



Date of Report: 07/27/2023

Bryan J. Rosales

Shafter-Wasco Irrigation

P.O. Box 1168
Wasco, CA 93280

Client Project: [none]
BCL Project: Irrigation Water
BCL Work Order: 2312186
Invoice ID: B479975

Enclosed are the results of analyses for samples received by the laboratory on 6/22/2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Kaylee Mayall
Client Services Rep

Stuart Buttram
Operations Manager

Kern County Environmental Health Division 2700 M Street, Ste 300 Bakersfield, CA 93312
Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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.
All results listed in this report are for the exclusive use of the submitting party. Pace Analytical assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Table of Contents

Sample Information

Chain of Custody and Cooler Receipt form.....	3
Laboratory / Client Sample Cross Reference.....	5

Sample Results

2312186-01 - 5.8-7 North

Water Analysis (General Chemistry).....	6
Metals Analysis.....	8

2312186-02 - 1.1-10 South

Water Analysis (General Chemistry).....	9
Metals Analysis.....	11

Quality Control Reports

Water Analysis (General Chemistry)

Method Blank Analysis.....	12
Laboratory Control Sample.....	13
Precision and Accuracy.....	14

Metals Analysis

Method Blank Analysis.....	16
Laboratory Control Sample.....	17
Precision and Accuracy.....	18

Notes

Notes and Definitions.....	19
----------------------------	----

PACE ANALYTICAL		COOLER RECEIPT FORM		Page 1 of 1							
Submission #: <u>23-12186</u>											
SHIPPING INFORMATION Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> GSO / GLS <input type="checkbox"/> Hand Delivery <input checked="" type="checkbox"/> Pace Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			SHIPPING CONTAINER Ice Chest <input type="checkbox"/> None <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> W / S						
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments: <u>Samples taken close to drop</u>											
Custody Seals: Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: <u>off time.</u>											
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>											
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.97</u> Container: <u>NA</u> Thermometer ID: <u>337</u>		Date/Time: <u>6-22-23</u>							
		Temperature: (A) <u>19.7</u> °C / (C) <u>19.5</u> °C		Analyst Init: <u>SMH 1028</u>							
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	8	9	10
QT PE UNPRES		A	A								
4oz / Box / 16oz PE UNPRES											
2oz Cr ⁴											
QT INORGANIC CHEMICAL METALS											
INORGANIC CHEMICAL METALS 4oz / Box / 16oz											
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz NITRATE/NITRITE											
PT TOTAL ORGANIC CARBON											
PT CHEMICAL OXYGEN DEMAND											
PVA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK											
40ml VOA VIAL											
QT EPA 1664D											
PT ODOB											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL - 504											
QT EPA 518.01/0151A											
QT EPA 515.1/0151A											
QT EPA 525.2											
QT EPA 525.2 TRAVEL BLANK											
40ml EPA 547											
40ml EPA 531.1											
8oz EPA 548.1											
QT EPA 562.2											
QT EPA 8015M											
QT EPA 817C											
Box / 16oz / 32oz AMBER											
Box / 16oz / 32oz JAR											
SOIL SLEEVE											
PCR VIAL											
PLASTIC BAG											
TEDLAR BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
SUMMA CANISTER											

Comments:
 Sample Numbering Completed By: 102 Date/Time: 6/22/23 1332
 A = Actual / C = Corrected



Shafter-Wasco Irrigation
P.O. Box 1168
Wasco, CA 93280

Reported: 07/27/2023 9:36
Project: Irrigation Water
Project Number: [none]
Project Manager: Bryan J. Rosales

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2312186-01	COC Number:	---	Receive Date:	06/22/2023 10:28
	Project Number:	---	Sampling Date:	06/22/2023 09:55
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	5.8-7 North	Lab Matrix:	Water
	Sampled By:	Bryan J. Rosales	Sample Type:	Irrigation
2312186-02	COC Number:	---	Receive Date:	06/22/2023 10:28
	Project Number:	---	Sampling Date:	06/22/2023 10:15
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	1.1-10 South	Lab Matrix:	Water
	Sampled By:	Bryan J. Rosales	Sample Type:	Irrigation

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.
All results listed in this report are for the exclusive use of the submitting party. Pace Analytical assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Shafter-Wasco Irrigation
 P.O. Box 1168
 Wasco, CA 93280

Reported: 07/27/2023 9:36
 Project: Irrigation Water
 Project Number: [none]
 Project Manager: Bryan J. Rosales

Water Analysis (General Chemistry)

BCL Sample ID:	2312186-01	Client Sample Name:	5.8-7 North, 6/22/2023 9:55:00AM, Bryan J. Rosales					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Dissolved Calcium	1.0	mg/L	0.10	0.016	EPA-6010B	ND		1
Dissolved Magnesium	0.14	mg/L	0.050	0.022	EPA-6010B	ND		1
Dissolved Sodium	0.30	mg/L	1.0	0.051	EPA-6010B	ND	J	1
Dissolved Potassium	ND	mg/L	1.0	0.10	EPA-6010B	ND		1
Bicarbonate	18	mg/L	5.0	5.0	EPA-310.1	ND		2
Carbonate	ND	mg/L	2.5	2.5	EPA-310.1	ND		2
Hydroxide	ND	mg/L	1.4	1.4	EPA-310.1	ND		2
Chloride	0.63	mg/L	0.50	0.13	EPA-300.0	ND		3
Nitrate as N	0.039	mg/L	0.10	0.024	EPA-300.0	ND	J	3
Nitrate as NO3	0.17	mg/L	0.44	0.11	Calc	ND	J	4
Sulfate	1.0	mg/L	1.0	0.14	EPA-300.0	0.24		3
Dissolved Total Cations	ND	meq/L	0.10	0.10	Calc	ND		5
Total Anions	0.34	meq/L	0.10	0.10	Calc	ND		4
Adjusted Sodium Adsorption Ratio (SAR-adj)	ND	NA	0.010	0.010	Calc	ND		4
Extractable Sodium Percentage (ESP)	ND	NA	0.010	0.010	Calc	ND		4
Gypsum Requirement	1.0	# gyp/hr/10 0 gal/min	0.010	0.010	Calc	ND		4
Dissolved Hardness as CaCO3	3.1	mg/L	0.50	0.10	Calc	ND		5
pHc	10	NA	0.010	0.010	Calc	ND		4
Sodium Adsorption Ratio (SAR)	ND	NA	0.10	0.10	Calc	ND		4
TDS (by summation)	12	mg/L	10	10	Calc	ND		4
pH	7.11	pH Units	0.05	0.05	EPA-150.1		S05	6
Electrical Conductivity @ 25 C	28.9	umhos/c m	1.00	1.00	EPA-120.1			7

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.
 All results listed in this report are for the exclusive use of the submitting party. Pace Analytical assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Shafter-Wasco Irrigation
 P.O. Box 1168
 Wasco, CA 93280

Reported: 07/27/2023 9:36
Project: Irrigation Water
Project Number: [none]
Project Manager: Bryan J. Rosales

Water Analysis (General Chemistry)

BCL Sample ID: 2312186-01	Client Sample Name: 5.8-7 North, 6/22/2023 9:55:00AM, Bryan J. Rosales
----------------------------------	---

DCN	Method	Prep Date		Run Date/Time		Analyst	Instrument	Dilution	QC	
									Batch ID	
1	EPA-6010B	07/12/23	08:00	07/13/23	17:40	ARD	PE-OP3	1	B169583	6010B/No Digestion
2	EPA-310.1	06/28/23	08:00	06/28/23	09:59	RML	MET-1	1	B167070	No Prep
3	EPA-300.0	06/23/23	17:00	06/23/23	17:56	EEC	IC12	1	B168697	No Prep
4	Calc	06/22/23	14:29	07/24/23	10:51	SPB	Calc	1	B168680	Calc
5	Calc	06/23/23	06:15	07/24/23	10:51	SPB	Calc	1	B168680	Calc
6	EPA-150.1	06/28/23	08:00	06/28/23	09:59	RML	MET-1	1	B167070	No Prep
7	EPA-120.1	06/28/23	08:00	06/28/23	09:59	RML	MET-1	1	B167070	No Prep

DCN = Data Continuation Number

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.
 All results listed in this report are for the exclusive use of the submitting party. Pace Analytical assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Shafter-Wasco Irrigation
 P.O. Box 1168
 Wasco, CA 93280

Reported: 07/27/2023 9:36
Project: Irrigation Water
Project Number: [none]
Project Manager: Bryan J. Rosales

Metals Analysis

BCL Sample ID: 2312186-01	Client Sample Name: 5.8-7 North, 6/22/2023 9:55:00AM, Bryan J. Rosales
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Dissolved Boron	0.021	mg/L	0.10	0.010	EPA-6010B	0.019	J	1

DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-6010B	07/12/23 08:00	07/13/23	17:40	ARD	PE-OP3	1	B169583	EPA 3005A

DCN = Data Continuation Number

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.
 All results listed in this report are for the exclusive use of the submitting party. Pace Analytical assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Shafter-Wasco Irrigation
 P.O. Box 1168
 Wasco, CA 93280

Reported: 07/27/2023 9:36
 Project: Irrigation Water
 Project Number: [none]
 Project Manager: Bryan J. Rosales

Water Analysis (General Chemistry)

BCL Sample ID:	2312186-02	Client Sample Name:	1.1-10 South, 6/22/2023 10:15:00AM, Bryan J. Rosales					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Dissolved Calcium	2.7	mg/L	0.10	0.016	EPA-6010B	ND		1
Dissolved Magnesium	0.43	mg/L	0.050	0.022	EPA-6010B	ND		1
Dissolved Sodium	2.0	mg/L	1.0	0.051	EPA-6010B	ND		1
Dissolved Potassium	0.82	mg/L	1.0	0.10	EPA-6010B	ND	J	1
Bicarbonate	15	mg/L	5.0	5.0	EPA-310.1	ND		2
Carbonate	ND	mg/L	2.5	2.5	EPA-310.1	ND		2
Hydroxide	ND	mg/L	1.4	1.4	EPA-310.1	ND		2
Chloride	0.62	mg/L	0.50	0.13	EPA-300.0	ND		3
Nitrate as N	0.039	mg/L	0.10	0.024	EPA-300.0	ND	J	3
Nitrate as NO3	0.17	mg/L	0.44	0.11	Calc	ND	J	4
Sulfate	0.94	mg/L	1.0	0.14	EPA-300.0	0.24	J	3
Dissolved Total Cations	0.28	meq/L	0.10	0.10	Calc	ND		5
Total Anions	0.28	meq/L	0.10	0.10	Calc	ND		4
Adjusted Sodium Adsorption Ratio (SAR-adj)	ND	NA	0.010	0.010	Calc	ND		4
Extractable Sodium Percentage (ESP)	ND	NA	0.010	0.010	Calc	ND		4
Gypsum Requirement	0.31	# gyp/hr/10 0 gal/min	0.010	0.010	Calc	ND		4
Dissolved Hardness as CaCO3	8.6	mg/L	0.50	0.10	Calc	ND		5
pHc	9.8	NA	0.010	0.010	Calc	ND		4
Sodium Adsorption Ratio (SAR)	0.30	NA	0.10	0.10	Calc	ND		4
TDS (by summation)	15	mg/L	10	10	Calc	ND		4
pH	7.14	pH Units	0.05	0.05	EPA-150.1		S05	6
Electrical Conductivity @ 25 C	27.3	umhos/c m	1.00	1.00	EPA-120.1			7

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.
 All results listed in this report are for the exclusive use of the submitting party. Pace Analytical assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Shafter-Wasco Irrigation
 P.O. Box 1168
 Wasco, CA 93280

Reported: 07/27/2023 9:36
Project: Irrigation Water
Project Number: [none]
Project Manager: Bryan J. Rosales

Water Analysis (General Chemistry)

BCL Sample ID: 2312186-02	Client Sample Name: 1.1-10 South, 6/22/2023 10:15:00AM, Bryan J. Rosales
----------------------------------	---

DCN	Method	Prep Date		Run		Analyst	Instrument	Dilution	QC	
				Date/Time	Date/Time				Batch ID	
1	EPA-6010B	07/12/23	08:00	07/24/23	22:13	ARD	PE-OP4	1	B169583	6010B/No Digestion
2	EPA-310.1	06/28/23	08:00	06/28/23	10:05	RML	MET-1	1	B167070	No Prep
3	EPA-300.0	06/23/23	17:00	06/23/23	18:10	EEC	IC12	1	B168697	No Prep
4	Calc	06/22/23	14:29	07/26/23	11:38	SPB	Calc	1	B168680	Calc
5	Calc	06/23/23	06:15	07/26/23	11:38	SPB	Calc	1	B168680	Calc
6	EPA-150.1	06/28/23	08:00	06/28/23	10:05	RML	MET-1	1	B167070	No Prep
7	EPA-120.1	06/28/23	08:00	06/28/23	10:05	RML	MET-1	1	B167070	No Prep

DCN = Data Continuation Number

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.
 All results listed in this report are for the exclusive use of the submitting party. Pace Analytical assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Shafter-Wasco Irrigation
 P.O. Box 1168
 Wasco, CA 93280

Reported: 07/27/2023 9:36
Project: Irrigation Water
Project Number: [none]
Project Manager: Bryan J. Rosales

Metals Analysis

BCL Sample ID: 2312186-02	Client Sample Name: 1.1-10 South, 6/22/2023 10:15:00AM, Bryan J. Rosales
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Dissolved Boron	1.2	mg/L	0.10	0.010	EPA-6010B	0.019		1

DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-6010B	07/12/23 08:00	07/13/23	17:42	ARD	PE-OP3	1	B169583	EPA 3005A

DCN = Data Continuation Number

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.
 All results listed in this report are for the exclusive use of the submitting party. Pace Analytical assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Shafter-Wasco Irrigation
P.O. Box 1168
Wasco, CA 93280

Reported: 07/27/2023 9:36
Project: Irrigation Water
Project Number: [none]
Project Manager: Bryan J. Rosales

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B167070							
Bicarbonate	B167070-BLK1	ND	mg/L	5.0	5.0		1
Carbonate	B167070-BLK1	ND	mg/L	2.5	2.5		1
Hydroxide	B167070-BLK1	ND	mg/L	1.4	1.4		1

QC Batch ID: B168680							
Nitrate as NO3	B168680-BLK1	ND	mg/L	0.44	0.11		2
Dissolved Total Cations	B168680-BLK1	ND	meq/L	0.10	0.10		3
Total Anions	B168680-BLK1	ND	meq/L	0.10	0.10		3
Adjusted Sodium Adsorption Ratio (SAR-adj)	B168680-BLK1	ND	NA	0.010	0.010		3
Extractable Sodium Percentage (ESP)	B168680-BLK1	ND	NA	0.010	0.010		3
Gypsum Requirement	B168680-BLK1	ND	‡ gyp/hr/100 gal/mir	0.010	0.010		3
Dissolved Hardness as CaCO3	B168680-BLK1	ND	mg/L	0.50	0.10		3
pHc	B168680-BLK1	ND	NA	0.010	0.010		3
Sodium Adsorption Ratio (SAR)	B168680-BLK1	ND	NA	0.10	0.10		3
TDS (by summation)	B168680-BLK1	ND	mg/L	10	10		3

QC Batch ID: B168697							
Chloride	B168697-BLK1	ND	mg/L	0.50	0.13		4
Nitrate as N	B168697-BLK1	ND	mg/L	0.10	0.024		4
Sulfate	B168697-BLK1	0.24060	mg/L	1.0	0.14	J	4

QC Batch ID: B169583							
Dissolved Calcium	B169583-BLK1	ND	mg/L	0.10	0.016		5
Dissolved Magnesium	B169583-BLK1	ND	mg/L	0.050	0.022		5
Dissolved Sodium	B169583-BLK1	ND	mg/L	1.0	0.051		5
Dissolved Potassium	B169583-BLK1	ND	mg/L	1.0	0.10		5

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B167070-BLK1	PB	EPA-310.1	06/28/23	06/28/23 09:13	RML	MET-1	1
2	B168680-BLK1	PB	Calc	06/22/23	06/26/23 17:03	AMM	Calc	1
3	B168680-BLK1	PB	Calc	06/22/23	07/24/23 10:51	SPB	Calc	1
4	B168697-BLK1	PB	EPA-300.0	06/22/23	06/24/23 08:39	RC1	IC12	1
5	B169583-BLK1	PB	EPA-6010B	07/12/23	07/13/23 16:10	ARD	PE-OP3	1

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.
All results listed in this report are for the exclusive use of the submitting party. Pace Analytical assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Shafter-Wasco Irrigation
P.O. Box 1168
Wasco, CA 93280

Reported: 07/27/2023 9:36
Project: Irrigation Water
Project Number: [none]
Project Manager: Bryan J. Rosales

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B167070											
pH	B167070-BS2	LCS	7.0800	7.0000	pH Units	101		95 - 105			1
Electrical Conductivity @ 25 C	B167070-BS1	LCS	305.40	303.00	umhos/cm	101		90 - 110			2
QC Batch ID: B168697											
Chloride	B168697-BS1	LCS	52.716	50.000	mg/L	105		90 - 110			3
	B168697-BSD1	LCSD	52.736	50.000	mg/L	105	0.0	90 - 110	10		4
Nitrate as N	B168697-BS1	LCS	5.2237	5.0000	mg/L	104		90 - 110			3
	B168697-BSD1	LCSD	5.2251	5.0000	mg/L	105	0.0	90 - 110	10		4
Sulfate	B168697-BS1	LCS	103.85	100.00	mg/L	104		90 - 110			3
	B168697-BSD1	LCSD	103.86	100.00	mg/L	104	0.0	90 - 110	10		4
QC Batch ID: B169583											
Dissolved Calcium	B169583-BS1	LCS	9.8696	10.000	mg/L	98.7		80 - 120			5
	B169583-BSD1	LCSD	9.8274	10.000	mg/L	98.3	0.4	80 - 120	20		6
Dissolved Magnesium	B169583-BS1	LCS	9.8621	10.000	mg/L	98.6		80 - 120			5
	B169583-BSD1	LCSD	9.9492	10.000	mg/L	99.5	0.9	80 - 120	20		6
Dissolved Sodium	B169583-BS1	LCS	9.7409	10.000	mg/L	97.4		80 - 120			5
	B169583-BSD1	LCSD	9.6234	10.000	mg/L	96.2	1.2	80 - 120	20		6
Dissolved Potassium	B169583-BS1	LCS	9.5866	10.000	mg/L	95.9		80 - 120			5
	B169583-BSD1	LCSD	9.4902	10.000	mg/L	94.9	1.0	80 - 120	20		6

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B167070-BS2	LCS	EPA-150.1	06/28/23	06/28/23	08:56	RML	MET-1	1
2	B167070-BS1	LCS	EPA-120.1	06/28/23	06/28/23	08:39	RML	MET-1	1
3	B168697-BS1	LCS	EPA-300.0	06/22/23	06/23/23	21:31	RC1	IC12	1
4	B168697-BSD1	LCSD	EPA-300.0	06/22/23	06/23/23	21:44	EEC	IC12	1
5	B169583-BS1	LCS	EPA-6010B	07/12/23	07/13/23	16:11	ARD	PE-OP3	1
6	B169583-BSD1	LCSD	EPA-6010B	07/12/23	07/13/23	16:13	ARD	PE-OP3	1

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.
All results listed in this report are for the exclusive use of the submitting party. Pace Analytical assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Shafter-Wasco Irrigation
 P.O. Box 1168
 Wasco, CA 93280

Reported: 07/27/2023 9:36
 Project: Irrigation Water
 Project Number: [none]
 Project Manager: Bryan J. Rosales

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals	R#
									RPD	Percent Recovery		
QC Batch ID: B167070		Used client sample: N										
Bicarbonate	DUP	2312196-01	516.78	523.08		mg/L	1.2		10			1
Carbonate	DUP	2312196-01	ND	ND		mg/L			10			1
Hydroxide	DUP	2312196-01	ND	ND		mg/L			10			1
pH	DUP	2312196-01	6.7400	6.7700		pH Units	0.4		20			2
Electrical Conductivity @ 25 C	DUP	2312196-01	2110.9	2111.7		umhos/cm	0.0		10			3
QC Batch ID: B168697		Used client sample: N										
Chloride	DUP	2312206-04	32.637	32.685		mg/L	0.1		10			4
	MS	2312206-04	32.637	88.013	50.505	mg/L		110		80 - 120		5
	MSD	2312206-04	32.637	88.008	50.505	mg/L	0.0	110	10	80 - 120		6
Nitrate as N	DUP	2312206-04	0.95930	0.95770		mg/L	0.2		10			4
	MS	2312206-04	0.95930	6.2289	5.0505	mg/L		104		80 - 120		5
	MSD	2312206-04	0.95930	6.2263	5.0505	mg/L	0.0	104	10	80 - 120		6
Sulfate	DUP	2312206-04	57.193	57.348		mg/L	0.3		10			4
	MS	2312206-04	57.193	169.41	101.01	mg/L		111		80 - 120		5
	MSD	2312206-04	57.193	169.44	101.01	mg/L	0.0	111	10	80 - 120		6
QC Batch ID: B169583		Used client sample: N										
Dissolved Calcium	DUP	2312196-01	261.46	260.59		mg/L	0.3		20			7
	MS	2312196-01	261.46	272.67	10.204	mg/L		110		75 - 125		8
	MSD	2312196-01	261.46	266.06	10.204	mg/L	2.5	45.1	20	75 - 125	A03	9
Dissolved Magnesium	DUP	2312196-01	36.977	35.802		mg/L	3.2		20			7
	MS	2312196-01	36.977	47.739	10.204	mg/L		105		75 - 125		8
	MSD	2312196-01	36.977	45.920	10.204	mg/L	3.9	87.6	20	75 - 125		9
Dissolved Sodium	DUP	2312196-01	116.48	113.77		mg/L	2.4		20			7
	MS	2312196-01	116.48	133.50	10.204	mg/L		167		75 - 125	A03	8
	MSD	2312196-01	116.48	120.51	10.204	mg/L	10.2	39.5	20	75 - 125	A03	9
Dissolved Potassium	DUP	2312196-01	37.807	37.463		mg/L	0.9		20			7
	MS	2312196-01	37.807	48.899	10.204	mg/L		109		75 - 125		8
	MSD	2312196-01	37.807	48.387	10.204	mg/L	1.1	104	20	75 - 125		9

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.
 All results listed in this report are for the exclusive use of the submitting party. Pace Analytical assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Shafter-Wasco Irrigation
P.O. Box 1168
Wasco, CA 93280

Reported: 07/27/2023 9:36
Project: Irrigation Water
Project Number: [none]
Project Manager: Bryan J. Rosales

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B167070-DUP1	DUP	EPA-310.1	06/28/23	06/28/23 09:25	RML	MET-1	2
2	B167070-DUP1	DUP	EPA-150.1	06/28/23	06/28/23 09:25	RML	MET-1	1
3	B167070-DUP1	DUP	EPA-120.1	06/28/23	06/28/23 09:25	RML	MET-1	1
4	B168697-DUP1	DUP	EPA-300.0	06/22/23	06/23/23 21:58	RC1	IC12	1
5	B168697-MS1	MS	EPA-300.0	06/22/23	06/23/23 22:11	RC1	IC12	1.010
6	B168697-MSD1	MSD	EPA-300.0	06/22/23	06/23/23 22:25	RC1	IC12	1.010
7	B169583-DUP1	DUP	EPA-6010B	07/12/23	07/13/23 16:16	ARD	PE-OP3	1
8	B169583-MS1	MS	EPA-6010B	07/12/23	07/13/23 16:19	ARD	PE-OP3	1.020
9	B169583-MSD1	MSD	EPA-6010B	07/12/23	07/13/23 16:21	ARD	PE-OP3	1.020

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.
All results listed in this report are for the exclusive use of the submitting party. Pace Analytical assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Shafter-Wasco Irrigation
 P.O. Box 1168
 Wasco, CA 93280

Reported: 07/27/2023 9:36
 Project: Irrigation Water
 Project Number: [none]
 Project Manager: Bryan J. Rosales

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
-------------	--------------	-----------	-------	-----	-----	-----------	-------

QC Batch ID: B169583

Dissolved Boron	B169583-BLK1	0.018930	mg/L	0.10	0.010	J	1
-----------------	--------------	----------	------	------	-------	---	---

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B169583-BLK1	PB	EPA-6010B	07/12/23	07/13/23 16:10	ARD	PE-OP3	1

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.
 All results listed in this report are for the exclusive use of the submitting party. Pace Analytical assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Shafter-Wasco Irrigation
 P.O. Box 1168
 Wasco, CA 93280

Reported: 07/27/2023 9:36
 Project: Irrigation Water
 Project Number: [none]
 Project Manager: Bryan J. Rosales

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B169583											
Dissolved Boron	B169583-BS1	LCS	0.94685	1.0000	mg/L	94.7		80 - 120			1
	B169583-BSD1	LCSD	0.97725	1.0000	mg/L	97.7	3.2	80 - 120	20		2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B169583-BS1	LCS	EPA-6010B	07/12/23	07/13/23	16:11	ARD	PE-OP3	1
2	B169583-BSD1	LCSD	EPA-6010B	07/12/23	07/13/23	16:13	ARD	PE-OP3	1

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.
 All results listed in this report are for the exclusive use of the submitting party. Pace Analytical assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Shafter-Wasco Irrigation
P.O. Box 1168
Wasco, CA 93280

Reported: 07/27/2023 9:36
Project: Irrigation Water
Project Number: [none]
Project Manager: Bryan J. Rosales

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab Quals	R#
									RPD	Percent Recovery		
QC Batch ID: B169583		Used client sample: N										
Dissolved Boron	DUP	2312196-01	0.43610	0.43103		mg/L	1.2		20			1
	MS	2312196-01	0.43610	1.5106	1.0204	mg/L		105		75 - 125		2
	MSD	2312196-01	0.43610	1.4889	1.0204	mg/L	1.4	103	20	75 - 125		3

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B169583-DUP1	DUP	EPA-6010B	07/12/23	07/13/23 16:16	ARD	PE-OP3	1
2	B169583-MS1	MS	EPA-6010B	07/12/23	07/13/23 16:19	ARD	PE-OP3	1.020
3	B169583-MSD1	MSD	EPA-6010B	07/12/23	07/13/23 16:21	ARD	PE-OP3	1.020

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.
All results listed in this report are for the exclusive use of the submitting party. Pace Analytical assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Shafter-Wasco Irrigation
P.O. Box 1168
Wasco, CA 93280

Reported: 07/27/2023 9:36
Project: Irrigation Water
Project Number: [none]
Project Manager: Bryan J. Rosales

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A03 The sample concentration was more than 4 times the spike level.
- S05 The sample holding time was exceeded.