



Alpha Analytical Laboratories Inc.

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Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 • Phone: (925) 828-6226 • Fax: (925) 828-6309

Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 • Phone: (916) 686-5190 • Fax: (916) 686-5192

ELAP Certificates 1551, 2728, and 2922

14 December 2017

Sample Traps, LLC

Attn: Quality Control Manager

262 Rickenbacker Circle

Livermore, CA 94551

RE: QC- 64oz. WM HDPE

Work Order: 17L0239

Enclosed are the results of analyses for samples received by the laboratory on 12/04/17 22:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For Chelsea L. Sandelin
Project Manager



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Sample Traps, LLC
262 Rickenbacker Circle
Livermore CA, 94551

Project Manager: Quality Control Manager
Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Z7334CUCS	17L0239-01	Water	12/04/17 00:00	12/04/17 22:10



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Sample Traps, LLC
262 Rickenbacker Circle
Livermore CA, 94551

Project Manager: Quality Control Manager
Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

Metals (Drinking Water) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
			Limit									
Z7334CUCS (17L0239-01) Water Sampled: 12/04/17 00:00 Received: 12/04/17 22:10												
Calcium	ND	0.20	1.0		mg/L	1	AL73193	12/08/17 10:00	12/11/17 14:25	EPA 200.7	MAM	U
Magnesium	ND	0.030	1.0		mg/L	1	AL73193	12/08/17 10:00	12/11/17 14:25	EPA 200.7	MAM	U
Potassium	ND	0.20	1.0		mg/L	1	AL73193	12/08/17 10:00	12/11/17 14:25	EPA 200.7	MAM	U
Sodium	ND	0.40	1.0		mg/L	1	AL73193	12/08/17 10:00	12/11/17 14:25	EPA 200.7	MAM	U



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Project Manager: Quality Control Manager
Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
			Limit									

Z7334CUCS (17L0239-01) Water Sampled: 12/04/17 00:00 Received: 12/04/17 22:10

Mercury	ND	0.010	0.020	ug/L	1	AL73235	12/08/17 17:05	12/12/17 08:42	EPA 245.1	REN	U
Tin	ND	0.020	0.050	mg/L	1	AL73193	12/08/17 10:00	12/11/17 14:25	EPA 200.7	MAM	U



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Livermore CA, 94551

Project Manager: Quality Control Manager
Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
			Limit									
Z7334CUCS (17L0239-01) Water Sampled: 12/04/17 00:00 Received: 12/04/17 22:10												
												P-02
Aluminum	ND	5.0	10	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Antimony	ND	0.20	0.50	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Arsenic	ND	0.20	0.50	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Barium	ND	0.20	0.50	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Beryllium	ND	0.020	0.10	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Boron	ND	20	50	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Cadmium	ND	0.030	0.10	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Chromium	0.19	0.080	0.50	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		J
Cobalt	0.063	0.030	0.10	ug/L	1	AL73195	12/08/17 07:52	12/12/17 12:28	EPA 200.8	MMY		J
Copper	ND	0.40	0.50	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Iron	ND	10	50	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Lead	ND	0.060	0.25	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Manganese	ND	0.90	5.0	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Molybdenum	ND	0.070	0.25	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Nickel	ND	0.30	0.50	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Selenium	ND	0.20	2.0	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Silver	ND	0.050	0.10	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Thallium	ND	0.050	0.10	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Vanadium	ND	0.50	1.0	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U
Zinc	ND	2.0	5.0	ug/L	1	AL73195	12/08/17 07:52	12/11/17 12:39	EPA 200.8	MMY		U



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262 Rickenbacker Circle
Livermore CA, 94551

Project Manager: Quality Control Manager
Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
			Limit									
Z7334CUCS (17L0239-01) Water Sampled: 12/04/17 00:00 Received: 12/04/17 22:10												
Fluoride	ND	0.070	0.10		mg/L	1	AL73051	12/06/17 16:22	12/06/17 16:22	EPA 300.0	SMP	U
Nitrate as NO3	ND	0.20	1.0		mg/L	1	AL73051	12/06/17 16:22	12/06/17 16:22	EPA 300.0	SMP	T-03, U
Nitrite as NO2	ND	0.20	1.0		mg/L	1	AL73051	12/06/17 16:22	12/06/17 16:22	EPA 300.0	SMP	T-03, U
Sulfate as SO4	ND	0.20	0.50		mg/L	1	AL73051	12/06/17 16:22	12/06/17 16:22	EPA 300.0	SMP	U



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Livermore CA, 94551

Project Manager: Quality Control Manager
Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

Metals (Drinking Water) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AL73193 - Metals Digest

Blank (AL73193-BLK1)

Prepared: 12/08/17 Analyzed: 12/11/17

Calcium	ND	0.20	1.0	mg/L							U
Magnesium	ND	0.030	1.0	mg/L							U
Potassium	ND	0.20	1.0	mg/L							U
Sodium	ND	0.40	1.0	mg/L							U

LCS (AL73193-BS1)

Prepared: 12/08/17 Analyzed: 12/11/17

Calcium	7.53	0.20	1.0	mg/L	8.00		94.1	85-115			
Magnesium	7.59	0.030	1.0	mg/L	8.00		94.8	85-115			
Potassium	7.25	0.20	1.0	mg/L	8.00		90.7	85-115			
Sodium	7.43	0.40	1.0	mg/L	8.00		92.8	85-115			

Duplicate (AL73193-DUP1)

Source: 17L0044-01

Prepared: 12/08/17 Analyzed: 12/11/17

Calcium	12.5	0.20	1.0	mg/L		12.2			2.38	20	
Magnesium	2.18	0.030	1.0	mg/L		2.13			2.27	20	
Potassium	4.25	0.20	1.0	mg/L		4.16			2.07	20	
Sodium	10.3	0.40	1.0	mg/L		10.3			0.0302	20	

Matrix Spike (AL73193-MS1)

Source: 17L0044-01

Prepared: 12/08/17 Analyzed: 12/11/17

Calcium	20.0	0.20	1.0	mg/L	8.00	12.2	97.1	70-130			
Magnesium	9.61	0.030	1.0	mg/L	8.00	2.13	93.6	70-130			
Potassium	11.1	0.20	1.0	mg/L	8.00	4.16	87.1	70-130			
Sodium	17.3	0.40	1.0	mg/L	8.00	10.3	87.7	70-130			

Matrix Spike (AL73193-MS2)

Source: 17L0507-02

Prepared: 12/08/17 Analyzed: 12/11/17

Calcium	9.52	0.20	1.0	mg/L	8.00	2.36	89.6	70-130			
Magnesium	7.64	0.030	1.0	mg/L	8.00	0.296	91.8	70-130			
Potassium	7.73	0.20	1.0	mg/L	8.00	0.403	91.6	70-130			
Sodium	11.6	0.40	1.0	mg/L	8.00	4.41	90.2	70-130			



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Livermore CA, 94551

Project Manager: Quality Control Manager
Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

Metals (Drinking Water) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AL73193 - Metals Digest

Matrix Spike Dup (AL73193-MSD1)

Source: 17L0044-01

Prepared: 12/08/17 Analyzed: 12/11/17

Calcium	20.2	0.20	1.0	mg/L	8.00	12.2	100	70-130	1.15	20	
Magnesium	9.65	0.030	1.0	mg/L	8.00	2.13	94.1	70-130	0.408	20	
Potassium	11.3	0.20	1.0	mg/L	8.00	4.16	89.6	70-130	1.74	20	
Sodium	17.7	0.40	1.0	mg/L	8.00	10.3	92.3	70-130	2.13	20	



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Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AL73193 - Metals Digest

Blank (AL73193-BLK1)					Prepared: 12/08/17 Analyzed: 12/11/17						
Tin	ND	0.020	0.050	mg/L							U
LCS (AL73193-BS1)					Prepared: 12/08/17 Analyzed: 12/11/17						
Tin	0.187	0.020	0.050	mg/L	0.168		111	85-115			
Duplicate (AL73193-DUP1)					Source: 17L0044-01 Prepared: 12/08/17 Analyzed: 12/11/17						
Tin	ND	0.020	0.050	mg/L		ND			20		U
Matrix Spike (AL73193-MS1)					Source: 17L0044-01 Prepared: 12/08/17 Analyzed: 12/11/17						
Tin	0.185	0.020	0.050	mg/L	0.168	ND	110	70-130			
Matrix Spike (AL73193-MS2)					Source: 17L0507-02 Prepared: 12/08/17 Analyzed: 12/11/17						
Tin	0.183	0.020	0.050	mg/L	0.168	ND	109	70-130			
Matrix Spike Dup (AL73193-MSD1)					Source: 17L0044-01 Prepared: 12/08/17 Analyzed: 12/11/17						
Tin	0.186	0.020	0.050	mg/L	0.168	ND	111	70-130	0.442	20	

Batch AL73235 - EPA 245.1 Hg Water

Blank (AL73235-BLK1)					Prepared: 12/08/17 Analyzed: 12/12/17						
Mercury	ND	0.010	0.020	ug/L							U
LCS (AL73235-BS1)					Prepared: 12/08/17 Analyzed: 12/12/17						
Mercury	0.220	0.010	0.020	ug/L	0.250		88.0	85-115			
Duplicate (AL73235-DUP1)					Source: 17L0238-01 Prepared: 12/08/17 Analyzed: 12/12/17						
Mercury	ND	0.010	0.020	ug/L		ND			20		U



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Sample Traps, LLC
262 Rickenbacker Circle
Livermore CA, 94551

Project Manager: Quality Control Manager
Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AL73235 - EPA 245.1 Hg Water

Matrix Spike (AL73235-MS1)		Source: 17L0238-01			Prepared: 12/08/17 Analyzed: 12/12/17						
Mercury	0.220	0.010	0.020	ug/L	0.250	ND	88.0	70-130			
Matrix Spike Dup (AL73235-MSD1)		Source: 17L0238-01			Prepared: 12/08/17 Analyzed: 12/12/17						
Mercury	0.224	0.010	0.020	ug/L	0.250	ND	89.6	70-130	1.80	20	



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Project Manager: Quality Control Manager
Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AL73195 - EPA 200.8

Blank (AL73195-BLK1)

Prepared: 12/08/17 Analyzed: 12/11/17

Aluminum	ND	5.0	10	ug/L							U
Antimony	ND	0.20	0.50	ug/L							U
Arsenic	ND	0.20	0.50	ug/L							U
Barium	ND	0.20	0.50	ug/L							U
Beryllium	ND	0.020	0.10	ug/L							U
Boron	ND	20	50	ug/L							U
Cadmium	ND	0.030	0.10	ug/L							U
Chromium	0.172	0.080	0.50	ug/L							J
Cobalt	ND	0.030	0.10	ug/L							U
Copper	ND	0.40	0.50	ug/L							U
Iron	ND	10	50	ug/L							U
Lead	ND	0.060	0.25	ug/L							U
Manganese	ND	0.90	5.0	ug/L							U
Molybdenum	ND	0.070	0.25	ug/L							U
Nickel	ND	0.30	0.50	ug/L							U
Selenium	ND	0.20	2.0	ug/L							U
Silver	ND	0.050	0.10	ug/L							U
Thallium	ND	0.050	0.10	ug/L							U
Vanadium	ND	0.50	1.0	ug/L							U
Zinc	ND	2.0	5.0	ug/L							U

LCS (AL73195-BS1)

Prepared: 12/08/17 Analyzed: 12/11/17

Aluminum	568	5.0	10	ug/L	520	109	85-115
Antimony	21.9	0.20	0.50	ug/L	20.0	109	85-115
Arsenic	22.1	0.20	0.50	ug/L	20.0	110	85-115
Barium	22.3	0.20	0.50	ug/L	20.0	112	85-115
Beryllium	23.0	0.020	0.10	ug/L	20.0	115	85-115
Boron	110	20	50	ug/L	100	110	85-115
Cadmium	21.1	0.030	0.10	ug/L	20.0	106	85-115
Chromium	20.4	0.080	0.50	ug/L	20.0	102	85-115
Cobalt	20.1	0.030	0.10	ug/L	20.0	101	85-115
Copper	21.1	0.40	0.50	ug/L	20.0	106	85-115
Iron	524	10	50	ug/L	520	101	85-115
Lead	21.8	0.060	0.25	ug/L	20.0	109	85-115
Manganese	19.6	0.90	5.0	ug/L	20.0	98.0	85-115

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Livermore CA, 94551

Project Manager: Quality Control Manager
Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AL73195 - EPA 200.8

LCS (AL73195-BS1)

Prepared: 12/08/17 Analyzed: 12/11/17

Molybdenum	21.2	0.070	0.25	ug/L	20.0	106	85-115				
Nickel	20.0	0.30	0.50	ug/L	20.0	100	85-115				
Selenium	20.7	0.20	2.0	ug/L	20.0	103	85-115				
Silver	20.7	0.050	0.10	ug/L	20.0	104	85-115				
Thallium	21.8	0.050	0.10	ug/L	20.0	109	85-115				
Vanadium	20.1	0.50	1.0	ug/L	20.0	101	85-115				
Zinc	108	2.0	5.0	ug/L	100	108	85-115				

Duplicate (AL73195-DUP1)

Source: 17L0238-01

Prepared: 12/08/17 Analyzed: 12/11/17

Aluminum	ND	5.0	10	ug/L		ND			20		U
Antimony	ND	0.20	0.50	ug/L		ND			20		U
Arsenic	ND	0.20	0.50	ug/L		ND			20		U
Barium	ND	0.20	0.50	ug/L		ND			20		U
Beryllium	ND	0.020	0.10	ug/L		ND			20		U
Boron	ND	20	50	ug/L		ND			20		U
Cadmium	ND	0.030	0.10	ug/L		ND			20		U
Chromium	0.186	0.080	0.50	ug/L		0.185		0.275	20		J
Cobalt	0.0322	0.030	0.10	ug/L		0.0580		57.2	20		J
Copper	ND	0.40	0.50	ug/L		ND			20		U
Iron	ND	10	50	ug/L		ND			20		U
Lead	ND	0.060	0.25	ug/L		ND			20		U
Manganese	ND	0.90	5.0	ug/L		ND			20		U
Molybdenum	ND	0.070	0.25	ug/L		ND			20		U
Nickel	ND	0.30	0.50	ug/L		ND			20		U
Selenium	ND	0.20	2.0	ug/L		ND			20		U
Silver	ND	0.050	0.10	ug/L		ND			20		U
Thallium	ND	0.050	0.10	ug/L		ND			20		U
Vanadium	ND	0.50	1.0	ug/L		ND			20		U
Zinc	ND	2.0	5.0	ug/L		ND			20		U



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Sample Traps, LLC
262 Rickenbacker Circle
Livermore CA, 94551

Project Manager: Quality Control Manager
Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AL73195 - EPA 200.8

Matrix Spike (AL73195-MS1)

Source: 17L0238-01

Prepared: 12/08/17 Analyzed: 12/11/17

Aluminum	548	5.0	10	ug/L	520	ND	105	70-130			
Antimony	21.6	0.20	0.50	ug/L	20.0	ND	108	70-130			
Arsenic	21.5	0.20	0.50	ug/L	20.0	ND	108	70-130			
Barium	21.6	0.20	0.50	ug/L	20.0	ND	108	70-130			
Beryllium	22.7	0.020	0.10	ug/L	20.0	ND	114	70-130			
Boron	118	20	50	ug/L	100	ND	118	70-130			
Cadmium	20.7	0.030	0.10	ug/L	20.0	ND	104	70-130			
Chromium	19.9	0.080	0.50	ug/L	20.0	0.185	98.5	70-130			
Cobalt	19.6	0.030	0.10	ug/L	20.0	0.0580	97.9	70-130			
Copper	21.0	0.40	0.50	ug/L	20.0	ND	105	70-130			
Iron	507	10	50	ug/L	520	ND	97.5	70-130			
Lead	21.7	0.060	0.25	ug/L	20.0	ND	108	70-130			
Manganese	19.2	0.90	5.0	ug/L	20.0	ND	96.0	70-130			
Molybdenum	21.0	0.070	0.25	ug/L	20.0	ND	105	70-130			
Nickel	19.3	0.30	0.50	ug/L	20.0	ND	96.6	70-130			
Selenium	20.6	0.20	2.0	ug/L	20.0	ND	103	70-130			
Silver	20.4	0.050	0.10	ug/L	20.0	ND	102	70-130			
Thallium	21.5	0.050	0.10	ug/L	20.0	ND	108	70-130			
Vanadium	19.6	0.50	1.0	ug/L	20.0	ND	97.9	70-130			
Zinc	105	2.0	5.0	ug/L	100	ND	105	70-130			

Matrix Spike (AL73195-MS2)

Source: 17L0594-02

Prepared: 12/08/17 Analyzed: 12/12/17

Aluminum	524	20	40	ug/L	520	ND	101	70-130			
Antimony	22.5	0.80	2.0	ug/L	20.0	ND	112	70-130			
Arsenic	26.6	0.80	2.0	ug/L	20.0	4.82	109	70-130			
Barium	73.5	0.80	2.0	ug/L	20.0	51.8	108	70-130			
Beryllium	21.1	0.080	0.40	ug/L	20.0	ND	106	70-130			
Boron	710	80	200	ug/L	100	574	136	70-130			QM-4X
Cadmium	20.3	0.12	0.40	ug/L	20.0	ND	101	70-130			
Chromium	21.3	0.32	2.0	ug/L	20.0	ND	107	70-130			
Cobalt	21.5	0.12	0.40	ug/L	20.0	0.161	107	70-130			
Copper	23.7	1.6	2.0	ug/L	20.0	4.62	95.5	70-130			
Iron	1790	40	200	ug/L	520	1160	119	70-130			
Lead	16.6	0.24	1.0	ug/L	20.0	ND	82.8	70-130			
Manganese	277	3.6	20	ug/L	20.0	247	155	70-130			QM-01

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 • Phone: (916) 686-5190 • Fax: (916) 686-5192

Sample Traps, LLC
262 Rickenbacker Circle
Livermore CA, 94551

Project Manager: Quality Control Manager
Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AL73195 - EPA 200.8

Matrix Spike (AL73195-MS2)

Source: 17L0594-02

Prepared: 12/08/17 Analyzed: 12/12/17

Molybdenum	32.4	0.28	1.0	ug/L	20.0	9.93	113	70-130			
Nickel	25.2	1.2	2.0	ug/L	20.0	4.40	104	70-130			
Selenium	21.2	0.80	8.0	ug/L	20.0	1.10	101	70-130			
Silver	19.1	0.20	0.40	ug/L	20.0	ND	95.3	70-130			
Thallium	17.3	0.20	0.40	ug/L	20.0	ND	86.5	70-130			
Vanadium	22.6	2.0	4.0	ug/L	20.0	ND	113	70-130			
Zinc	100	8.0	20	ug/L	100	ND	100	70-130			

Matrix Spike Dup (AL73195-MSD1)

Source: 17L0238-01

Prepared: 12/08/17 Analyzed: 12/11/17

Aluminum	547	5.0	10	ug/L	520	ND	105	70-130	0.114	20	
Antimony	21.6	0.20	0.50	ug/L	20.0	ND	108	70-130	0.319	20	
Arsenic	22.1	0.20	0.50	ug/L	20.0	ND	110	70-130	2.42	20	
Barium	21.7	0.20	0.50	ug/L	20.0	ND	108	70-130	0.526	20	
Beryllium	22.6	0.020	0.10	ug/L	20.0	ND	113	70-130	0.420	20	
Boron	119	20	50	ug/L	100	ND	119	70-130	0.343	20	
Cadmium	20.9	0.030	0.10	ug/L	20.0	ND	104	70-130	0.808	20	
Chromium	19.8	0.080	0.50	ug/L	20.0	0.185	97.9	70-130	0.589	20	
Cobalt	19.6	0.030	0.10	ug/L	20.0	0.0580	97.6	70-130	0.318	20	
Copper	20.6	0.40	0.50	ug/L	20.0	ND	103	70-130	2.31	20	
Iron	512	10	50	ug/L	520	ND	98.4	70-130	0.966	20	
Lead	21.6	0.060	0.25	ug/L	20.0	ND	108	70-130	0.161	20	
Manganese	19.2	0.90	5.0	ug/L	20.0	ND	95.9	70-130	0.123	20	
Molybdenum	20.8	0.070	0.25	ug/L	20.0	ND	104	70-130	0.552	20	
Nickel	19.3	0.30	0.50	ug/L	20.0	ND	96.4	70-130	0.251	20	
Selenium	21.5	0.20	2.0	ug/L	20.0	ND	108	70-130	4.42	20	
Silver	20.5	0.050	0.10	ug/L	20.0	ND	103	70-130	0.804	20	
Thallium	21.4	0.050	0.10	ug/L	20.0	ND	107	70-130	0.492	20	
Vanadium	19.6	0.50	1.0	ug/L	20.0	ND	98.2	70-130	0.307	20	
Zinc	104	2.0	5.0	ug/L	100	ND	104	70-130	1.11	20	

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Sample Traps, LLC
262 Rickenbacker Circle
Livermore CA, 94551

Project Manager: Quality Control Manager
Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AL73051 - General Preparation

Blank (AL73051-BLK1)

Prepared & Analyzed: 12/06/17

Fluoride	ND	0.070	0.10	mg/L							U
Nitrite as NO2	ND	0.20	1.0	mg/L							U
Nitrate as NO3	ND	0.20	1.0	mg/L							U
Sulfate as SO4	ND	0.20	0.50	mg/L							U

LCS (AL73051-BS1)

Prepared & Analyzed: 12/06/17

Nitrite as NO2	18.4	0.20	1.0	mg/L	18.2	ND	101	90-110			
Sulfate as SO4	22.4	0.20	0.50	mg/L	22.2	ND	101	90-110			
Nitrate as NO3	25	0.20	1.0	mg/L	24.7	ND	102	90-110			
Fluoride	5.63	0.070	0.10	mg/L	5.56	ND	101	90-110			

Duplicate (AL73051-DUP1)

Source: 17L0239-01

Prepared & Analyzed: 12/06/17

Nitrate as NO3	ND	0.20	1.0	mg/L		ND			20		U
Fluoride	ND	0.070	0.10	mg/L		ND			20		U
Nitrite as NO2	ND	0.20	1.0	mg/L		ND			20		U
Sulfate as SO4	ND	0.20	0.50	mg/L		ND			20		U

Matrix Spike (AL73051-MS1)

Source: 17L0239-01

Prepared & Analyzed: 12/06/17

Nitrite as NO2	19.1	0.20	1.0	mg/L	18.2	ND	105	80-120			
Nitrate as NO3	26	0.20	1.0	mg/L	24.7	ND	105	80-120			
Sulfate as SO4	22.9	0.20	0.50	mg/L	22.2	ND	103	80-120			
Fluoride	5.75	0.070	0.10	mg/L	5.56	ND	104	80-120			

Matrix Spike (AL73051-MS2)

Source: 17L0209-02

Prepared & Analyzed: 12/06/17

Sulfate as SO4	39.0	1.0	2.5	mg/L	22.2	17.9	95.0	80-120			
Nitrite as NO2	16.9	1.0	5.0	mg/L	18.2	ND	93.0	80-120			
Fluoride	5.46	0.35	0.50	mg/L	5.56	ND	98.2	80-120			
Nitrate as NO3	24	1.0	5.0	mg/L	24.7	ND	95.9	80-120			



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Sample Traps, LLC
262 Rickenbacker Circle
Livermore CA, 94551

Project Manager: Quality Control Manager
Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AL73051 - General Preparation

Matrix Spike Dup (AL73051-MSD1)

Source: 17L0239-01

Prepared & Analyzed: 12/06/17

Nitrate as NO3	26	0.20	1.0	mg/L	24.7	ND	105	80-120	0.253	20	
Nitrite as NO2	18.9	0.20	1.0	mg/L	18.2	ND	104	80-120	0.807	20	
Sulfate as SO4	22.8	0.20	0.50	mg/L	22.2	ND	103	80-120	0.117	20	
Fluoride	5.75	0.070	0.10	mg/L	5.56	ND	104	80-120	0.0193	20	



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Sample Traps, LLC
262 Rickenbacker Circle
Livermore CA, 94551

Project Manager: Quality Control Manager
Project: QC- 64oz. WM HDPE
Project Number: Lot Number Z7334CUCS

Reported:
12/14/17 09:09

Notes and Definitions

- J Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
- P-02 Sample acidified to pH <2 and allowed to sit 24 hours before further processing.
- QM-01 The spike recovery for this QC sample is outside of established control limits possibly due to a sample matrix interference.
- QM-4X The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
- T-03 Client did not specify sampling time.
- U Analyte included in analysis, but not detected at or above MDL.
- ND Analyte NOT DETECTED at or above the reporting limit
- dry Sample results reported on a dry weight basis
- MDL Method detection limit
- Rec Recovery
- RPD Relative Percent Difference

