12/2012 09:36
Sample #: 312080-014

Client: ARCADIS
Site:
Client Sample #: B-1-CW12 Duplicate

Collector: Client
Notes:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 200.7		Prep Method: EPA 3010A				QCBatchID: QC1130599		
Calcium	123	1	0.038	0.1	mg/L	10/17/12	nina	
Magnesium	37.4	1	0.016	0.1	mg/L	10/17/12	nina	
Method: EPA 300.0		Prep Method: Method				QCBatchID: QC1130565		
Chloride	62.0	1	0.1	1	mg/L	10/13/12	wei	
Sulfate	88.2	1	0.12	1	mg/L	10/13/12	wei	
Nitrate, as Nitrogen	13.1	2	0.12	0.2	mg/L	10/13/12	wei	
Nitrite, as Nitrogen	ND	1	0.018	0.1	mg/L	10/13/12	wei	
Fluoride	0.36	1	0.04	0.2	mg/L	10/13/12	wei	
Method: EPA 8260 NELAC		Prep Method: EPA 5030B				QCBatchID: QC1130740		
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/20/12	nicollez	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/20/12	nicollez	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/20/12	nicollez	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/20/12	nicollez	
1,1,2-Trichlorotrifluoroethane	ND	1	0.119	0.5	ug/L	10/20/12	nicollez	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/20/12	nicollez	
1,1-Dichloroethene	7.2	1	0.13	0.5	ug/L	10/20/12	nicollez	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/20/12	nicollez	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/20/12	nicollez	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/20/12	nicollez	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/20/12	nicollez	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/20/12	nicollez	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/20/12	nicollez	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/20/12	nicollez	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/20/12	nicollez	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/20/12	nicollez	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/20/12	nicollez	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/20/12	nicollez	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/20/12	nicollez	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/20/12	nicollez	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/20/12	nicollez	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/20/12	nicollez	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/20/12	nicollez	
Acetone	ND	1	0.2	10	ug/L	10/20/12	nicollez	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
Benzene	ND	1	0.071	0.5	ug/L	10/20/12	nicollez	
Bromobenzene	ND	1	0.073	1	ug/L	10/20/12	nicollez	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
Bromoform	ND	1	0.053	0.5	ug/L	10/20/12	nicollez	
Bromomethane	ND	1	0.13	1	ug/L	10/20/12	nicollez	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/20/12	nicollez	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/20/12	nicollez	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/20/12	nicollez	
Chloroethane	ND	1	0.4	0.5	ug/L	10/20/12	nicollez	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

Analytical Results Report

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ALAB : 000029

CONFIDENTIAL

LMC-PET-00000828

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 09:36	Site:	Notes:
Sample #: 312080-014	Client Sample #: B-1-CW12 Duplicate	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Chloroform	1.8	1	0.044	0.5	ug/L	10/20/12	nicollez	
Chloromethane	ND	1	0.055	0.5	ug/L	10/20/12	nicollez	
cis-1,2-Dichloroethene	5.1	1	0.055	0.5	ug/L	10/20/12	nicollez	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/20/12	nicollez	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	nicollez	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/20/12	nicollez	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/20/12	nicollez	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/20/12	nicollez	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/20/12	nicollez	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/20/12	nicollez	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/20/12	nicollez	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/20/12	nicollez	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/20/12	nicollez	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/20/12	nicollez	
Naphthalene	ND	1	0.061	0.5	ug/L	10/20/12	nicollez	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/20/12	nicollez	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/20/12	nicollez	
o-Xylene	ND	1	0.075	0.5	ug/L	10/20/12	nicollez	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/20/12	nicollez	
Styrene	ND	1	0.088	0.5	ug/L	10/20/12	nicollez	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/20/12	nicollez	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/20/12	nicollez	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/20/12	nicollez	
Tetrachloroethene	34	1	0.15	0.5	ug/L	10/20/12	nicollez	
Toluene	ND	1	0.078	0.5	ug/L	10/20/12	nicollez	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/20/12	nicollez	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/20/12	nicollez	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	nicollez	
Trichloroethene	100	1	0.078	0.5	ug/L	10/20/12	nicollez	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/20/12	nicollez	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	114	70-145	
4-Bromofluorobenzene (SUR)	108	70-145	
Dibromodifluoromethane (SUR)	100	70-145	
Toluene-d8 (SUR)	98	70-145	

Method: SM 2320-B	Prep Method: Method	QCBatchID: QC1130512
Bicarbonate (HCO3)	360 1 1 5 mg/L	10/15/12 hanhkhong
Carbonate (CO3)	ND 1 0.7 5 mg/L	10/15/12 hanhkhong
Hydroxide (OH)	ND 1 0.3 5 mg/L	10/15/12 hanhkhong
Total Alkalinity (as CaCO3)	295 1 1.8 5 mg/L	10/15/12 hanhkhong
Method: SM 2510-B	Prep Method: Method	QCBatchID:
Specific Conductance	971 1 0.86 1 umhos/cm	10/23/12 ame
Method: SM 2540-C	Prep Method: Method	QCBatchID: QC1130545
Total Dissolved Solids	508 1 5.7 10 mg/L	10/15/12 rvenal
Method: SM 4500-H+B	Prep Method: Method	QCBatchID:
pH	7.62 1 pH Units	10/13/12 dung

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 00030

CONFIDENTIAL

LMC-PET-00000829

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 09:36	Site:	Notes:
Sample #: <u>312080-014</u>	Client Sample #: B-1-CW12 Duplicate	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: SM 4500-Si-C	Prep Method: Method							QCBatchID: QC1130568
Silica	31.3	5	0.5	5	mg/L	10/16/12	cathy	
Method: SM 5310B	Prep Method: Method							QCBatchID: QC1130670
Total Organic Carbon (TOC)	ND	1	0.1	0.5	mg/L	10/16/12	quang	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 00031

CONFIDENTIAL

LMC-PET-00000830

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 08:10	Site:	Notes:
Sample #: 312080-015	Client Sample #: MW-3	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6	Prep Method: EPA 218.6							QCBatchID: QC1130697
Hexavalent Chromium	0.6 J	1	0.1	1	ug/L	10/19/12	rybechay	
Method: EPA 300.0	Prep Method: Method							QCBatchID: QC1130565
Nitrate, as Nitrogen	16.5	1	0.06	0.1	mg/L	10/13/12	wei	
Nitrite, as Nitrogen	ND	1	0.018	0.1	mg/L	10/13/12	wei	
Method: EPA 6010 NELAC	Prep Method: EPA 3010A/Filtered							QCBatchID: QC1130591
Chromium	0.003 J	1	0.002	0.01	mg/L	10/17/12	nina	
Thallium	ND	1	0.003	0.005	mg/L	10/17/12	nina	
Method: EPA 8260 NELAC	Prep Method: EPA 5030B							QCBatchID: QC1130740
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/20/12	nicollez	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/20/12	nicollez	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/20/12	nicollez	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/20/12	nicollez	
1,1,2-Trichlorotrifluoroethane	3.2	1	0.119	0.5	ug/L	10/20/12	nicollez	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/20/12	nicollez	
1,1-Dichloroethene	1.3	1	0.13	0.5	ug/L	10/20/12	nicollez	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
1,2,3-Trichloropropane	6.2	1	0.073	0.5	ug/L	10/20/12	nicollez	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/20/12	nicollez	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/20/12	nicollez	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/20/12	nicollez	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/20/12	nicollez	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/20/12	nicollez	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/20/12	nicollez	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/20/12	nicollez	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/20/12	nicollez	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/20/12	nicollez	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/20/12	nicollez	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/20/12	nicollez	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/20/12	nicollez	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/20/12	nicollez	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/20/12	nicollez	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/20/12	nicollez	
Acetone	ND	1	0.2	10	ug/L	10/20/12	nicollez	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
Benzene	ND	1	0.071	0.5	ug/L	10/20/12	nicollez	
Bromobenzene	ND	1	0.073	1	ug/L	10/20/12	nicollez	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
Bromoform	ND	1	0.053	0.5	ug/L	10/20/12	nicollez	
Bromomethane	ND	1	0.13	1	ug/L	10/20/12	nicollez	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/20/12	nicollez	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/20/12	nicollez	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/20/12	nicollez	
Chloroethane	ND	1	0.4	0.5	ug/L	10/20/12	nicollez	
Chloroform	2.0	1	0.044	0.5	ug/L	10/20/12	nicollez	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 000032

CONFIDENTIAL

LMC-PET-00000831

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/12/2012 08:10	Site:	Notes:
Sample #: 312080-015	Client Sample #: MW-3	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Chloromethane	ND	1	0.055	0.5	ug/L	10/20/12	nicollez	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/20/12	nicollez	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/20/12	nicollez	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	nicollez	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/20/12	nicollez	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/20/12	nicollez	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/20/12	nicollez	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/20/12	nicollez	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/20/12	nicollez	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/20/12	nicollez	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/20/12	nicollez	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/20/12	nicollez	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/20/12	nicollez	
Naphthalene	ND	1	0.061	0.5	ug/L	10/20/12	nicollez	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/20/12	nicollez	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/20/12	nicollez	
o-Xylene	ND	1	0.075	0.5	ug/L	10/20/12	nicollez	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/20/12	nicollez	
Styrene	ND	1	0.088	0.5	ug/L	10/20/12	nicollez	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/20/12	nicollez	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/20/12	nicollez	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/20/12	nicollez	
Tetrachloroethene	95	1	0.15	0.5	ug/L	10/20/12	nicollez	
Toluene	ND	1	0.078	0.5	ug/L	10/20/12	nicollez	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/20/12	nicollez	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/20/12	nicollez	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/20/12	nicollez	
Trichloroethene	23	1	0.078	0.5	ug/L	10/20/12	nicollez	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/20/12	nicollez	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/20/12	nicollez	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/20/12	nicollez	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	112	70-145	
4-Bromofluorobenzene (SUR)	101	70-145	
Dibromodifluoromethane (SUR)	103	70-145	
Toluene-d8 (SUR)	100	70-145	

Method: EPA 8270M		Prep Method: EPA 3535					QCBatchID: QC1130645	
1,4-Dioxane		1.9	1	0.12	1	ug/L	10/17/12	qnguyen

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



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ALAB : 000033

CONFIDENTIAL

LMC-PET-00000832

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: <u>QC1130512</u>	Analyst: hanhkhong	Method: SM 2320-B
Matrix: Water	Analyzed: 10/15/2012	Instrument: CHEM (group)

Duplicate Summary						
Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1130512DUP1						Source: 311995-010
Bicarbonate (HCO ₃)	336	332	mg/L	1.2	20	
Carbonate (CO ₃)	ND	ND	mg/L	0.0	20	
Hydroxide (OH)	ND	ND	mg/L	0.0	20	
Total Alkalinity (as CaCO ₃)	275	273	mg/L	0.7	20	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 000034

CONFIDENTIAL

LMC-PET-00000833

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: QC1130545	Analyst: rvenal	Method: SM 2540-C
Matrix: Water	Analyzed: 10/15/2012	Instrument: CHEM (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130545MB1					
Total Dissolved Solids	ND	mg/L	5.7	10	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1130545LCS1											
Total Dissolved Solids	293		275		mg/L	94			90-110		

Duplicate Summary

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1130545DUP1						
Total Dissolved Solids	8340	8320	mg/L	0.2	5	Source: 312149-001

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 000035

CONFIDENTIAL

LMC-PET-00000834

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: QC1130565	Analyst: wei	Method: EPA 300.0
Matrix: Water	Analyzed: 10/13/2012	Instrument: CHEM (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130565MB1					
Chloride	ND	mg/L	0.1	1	
Fluoride	ND	mg/L	0.04	0.2	
Nitrate + Nitrite, as Nitrogen	ND	mg/L	0.06	0.1	
Nitrate, as Nitrogen	ND	mg/L	0.06	0.1	
Nitrate, as NO3	ND	mg/L	0.08	0.44	
Nitrite, as Nitrogen	ND	mg/L	0.018	0.1	
Nitrite, as NO2	ND	mg/L	0.12	0.33	
Sulfate	ND	mg/L	0.12	1	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	
QC1130565LCS1										
Chloride	40		40.0		mg/L	100			90-110	
Fluoride	8		7.84		mg/L	98			90-110	
Nitrate, as Nitrogen	4.5		4.60		mg/L	102			90-110	
Nitrate, as NO3	20		20.3		mg/L	102			90-110	
Nitrite, as Nitrogen	3.1		2.90		mg/L	94			90-110	
Nitrite, as NO2	10		9.67		mg/L	97			90-110	
Sulfate	40		38.9		mg/L	97			90-110	

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample	Spike Amount		Spike Result		Units	Recoveries		Limits		Notes
	Amount	MS	MSD	MS	MSD		MS	MSD	RPD	%Rec RPD	
QC1130565MS1											Source: 312080-013
Chloride	64.1	200		247		mg/L	91			75-125	
Fluoride	0.39	40		36.3		mg/L	90			75-125	
Nitrate, as Nitrogen	12.8	22.6		35.9		mg/L	102			75-125	
Nitrate, as NO3	56.7	100		159		mg/L	102			75-125	
Nitrite, as Nitrogen	ND	30.5		30.2		mg/L	99			75-125	
Nitrite, as NO2	ND	100		99.0		mg/L	99			75-125	
Sulfate	88.0	200		262		mg/L	87			75-125	
QC1130565MS2											Source: 312080-014
Chloride	62.0	200		242		mg/L	90			75-125	
Fluoride	0.36	40		36.1		mg/L	89			75-125	
Nitrate, as Nitrogen	13.1	22.6		35.2		mg/L	98			75-125	
Nitrite, as Nitrogen	ND	30.5		29.8		mg/L	98			75-125	
Sulfate	88.2	200		260		mg/L	86			75-125	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 000036

CONFIDENTIAL

LMC-PET-00000835

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: <u>QC1130568</u>	Analyst: cathy	Method: SM 4500-Si-C
Matrix: Water	Analyzed: 10/16/2012	Instrument: CHEM (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130568MB1					
Silica	ND	mg/L	0.1	1	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1130568LCS1											
Silica	2		2.05		mg/L	103			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1130568MS1, QC1130568MSD1												
Silica	33.8	10	10	44.8	43.8	mg/L	110	100	2.3	75-125	20	Source: 312080-013

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 000037

CONFIDENTIAL

LMC-PET-00000836

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: QC1130590	Analyst: qnguyen	Method: EPA 8270M
Matrix: Water	Analyzed: 10/15/2012	Instrument: SVOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130590MB1					
1,4-Dioxane	ND	ug/L	0.12	1	
N-nitrosodiethylamine (NDEA)	ND	ug/L	0.68	2	
N-Nitrosodimethylamine (NDMA)	ND	ug/L	0.29	2	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1130590LCS1, QC1130590LCSD1											
1,4-Dioxane	20	20	13	14	ug/L	65	70	7	65-135	35	
N-nitrosodiethylamine (NDEA)	20	20	14	15	ug/L	70	75	7	65-135	35	
N-Nitrosodimethylamine (NDMA)	20	20	14	15	ug/L	70	75	7	65-135	35	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00038

CONFIDENTIAL

LMC-PET-00000837

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: QC1130591	Analyst: melha	Method: EPA 6010B
Matrix: Water	Analyzed: 10/17/2012	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130591MB1					
Chromium	ND	mg/L	0.002	0.01	
Thallium	ND	mg/L	0.003	0.005	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1130591LCS1											
Chromium	2		2.24		mg/L	112			80-120		
Thallium	2		2.20		mg/L	110			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1130591MS1, QC1130591MSD1											Source: 311877-003	
Chromium	0.015	1	1	1.09	1.05	mg/L	108	104	3.7	75-125	20	
Thallium	ND	1	1	0.991	0.976	mg/L	99	98	1.5	75-125	20	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00039

CONFIDENTIAL

LMC-PET-00000838

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: <u>QC1130599</u>	Analyst: nina	Method: EPA 200.7
Matrix: Water	Analyzed: 10/17/2012	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130599MB1					
Calcium	ND	mg/L	0.038	0.1	
Magnesium	0.031 J	mg/L	0.016	0.1	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00040

CONFIDENTIAL

LMC-PET-00000839

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: QC1130645	Analyst: qnguyen	Method: EPA 8270M
Matrix: Water	Analyzed: 10/16/2012	Instrument: SVOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130645MB1					
1,4-Dioxane	ND	ug/L	0.12	1	
N-nitrosodiethylamine (NDEA)	ND	ug/L	0.68	2	
N-Nitrosodimethylamine (NDMA)	ND	ug/L	0.29	2	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1130645LCS1, QC1130645LCSD1											
1,4-Dioxane	20	20	14	14	ug/L	70	70	0	65-135	35	
N-nitrosodiethylamine (NDEA)	20	20	14	15	ug/L	70	75	7	65-135	35	
N-Nitrosodimethylamine (NDMA)	20	20	14	15	ug/L	70	75	7	65-135	35	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00041

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LMC-PET-00000840

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: QC1130670	Analyst: quang	Method: SM 5310B
Matrix: Water	Analyzed: 10/16/2012	Instrument: TOC-BIO (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130670MB1					
Total Organic Carbon (TOC)	ND	mg/L	0.1	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1130670LCS1											
Total Organic Carbon (TOC)	10		9.9		mg/L	99			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1130670MS1, QC1130670MSD1												
Total Organic Carbon (TOC)	ND	10	10	10.5	10.6	mg/L	105	106	0.9	80-120	20	Source: 312080-013

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00042

CONFIDENTIAL

LMC-PET-00000841

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: <u>QC1130697</u>	Analyst: rybechay	Method: EPA 218.6
Matrix: Water	Analyzed: 10/22/2012	Instrument: CHEM (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130697MB1					
Hexavalent Chromium	ND	ug/L	0.1	1	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1130697LCS1											
Hexavalent Chromium	5		4.77		ug/L	95			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1130697MS1, QC1130697MSD1												Source: 312080-015
Hexavalent Chromium	0.6	2	2	2.43	2.57	ug/L	92	99	5.6	75-125	20	
QC1130697MS2, QC1130697MSD2												Source: 312094-004
Hexavalent Chromium	ND	2	2	1.79	1.81	ug/L	90	91	1.1	75-125	20	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00043

CONFIDENTIAL

LMC-PET-00000842

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: QC1130740	Analyst: nicollez	Method: EPA 8260B
Matrix: Water	Analyzed: 10/20/2012	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130740MB1					
1,1,1,2-Tetrachloroethane	ND	ug/L	0.122	0.5	
1,1,1-Trichloroethane	ND	ug/L	0.063	0.5	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.063	0.5	
1,1,2-Trichloroethane	ND	ug/L	0.045	0.5	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	0.119	0.5	
1,1-Dichloroethane	ND	ug/L	0.078	0.5	
1,1-Dichloroethene	ND	ug/L	0.13	0.5	
1,1-Dichloropropene	ND	ug/L	0.06	0.5	
1,2,3-Trichlorobenzene	ND	ug/L	0.06	0.5	
1,2,3-Trichloropropane	ND	ug/L	0.073	0.5	
1,2,4-Trichlorobenzene	ND	ug/L	0.068	0.5	
1,2,4-Trimethylbenzene	ND	ug/L	0.078	0.5	
1,2-Dibromo-3-chloropropane	ND	ug/L	0.08	0.5	
1,2-Dibromoethane	ND	ug/L	0.043	0.5	
1,2-Dichlorobenzene	ND	ug/L	0.051	0.5	
1,2-Dichloroethane	ND	ug/L	0.066	0.5	
1,2-Dichloropropane	ND	ug/L	0.06	0.5	
1,3,5-Trimethylbenzene	ND	ug/L	0.097	0.5	
1,3-Dichlorobenzene	ND	ug/L	0.052	0.5	
1,3-Dichloropropane	ND	ug/L	0.68	0.5	
1,4-Dichlorobenzene	ND	ug/L	0.12	0.5	
2,2-Dichloropropane	ND	ug/L	0.11	0.5	
2-Butanone (MEK)	ND	ug/L	0.3	5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.23	0.5	
2-Chlorotoluene	ND	ug/L	0.079	0.5	
4-Chlorotoluene	ND	ug/L	0.08	0.5	
4-Isopropyltoluene	ND	ug/L	0.091	0.5	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	0.16	5	
Acetone	ND	ug/L	0.2	10	
Allyl Chloride	ND	ug/L	0.08	0.5	
Benzene	ND	ug/L	0.071	0.5	
Bromobenzene	ND	ug/L	0.073	1	
Bromochloromethane	ND	ug/L	0.06	0.5	
Bromodichloromethane	ND	ug/L	0.06	0.5	
Bromoform	ND	ug/L	0.053	0.5	
Bromomethane	ND	ug/L	0.13	1	
Carbon Tetrachloride	ND	ug/L	0.045	0.5	
Chlorobenzene	ND	ug/L	0.075	0.5	
Chlorodibromomethane	ND	ug/L	0.045	0.5	
Chloroethane	ND	ug/L	0.4	0.5	
Chloroform	ND	ug/L	0.044	0.5	
Chloromethane	ND	ug/L	0.055	0.5	
cis-1,2-Dichloroethene	ND	ug/L	0.055	0.5	
cis-1,3-dichloropropene	ND	ug/L	0.061	0.5	
cis-1,4-dichloro-2-butene	ND	ug/L	0.075	5	
Dibromomethane	ND	ug/L	0.06	0.5	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00044

CONFIDENTIAL

LMC-PET-00000843

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: QC1130740	Analyst: nicollez	Method: EPA 8260B
Matrix: Water	Analyzed: 10/20/2012	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130740MB1					
Dichlorodifluoromethane	ND	ug/L	0.062	0.5	
Di-isopropyl ether (DIPE)	ND	ug/L	0.17	0.5	
Ethylbenzene	ND	ug/L	0.091	0.5	
Ethyl-tertbutylether (ETBE)	ND	ug/L	0.25	0.5	
Hexachlorobutadiene	ND	ug/L	0.073	1	
Isopropylbenzene	ND	ug/L	0.089	0.5	
m and p-Xylene	ND	ug/L	0.17	0.5	
Methylene chloride	ND	ug/L	0.15	0.5	
Methyl-t-butyl Ether (MTBE)	ND	ug/L	0.068	0.5	
Naphthalene	ND	ug/L	0.061	0.5	
N-butylbenzene	ND	ug/L	0.094	0.5	
N-propylbenzene	ND	ug/L	0.09	0.5	
o-Xylene	ND	ug/L	0.075	0.5	
Sec-butylbenzene	ND	ug/L	0.077	0.5	
Styrene	ND	ug/L	0.088	0.5	
t-Butyl alcohol (TBA)	ND	ug/L	5	5	
Tert-amylmethylether (TAME)	ND	ug/L	0.13	0.5	
Tert-butylbenzene	ND	ug/L	0.092	0.5	
Tetrachloroethene	ND	ug/L	0.15	0.5	
Toluene	ND	ug/L	0.078	0.5	
trans-1,2-dichloroethene	ND	ug/L	0.17	0.5	
trans-1,3-dichloropropene	ND	ug/L	0.056	0.5	
trans-1,4-dichloro-2-butene	ND	ug/L	0.075	5	
Trichloroethene	ND	ug/L	0.078	0.5	
Trichlorofluoromethane	ND	ug/L	0.06	0.5	
Vinyl Chloride	ND	ug/L	0.08	0.5	
Xylenes (Total)	ND	ug/L	0.25	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1130740LCS1											
1,1-Dichloroethene	25		26		ug/L	104			59-172		
Benzene	25		26		ug/L	104			62-137		
Chlorobenzene	25		26		ug/L	104			60-133		
Methyl-t-butyl Ether (MTBE)	25		24		ug/L	96			62-137		
Toluene	25		26		ug/L	104			59-139		
Trichloroethene	25		25		ug/L	100			66-142		

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00045

CONFIDENTIAL

LMC-PET-00000844

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: QC1130740	Analyst: nicollez	Method: EPA 8260B
Matrix: Water	Analyzed: 10/20/2012	Instrument: VOA-MS (group)

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	Amount	MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1130740MS1, QC1130740MSD1											Source: 312080-006	
1,1-Dichloroethene	ND	25	25	25	24	ug/L	100	96	4.1	59-172	22	
Benzene	ND	25	25	27	26	ug/L	108	104	3.8	62-137	24	
Chlorobenzene	ND	25	25	26	26	ug/L	104	104	0.0	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	25	25	26	25	ug/L	104	100	3.9	62-137	21	
Toluene	ND	25	25	26	26	ug/L	104	104	0.0	59-139	21	
Trichloroethene	ND	25	25	26	26	ug/L	104	104	0.0	66-142	21	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB: 00046

CONFIDENTIAL

LMC-PET-00000845

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: QC1130783	Analyst: dung	Method: SM 2320-B
Matrix: Water	Analyzed: 10/23/2012	Instrument: CHEM (group)

Duplicate Summary						
Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1130783DUP1						Source: 312080-008
Bicarbonate (HCO ₃)	ND	ND	mg/L	0.0	20	
Carbonate (CO ₃)	ND	ND	mg/L	0.0	20	
Hydroxide (OH)	ND	ND	mg/L	0.0	20	
Total Alkalinity (as CaCO ₃)	ND	ND	mg/L	0.0	20	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00047

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LMC-PET-00000846

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: QC1130844	Analyst: akk	Method: EPA 8260M
Matrix: Water	Analyzed: 10/25/2012	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130844MB1					
1,2,3-Trichloropropane	ND	ug/L	0.005	0.005	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1130844LCS1, QC1130844LCSD1											
1,2,3-Trichloropropane	0.02	0.02	0.022	0.019	ug/L	110	95	15	50-150	30	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00048

CONFIDENTIAL

LMC-PET-00000847

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QCBatchID: <u>QC1130929</u>	Analyst: akk	Method: EPA 8260M
Matrix: Water	Analyzed: 10/29/2012	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130929MB1					
1,2,3-Trichloropropane	ND	ug/L	0.005	0.005	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1130929LCS1, QC1130929LCSD1											
1,2,3-Trichloropropane	0.02	0.02	0.016	0.019	ug/L	80	95	17	50-150	30	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00049

CONFIDENTIAL

LMC-PET-00000848

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312080

QC Batch ID: QC1130967	Analyst: akk	Method: EPA 8260M
Matrix: Water	Analyzed: 10/30/2012	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1130967MB1					
1,2,3-Trichloropropane	ND	ug/L	0.005	0.005	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1130967LCS1, QC1130967LCSD1											
1,2,3-Trichloropropane	0.02	0.02	0.017	0.019	ug/L	85	95	11	50-150	30	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00050

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LMC-PET-00000849

Notes and Definitions

B	Analyte was present in an associated method blank. Associated sample data was reported with qualifier.
C	Laboratory Contamination.
D	The sample duplicate RPD was not within control limits, the sample data was reported without further clarification.
DF	Dilution Factor
DW	Sample result is calculated on a dry weigh basis
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
MDL	Method Detection Limit
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
ND	Analyte was not detected or was less than the detection limit.
P	Sample was received without proper preservation according to EPA guidelines.
RDL	Reporting Detection Limit
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
T	Sample was extracted/analyzed past the holding time.

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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Analytical Results Report

Lab Request 312080 Page 18 of 18



ALAB : 00051

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LMC-PET-00000850

ASSOCIATED LABORATORIES

NARRATIVE

Date: November 8, 2012

Narrative for Lab Request LR: 312080

Client Project Identification:

Client Name: ARCADIS
Project: BOU Burbank

This narrative includes all samples as shown on the attached Lab Request final report.

Data Validation:

Holding Times

Samples were received on October 12th, 2012 intact and at a temperature of 3.0°C. All EPA recommended holding times were met for this project.

Calibration

Initial calibration criteria were met. Initial and Continuing Calibration Check samples were run at the required frequency. All results were within required limits.

Quality Control Samples

All QC results were within control limits.

Other Anomalies or Comments

1,2,3 – TCP for the Samples (ID# MW-1, MW-2, B-5-CW03, B-1-CW13 and MW-3) was analyzed and reported by regular EPA 8260B.

Estimated concentrations ("J" Flags) were reported on all samples and method blanks. The following samples have reported "J" flags:

Metals: MW-1, C-1-CW03, Equipment Blank, B-5-CW03, B-5-CW03 Duplicate, MW-3

Hex Chromium: MW-1, C-1-CW03, MW-3

ALAB: 00052

Chain of Custody Record

Lab Job No. 21
Page 1 of 1

[illegible]

Danielle Roberts

From: Levy, Leah [Leah.Levy@arcadis-us.com]
Sent: Tuesday, October 16, 2012 2:51 PM
To: Danielle Roberts
Subject: RE: BOU picked up 10-12-12
Daniel:

For the 10/12/12 COC, please add these analyses:

- MW-3 samples should be analyzed for VOCs, TCP, 1,4-dioxane, total and hexavalent chromium, nitrite/nitrate, and thallium.
- The equipment blank should be analyzed for 1,4- dioxane, TDS, general minerals, total chromium, and thallium in addition to the analyses indicated on the COCs.

Thanks

From: Danielle Roberts [mailto:droberts@associatedlabs.com]
Sent: Tuesday, October 16, 2012 2:40 PM
To: Levy, Leah
Subject: BOU picked up 10-12-12

Hi Leah,
Just want to follow up on MW-3. There are no analysis marked, just want to make sure you want the sample on hold or add analysis. Let me know.
Thanks

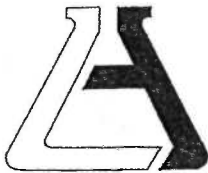
Danielle Roberts
Project Manager
Associated Laboratories
806 N. Batavia
Orange, CA 92868
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Tel 714-771-6900
Cell 714-920-5157

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10/16/2012

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LMC-PET-00000853

**ASSOCIATED LABORATORIES**

806 North Batavia – Orange, California 92868 – 714-771-6900

FAX 714-538-1209

SAMPLE ACCEPTANCE CHECKLIST**Section 1**Client: Arcadis

Project: _____

Date Received: 10 - 12 - 12Sampler's Name: Yes NoSample(s) received in cooler: Yes

No (Skip Section 2)

Shipping Information: _____

Section 2Was the cooler packed with: X Ice _____ Ice Packs _____ Bubble Wrap _____ Styrofoam
_____ Paper _____ None _____ Other _____Cooler or box temperature: 3.5

(Acceptance range is 0 to 6 Deg. C.)

Section 3	YES	NO	N/A
Was a COC received?	<u>X</u>		
Is it properly completed? (IDs, sampling date and time, signature, test)	<u>X</u>		
Were custody seals present?			<u>X</u>
If Yes – were they intact?			<u>X</u>
Were all samples sealed in plastic bags?	<u>X</u>		
Did all samples arrive intact? If no, indicate below.	<u>X</u>		
Did all bottle labels agree with COC? (ID, dates and times)	<u>X</u>		
Were correct containers used for the tests required?	<u>X</u>		
Was a sufficient amount of sample sent for tests indicated?	<u>X</u>		
Was there headspace in VOA vials?		<u>X</u>	<u>X</u>
Were the containers labeled with correct preservatives?	<u>X</u>		<u>X</u>
Was total residual chlorine measured (Fish Bioassay samples only)? *			<u>X</u>

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

Section 4

Explanations/Comments

Section 5

Was Project Manager notified of discrepancies: Y / N N/A

Completed By: [Signature]Date: 10 - 12 - 12

Created on 7/6/2012 1:29:00 PM

ALAB: 00054

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LMC-PET-00000854

SM 2320B

ALAB : 00055

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LMC-PET-00000855

Alkalinity

EPA 310.1 / SM 2320B

Analyst H. K.

H2SO4 (0.020 N) ID # 04 04 2012

Date 10 15 2012

Phenolphthalein ID # 01172011

Methyl Orange ID # 05302012

[illegible]

1/31/2012

80 of 100

ALAB : 00055

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LMC-PET-00000856

Alkalinity
EPA 310.1 / SM 2320B

Analyst BK

H2SO4 (0.020 N) ID # 04 04 2012

Date 10/23/2012

Phenolphthalein ID # 0117 2011

Methyl Orange ID # 05 30 2012

Lab Request #	Init. Vol.	MI of H2SO4	PH	Tot. Alk.	Bicarb.	Carb.	OH	Comments
Blank	50	0.05		ND	ND	ND	ND	
312080/08 - 1	50	0.05		ND	ND	ND	ND	15:30
dup	50	0.05		ND	ND	ND	ND	
								QC1/30703

SM 2510B

ALAB : 00058

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LMC-PET-00000858

Electrical Conductivity

EPA 120.1 / SM 2510

[illegible]

SM 2540C

ALAB : 00060

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LMC-PET-00000860

QC1130545 J

ASSOCIATED LABORATORIES

Date 10.15.12
Initials RV

Chem. Dept. Total Dissolved Solids T.D.S. EPA 160-1

SAMPLE # MB1 Company _____
_____ Electroconductivity _____ μ mhos/cm
D. Solids + container 90.2960 1:16pm Sample amount 100 ml
90.2865 g. 10:11am
Cont. wt. # _____ - 90.2892 g. 6:03pm
Dissolved solids g. T.D.S. ND mg/L

SAMPLE # LC51 Company _____
_____ Electroconductivity _____ μ mhos/cm
D. Solids + container 94.7715 1:15pm Sample amount 100 ml
94.7723 g. 10:19am
Cont. wt. # _____ - 94.7440 g. 6:10pm
Dissolved solids g. T.D.S. 275 mg/L

SAMPLE # 311995-002/3 Company Equipment Blank
_____ Electroconductivity _____ μ mhos/cm
D. Solids + container 118.3780 1:17pm Sample amount 200 ml
118.3780 RV g. 10:29am
Cont. wt. # _____ - 118.3781 g. 6:21pm
Dissolved solids g. T.D.S. ND mg/L

SAMPLE # 312080-008/1 Company Equipment Blank
_____ Electroconductivity _____ μ mhos/cm
D. Solids + container 111.0275 1:19pm Sample amount 200 ml
111.0279 g. 10:30am
Cont. wt. # _____ - 111.0325 g. 6:24pm
Dissolved solids g. T.D.S. ND mg/L

$$\text{T.D.S} = \frac{\text{Dissolved Solids g}}{\text{Sample Amount ml}} \times \frac{1000 \text{ mg}}{1 \text{ g}} \times \frac{1000 \text{ ml}}{1 \text{ L}}$$

95of200

ALAB: 00061

ASSOCIATED LABORATORIES

Chem. Dept. Total Dissolved Solids T.D.S. EPA 160-1

Date 10.15.12
Initials RV

SAMPLE # 312080-013/4 Company B-1 CW12

80.6315 1:10 pm Electroconductivity 987 μ mhos/cm
D. Solids + container 80.6380 g. 10:31 pm Sample amount 50 ml
Cont. wt. # 80.6121 g. 6:29 pm
Dissolved solids g. T.D.S. 508 mg/L

SAMPLE # 312080-014/3 Company B-1 CW12 Dup

81.5580 1:20 pm Electroconductivity 980 μ mhos/cm
D. Solids + container 81.5583 g. 10:32 am Sample amount 50 ml
Cont. wt. # 41.5326 g. 6:33 pm
Dissolved solids g. T.D.S. 508 mg/L

SAMPLE # 312080-015/1 Company

83.4927 1:21 pm Electroconductivity 929 μ mhos/cm
D. Solids + container 83.4930 g. 10:37 am Sample amount 50 ml
Cont. wt. # 83.4683 g. 6:35 pm
Dissolved solids g. T.D.S. 488 mg/L

SAMPLE # 312094-002/1 Company B-1 CW20

80.9523 1:23 pm Electroconductivity 857 μ mhos/cm
D. Solids + container 80.9529 g. 10:35 am Sample amount 50 ml
Cont. wt. # 80.9309 g. 6:40 pm
Dissolved solids g. T.D.S. 428 mg/L

T.D.S. = $\frac{\text{Dissolved Solids g}}{\text{Sample Amount ml}} \times \frac{1000 \text{ mg}}{1 \text{ g}} \times \frac{1000 \text{ ml}}{1 \text{ L}}$

96of200

ALAB: 00062

ASSOCIATED LABORATORIES

Date 10.15.12

Chem. Dept. Total Dissolved Solids T.D.S. EPA 160-1

Initials RV

SAMPLE # 312149-001/1 dup Company _____
43.2301 Electroconductivity 8960 μ hos/cm
43.2301 RV i. 35pm
 D. Solids + container 93.2313 g. 11.00pm Sample amount 25 ml
 Cont. wt. # _____ - 93.0220 g. 7.05pm
 Dissolved solids _____ g. T.D.S. 8324 mg/L

SAMPLE # _____ Company _____
 Electroconductivity _____ μ hos/cm
 D. Solids + container _____ g. Sample amount _____ ml
 Cont. wt. # _____ - _____ g.
 Dissolved solids _____ g. T.D.S. _____ mg/L

SAMPLE # _____ Company _____
 Electroconductivity _____ μ hos/cm
 D. Solids + container _____ g. Sample amount _____ ml
 Cont. wt. # _____ - _____ g.
 Dissolved solids _____ g. T.D.S. _____ mg/L

SAMPLE # _____ Company _____
 Electroconductivity _____ μ hos/cm
 D. Solids + container _____ g. Sample amount _____ ml
 Cont. wt. # _____ - _____ g.
 Dissolved solids _____ g. T.D.S. _____ mg/L

$$\text{T.D.S} = \frac{\text{Dissolved Solids g}}{\text{Sample Amount ml}} \times \frac{1000 \text{ mg}}{1 \text{ g}} \times \frac{1000 \text{ ml}}{1 \text{ L}}$$

99of200

ALAB: 00063