



Ecolobue 5702 Marsh Drive, unit K Pacheco, CA 94553	Client Project ID: drinking water testing	Date Sampled: 08/06/13
	Client Contact: Heather Jepson	Date Received: 08/06/13
	Client P.O.:	Date Extracted: 08/07/13
		Date Analyzed: 08/07/13

Inorganic Anions by IC*

Extraction method: E300.1

Analytical methods: E300.1

Work Order: 1308192

Lab ID	Client ID	Matrix	Fluoride	Nitrate as N	Nitrate as NO ₃ ⁻	DF	% SS	Comments
001B	Drinking Water	W	ND	0.31	1.4	1	114	
Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	0.1	0.1	0.45	mg/L			
	S	NA	NA	NA	mg/Kg			

* water samples are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in mg/wipe, product/oil/non-aqueous liquid samples in mg/L.
 * [Nitrate as NO₃⁻] = 4.4268 x [Nitrate as N]
 # means surrogate diluted out of range or surrogate coelutes with another peak; N/A means surrogate not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

CDPH ELAP 1644 ♦ NELAP 12283CA

TD Analyst's Initial

AR Angela Rydelius, Lab Manager



Ecoloblue 5702 Marsh Drive, unit K Pacheco, CA 94553	Client Project ID: drinking water testing	Date Sampled: 08/06/13
	Client Contact: Heather Jepson	Date Received: 08/06/13
	Client P.O.:	Date Extracted: 08/09/13
		Date Analyzed: 08/09/13

Volatile Organics by P&T and GC/MS*

Extraction Method: E524.2

Analytical Method: E524.2

Work Order: 1308192

Lab ID	1308192-001A
Client ID	Drinking Water
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	tert-Amyl Methyl Ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	3.2	1.0	2.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon disulfide	ND	1.0	0.5
Carbon tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	Chloroform	ND	1.0	0.5
Chloromethane	ND	1.0	0.5	2-Chlorotoluene	ND	1.0	0.5
4-Chlorotoluene	ND	1.0	0.5	Dibromochloromethane	ND	1.0	0.5
1,2-Dibromo-3-chloropropane	ND	1.0	0.2	1,2-Dibromoethane (EDB)	ND	1.0	0.5
Dibromomethane	ND	1.0	0.5	1,2-Dichlorobenzene	ND	1.0	0.5
1,3-Dichlorobenzene	ND	1.0	0.5	1,4-Dichlorobenzene	ND	1.0	0.5
Dichlorodifluoromethane	ND	1.0	0.5	1,1-Dichloroethane	ND	1.0	0.5
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5	1,1-Dichloroethene	ND	1.0	0.5
cis-1,2-Dichloroethene	ND	1.0	0.5	trans-1,2-Dichloroethene	ND	1.0	0.5
1,2-Dichloropropane	ND	1.0	0.5	1,3-Dichloropropane	ND	1.0	0.5
2,2-Dichloropropane	ND	1.0	0.5	1,1-Dichloropropene	ND	1.0	0.5
cis-1,3-Dichloropropene	ND	1.0	0.5	trans-1,3-Dichloropropene	ND	1.0	0.5
Diisopropyl ether (DIPE)	ND	1.0	0.5	Ethylbenzene	ND	1.0	0.5
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5	Freon 113	ND	1.0	10
Hexachlorobutadiene	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
n-Propyl benzene	ND	1.0	0.5	Styrene	ND	1.0	0.5
1,1,1,2-Tetrachloroethane	ND	1.0	0.5	1,1,2,2-Tetrachloroethane	ND	1.0	0.5
Tetrachloroethene	ND	1.0	0.5	Toluene	ND	1.0	0.5
1,2,3-Trichlorobenzene	ND	1.0	0.5	1,2,4-Trichlorobenzene	ND	1.0	0.5
1,1,1-Trichloroethane	ND	1.0	0.5	1,1,2-Trichloroethane	ND	1.0	0.5
Trichloroethene	ND	1.0	0.5	Trichlorofluoromethane	ND	1.0	0.5
1,2,3-Trichloropropane	ND	1.0	0.5	1,2,4-Trimethylbenzene	ND	1.0	0.5
1,3,5-Trimethylbenzene	ND	1.0	0.5	Vinyl chloride	ND	1.0	0.5
Xylenes, Total	ND	1.0	0.5				

Surrogate Recoveries (%)

%SS1:	112	%SS2:	97
%SS3:	96		

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis. %SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

surrogate diluted out of range or surrogate coelutes with another peak; &) low surrogate due to matrix interference.



McC Campbell Analytical, Inc.

"When Quality Counts"

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Ecoloblue 5702 Marsh Drive, unit K Pacheco, CA 94553	Client Project ID: drinking water testing	Date Sampled: 08/06/13
	Client Contact: Heather Jepson	Date Received: 08/06/13
	Client P.O.:	Date Extracted: 08/08/13
		Date Analyzed: 08/08/13

Total & Speciated Alkalinity as Calcium Carbonate*

Extraction method: SM2320B

Analytical methods: SM2320B

Work Order: 1308192

Lab ID	Client ID	Matrix	Total*	Carbonate*	Bicarbonate*	Hydroxide*	DF	Comments
001C	Drinking Water	W	20.5	ND	20.5	ND	1	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	1.0	1.0	1.0	1.0	mg CaCO ₃ /L
	S	NA	NA	NA	NA	mg/Kg

*water samples are reported in mg calcium carbonate/L. Hydroxide, Carbonate & Bicarbonate alkalinity measure @ end-point of pH = 8.3 & 4.5 per SM2320B.
DF = Dilution Factor

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HN Analyst's Initial Angela Rydelius, Lab Manager



Ecoloblue 5702 Marsh Drive, unit K Pacheco, CA 94553	Client Project ID: drinking water testing	Date Sampled: 08/06/13
	Client Contact: Heather Jepson	Date Received: 08/06/13
	Client P.O.:	Date Extracted: 08/22/13
		Date Analyzed: 08/19/13

Bisphenol A by ASTM D7574-09*

Analytical Method: ASTM D7574-09

Work Order: 1308192

Lab ID	Client ID	Matrix	Bisphenol A	DF	Comments
1308192-001E	Drinking Water	W	ND	1	

Reporting Limit for DF = 1; ND means not detected at or above the reporting limit	W	0.05 µg/L
	S	NA

* water samples are reported in µg/L.

ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS means Percent Recovery of Surrogate Standard; DF means Dilution Factor

#) surrogate diluted out of range or surrogate coelutes with another peak.; &) low or no surrogate due to matrix interference.



Ecolobue 5702 Marsh Drive, unit K Pacheco, CA 94553	Client Project ID: drinking water testing	Date Sampled: 08/06/13
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	Client P.O.:	Date Extracted: 08/06/13
		Date Analyzed: 08/06/13

Chloramine*

Extraction method: SM4500-Cl DE

Analytical methods: SM4500-Cl F

Work Order: 1308192

Lab ID	Client ID	Matrix	Dichloramine	Monochloramine	Total Chloramine	DF	% SS	Comments
001F	Drinking Water	W	ND	ND	ND	1	N/A	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	0.04	0.04	0.04	mg/L
	S	NA	NA	NA	mg/Kg

* water samples are reported in mg/L.
 According the formal method, this is "field test" with a 15 minute Hold Time. However, as this is unrealistically short for commercial environmental analysis, MAI has designated a 24 hour hold time for aqueous samples.
 DF = Dilution Factor



Ecoloblue 5702 Marsh Drive, unit K Pacheco, CA 94553	Client Project ID: drinking water testing	Date Sampled: 08/06/13
	Client Contact: Heather Jepson	Date Received: 08/06/13
	Client P.O.:	Date Extracted: 08/07/13
		Date Analyzed: 08/07/13

Metals*

Extraction method: E200.8

Analytical methods: E200.8

Work Order: 1308192

Lab ID	Client ID	Matrix	Extraction Type	Copper	Iron	Manganese	DF	% SS	Comments
001H	Drinking Water	W	TOTAL	ND	ND	ND	1	N/A	

Reporting Limit for DF=1; ND means not detected at or above the reporting limit	W	TOTAL	10	100	20	µg/L
	S	TOTAL	NA	NA	NA	NA

*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / WET / DI WET / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

means surrogate diluted out of range; ND means not detected above the reporting limit/method detection limit; N/A means not applicable to this sample or instrument.

TOTAL = Hot acid digestion of a representative sample aliquot.
 TRM = Total recoverable metals is the "direct analysis" of a sample aliquot taken from its acid-preserved container.
 DISS = Dissolved metals by direct analysis of 0.45 µm filtered and acidified sample.

%SS = Percent Recovery of Surrogate Standard
 DF = Dilution Factor

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	Client P.O.:	Date Extracted: 08/06/13
		Date Analyzed: 08/06/13

pH*

Analytical Method: SM4500H+B Work Order: 1308192

Lab ID	Client ID	Matrix	pH	DF	Comments
1308192-001D	Drinking Water	W	7.59 @ 18.0°C	1	

Method Accuracy and Reporting Units	W	±0.05, pH units @ °C
	S	NA

* According the formal method, this is "field test" with a 15 minute Hold Time. However, as this is unrealistically short for commercial environmental analysis, MAI has designated a 24 hour hold time for aqueous samples.

DF = Dilution Factor



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		Date Received: 08/06/13
	Client Contact: Heather Jepson	Date Extracted: 08/06/13
	Client P.O.:	Date Analyzed: 08/07/13

Total Coliform / E. Coli, Enumeration

Analytical Method: SM9223B

Work Order: 1308192

Lab ID	Client ID	Matrix	Total Coliform	95% Confident Interval	E. Coli	95% Confident Interval	DF	Comments
001G	Drinking Water	W	ND	---	ND	---	1	

Reporting Limit & Reporting Units	W	1.0 MPN/100ml	
	S	NA	

DF = Dilution Factor



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	Client P.O.:	Date Extracted: 08/07/13
		Date Analyzed: 08/08/13

Total Dissolved Solids*

Analytical Method: SM2540C

Work Order: 1308192

Lab ID	Client ID	Matrix	Total Dissolved Solids	DF	Comments
1308192-001D	Drinking Water	W	ND	1	

Reporting Limit for DF = 1; ND means not detected at or above the reporting limit	W	10 mg/L
	S	NA

* water samples reported in mg/L.
 DF = Dilution Factor



QC SUMMARY REPORT FOR E300.1

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 80231

WorkOrder: 1308192

EPA Method: E300.1		Extraction: E300.1					Spiked Sample ID: 1308176-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Fluoride	ND<1.0	1	NR	NR	NR	95.5	N/A	N/A	85 - 115	
Nitrate as N	32	1	NR	NR	NR	92.8	N/A	N/A	85 - 115	
Nitrate as NO ₃ ⁻	140	4.4	NR	NR	NR	93.4	N/A	N/A	85 - 115	
%SS:	---#	0.10	NR	NR	NR	115	N/A	N/A	90 - 115	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 80231 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308192-001B	08/06/13	08/07/13	08/07/13 9:02 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not applicable to this method.
 # surrogate diluted out of range or surrogate coelutes with another peak.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



QC SUMMARY REPORT FOR E524.2

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 80389

WorkOrder: 1308192

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Acetone	N/A	200	N/A	N/A	N/A	87.9	N/A	N/A	70 - 130
tert-Amyl Methyl Ether (TAME)	N/A	10	N/A	N/A	N/A	108	N/A	N/A	70 - 130
Benzene	N/A	10	N/A	N/A	N/A	104	N/A	N/A	70 - 130
Bromobenzene	N/A	10	N/A	N/A	N/A	104	N/A	N/A	70 - 130
Bromochloromethane	N/A	10	N/A	N/A	N/A	109	N/A	N/A	70 - 130
Bromodichloromethane	N/A	10	N/A	N/A	N/A	112	N/A	N/A	70 - 130
Bromoform	N/A	10	N/A	N/A	N/A	127	N/A	N/A	70 - 130
Bromomethane	N/A	10	N/A	N/A	N/A	102	N/A	N/A	70 - 130
2-Butanone (MEK)	N/A	40	N/A	N/A	N/A	108	N/A	N/A	70 - 130
t-Butyl alcohol (TBA)	N/A	40	N/A	N/A	N/A	102	N/A	N/A	70 - 130
n-Butyl benzene	N/A	10	N/A	N/A	N/A	103	N/A	N/A	70 - 130
sec-Butyl benzene	N/A	10	N/A	N/A	N/A	107	N/A	N/A	70 - 130
tert-Butyl benzene	N/A	10	N/A	N/A	N/A	106	N/A	N/A	70 - 130
Carbon disulfide	N/A	10	N/A	N/A	N/A	108	N/A	N/A	70 - 130
Carbon tetrachloride	N/A	10	N/A	N/A	N/A	118	N/A	N/A	70 - 130
Chlorobenzene	N/A	10	N/A	N/A	N/A	102	N/A	N/A	70 - 130
Chloroethane	N/A	10	N/A	N/A	N/A	98.9	N/A	N/A	70 - 130
Chloroform	N/A	10	N/A	N/A	N/A	106	N/A	N/A	70 - 130
Chloromethane	N/A	10	N/A	N/A	N/A	98.4	N/A	N/A	70 - 130
2-Chlorotoluene	N/A	10	N/A	N/A	N/A	106	N/A	N/A	70 - 130
4-Chlorotoluene	N/A	10	N/A	N/A	N/A	104	N/A	N/A	70 - 130
Dibromochloromethane	N/A	10	N/A	N/A	N/A	121	N/A	N/A	70 - 130
1,2-Dibromo-3-chloropropane	N/A	4	N/A	N/A	N/A	102	N/A	N/A	70 - 130
1,2-Dibromoethane (EDB)	N/A	10	N/A	N/A	N/A	111	N/A	N/A	70 - 130
Dibromomethane	N/A	10	N/A	N/A	N/A	107	N/A	N/A	70 - 130
1,2-Dichlorobenzene	N/A	10	N/A	N/A	N/A	104	N/A	N/A	70 - 130
1,3-Dichlorobenzene	N/A	10	N/A	N/A	N/A	104	N/A	N/A	70 - 130
1,4-Dichlorobenzene	N/A	10	N/A	N/A	N/A	102	N/A	N/A	70 - 130
Dichlorodifluoromethane	N/A	10	N/A	N/A	N/A	108	N/A	N/A	70 - 130
1,1-Dichloroethane	N/A	10	N/A	N/A	N/A	104	N/A	N/A	70 - 130
1,2-Dichloroethane (1,2-DCA)	N/A	10	N/A	N/A	N/A	106	N/A	N/A	70 - 130

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



QC SUMMARY REPORT FOR E524.2

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 80389

WorkOrder: 1308192

Analyte	Extraction: E524.2		Spiked Sample ID: N/A						
	Sample µg/L	Spiked µg/L	MS % Rec.	MSD % Rec.	MS-MSD % RPD	LCS % Rec.	Acceptance Criteria (%)		
							MS / MSD	RPD	LCS
1,1-Dichloroethene	N/A	10	N/A	N/A	N/A	109	N/A	N/A	70 - 130
cis-1,2-Dichloroethene	N/A	10	N/A	N/A	N/A	108	N/A	N/A	70 - 130
trans-1,2-Dichloroethene	N/A	10	N/A	N/A	N/A	107	N/A	N/A	70 - 130
1,2-Dichloropropane	N/A	10	N/A	N/A	N/A	108	N/A	N/A	70 - 130
1,3-Dichloropropane	N/A	10	N/A	N/A	N/A	108	N/A	N/A	70 - 130
2,2-Dichloropropane	N/A	10	N/A	N/A	N/A	104	N/A	N/A	70 - 130
1,1-Dichloropropene	N/A	10	N/A	N/A	N/A	102	N/A	N/A	70 - 130
cis-1,3-Dichloropropene	N/A	10	N/A	N/A	N/A	117	N/A	N/A	70 - 130
trans-1,3-Dichloropropene	N/A	10	N/A	N/A	N/A	117	N/A	N/A	70 - 130
Diisopropyl ether (DIPE)	N/A	10	N/A	N/A	N/A	107	N/A	N/A	70 - 130
Ethylbenzene	N/A	10	N/A	N/A	N/A	104	N/A	N/A	70 - 130
Ethyl tert-butyl ether (ETBE)	N/A	10	N/A	N/A	N/A	108	N/A	N/A	70 - 130
Freon 113	N/A	10	N/A	N/A	N/A	107	N/A	N/A	70 - 130
Hexachlorobutadiene	N/A	10	N/A	N/A	N/A	97.6	N/A	N/A	70 - 130
2-Hexanone	N/A	10	N/A	N/A	N/A	113	N/A	N/A	70 - 130
Isopropylbenzene	N/A	10	N/A	N/A	N/A	104	N/A	N/A	70 - 130
4-Isopropyl toluene	N/A	10	N/A	N/A	N/A	104	N/A	N/A	70 - 130
Methyl-t-butyl ether (MTBE)	N/A	10	N/A	N/A	N/A	106	N/A	N/A	70 - 130
Methylene chloride	N/A	10	N/A	N/A	N/A	105	N/A	N/A	70 - 130
4-Methyl-2-pentanone (MIBK)	N/A	10	N/A	N/A	N/A	112	N/A	N/A	70 - 130
Naphthalene	N/A	10	N/A	N/A	N/A	115	N/A	N/A	70 - 130
n-Propyl benzene	N/A	10	N/A	N/A	N/A	107	N/A	N/A	70 - 130
Styrene	N/A	10	N/A	N/A	N/A	108	N/A	N/A	70 - 130
1,1,1,2-Tetrachloroethane	N/A	10	N/A	N/A	N/A	115	N/A	N/A	70 - 130
1,1,2,2-Tetrachloroethane	N/A	10	N/A	N/A	N/A	111	N/A	N/A	70 - 130
Tetrachloroethene	N/A	10	N/A	N/A	N/A	100	N/A	N/A	70 - 130
Toluene	N/A	10	N/A	N/A	N/A	104	N/A	N/A	70 - 130
1,2,3-Trichlorobenzene	N/A	10	N/A	N/A	N/A	107	N/A	N/A	70 - 130
1,2,4-Trichlorobenzene	N/A	10	N/A	N/A	N/A	102	N/A	N/A	70 - 130
1,1,1-Trichloroethane	N/A	10	N/A	N/A	N/A	110	N/A	N/A	70 - 130
1,1,2-Trichloroethane	N/A	10	N/A	N/A	N/A	110	N/A	N/A	70 - 130

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



QC SUMMARY REPORT FOR E524.2

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 80389

WorkOrder: 1308192

EPA Method: E524.2		Extraction: E524.2				Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Trichloroethene	N/A	10	N/A	N/A	N/A	106	N/A	N/A	70 - 130
Trichlorofluoromethane	N/A	10	N/A	N/A	N/A	100	N/A	N/A	70 - 130
1,2,3-Trichloropropane	N/A	10	N/A	N/A	N/A	111	N/A	N/A	70 - 130
1,2,4-Trimethylbenzene	N/A	10	N/A	N/A	N/A	108	N/A	N/A	70 - 130
1,3,5-Trimethylbenzene	N/A	10	N/A	N/A	N/A	106	N/A	N/A	70 - 130
Vinyl chloride	N/A	10	N/A	N/A	N/A	101	N/A	N/A	70 - 130
%SS1:	N/A	35	N/A	N/A	N/A	111	N/A	N/A	70 - 130
%SS2:	N/A	35	N/A	N/A	N/A	92	N/A	N/A	70 - 130
%SS3:	N/A	3.5	N/A	N/A	N/A	100	N/A	N/A	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 80389 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308192-001A	08/06/13	08/09/13	08/09/13 12:52 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 $\% \text{ Recovery} = 100 * (\text{MS} - \text{Sample}) / (\text{Amount Spiked})$; $\text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2)$.
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.
 Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



QC SUMMARY REPORT FOR WET CHEMISTRY TESTS

Test Method: SM2320B (Alkalinity)

Matrix: W

WorkOrder: 1308192

Method Name: SM2320B			Units: mg CaCO ₃ /L			BatchID: 80320
Lab ID	Sample	DF	Dup / Ser. Dil.	DF	% RPD	Acceptance Criteria (%)
1308192-001C	20.5	1	17.6	1	15	<20

BATCH 80320 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308192-001C	08/06/13	08/08/13	08/08/13 9:36 AM				

Test Method: SM4500H+B (pH)

Matrix: W

WorkOrder: 1308192

Method Name: SM4500H+B			Units: ±, pH units @ °C			BatchID: 80250
Lab ID	Sample	DF	Dup / Ser. Dil.	DF	Precision	Acceptance Criteria
1308192-001D	7.59 @ 18.0°C	1	7.57 @ 17.9°C	1	0.02	0.05

BATCH 80250 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308192-001D	08/06/13	08/06/13	08/06/13 9:46 PM				

Test Method: SM2540C (TDS)

Matrix: W

WorkOrder: 1308192

Method Name: SM2540C			Units: mg/L			BatchID: 80356
Lab ID	Sample	DF	Dup / Ser. Dil.	DF	% RPD	Acceptance Criteria (%)
1308192-001D	ND	1	ND<20.0	2	N/A	<20

BATCH 80356 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308192-001D	08/06/13	08/07/13	08/08/13 6:35 PM				

Dup = Duplicate; Ser. Dil. = Serial Dilution; MS = Matrix Spike; RD = Relative Difference; RPD = Relative Percent Deviation.

Precision = Absolute Value (Sample - Duplicate)

RPD = 100 * (Sample - Duplicate) / [(Sample + Duplicate) / 2]

%RPD is calculated using results of up to 10 significant figures, however the reported results are rounded to 2 or 3 significant figures. Therefore there may be a slight discrepancy between the %RPD displayed above and %RPD calculated using the reported results. MAI considers %RPD based upon more significant figures to be more accurate.



QC SUMMARY REPORT FOR ASTM D7574-09

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 80895

WorkOrder: 1308192

EPA Method: ASTM D7574-09		Extraction: ASTM D7574-09					Spiked Sample ID: 1308192-001E			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Bisphenol A	ND	5	103	101	2.10	100	70 - 130	30	70 - 130	
All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE										

BATCH 80895 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308192-001E	08/06/13	08/22/13	08/19/13 1:33 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked})$; $\text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2)$.
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.
 Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



QC SUMMARY REPORT FOR SM4500-CI F

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 80234

WorkOrder: 1308192

EPA Method: SM4500-CI F		Extraction: SM4500-CI DE					Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Chlorine	N/A	0.20	N/A	N/A	N/A	106	N/A	N/A	80 - 120	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 80234 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308192-001F	08/06/13	08/06/13	08/06/13 9:00 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2).$
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not applicable to this method.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 80266

WorkOrder: 1308192

EPA Method: E200.8		Extraction: E200.8					Spiked Sample ID: 1307958-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Copper	26	50	92.4	90.4	1.43	105	85 - 115	20	85 - 115	
Iron	ND	500	97.5	96.2	1.34	98.5	85 - 115	20	85 - 115	
Manganese	ND	500	96.1	94	2.17	101	85 - 115	20	85 - 115	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 80266 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308192-001H	08/06/13	08/07/13	08/07/13 1:24 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked})$; $\text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2)$.
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not applicable to this method.
 NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



QC SUMMARY REPORT FOR WET CHEMISTRY TESTS

Test Method: SM9223B (Total Coliform & E. Coli)

Matrix: W

WorkOrder: 1308192

Method Name: SM9223B				BatchID: 80245				
Lab ID	Analyte	Reporting Units	Sample	DF	Dup	DF	% RPD	Acceptance Criteria (%)
1308192-001G	E Coli	MPN/100ml	ND	1	ND	1	N/A	<70
	Total Coliform	MPN/100ml	ND	1	ND	1	N/A	<70

BATCH 80245 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308192-001G	08/06/13	08/06/13	08/07/13 4:33 PM				

% RPD = $\text{abs}(\text{Sample} - \text{Dup}) / ((\text{Sample} + \text{Dup}) / 2) * 100$
 N/A = Not Applicable
 NR = %RPD may fall outside of laboratory acceptance criteria due to sample inconsistency between two containers.