



Date of Report: 03/17/2023

Bryan J. Rosales

Shafter-Wasco Irrigation

P.O. Box 1168
Wasco, CA 93280

Client Project: [none]
BCL Project: Irrigation Water
BCL Work Order: 2303814
Invoice ID: B471589

Enclosed are the results of analyses for samples received by the laboratory on 2/22/2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Brianna Schutte
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.
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2303814

4100 Atlas Ct. - Bakersfield, CA 93308 - 661.327.4911 - Fax: 661.327.1918 - www.pacelabs.com



Report To: **Client:** Shafter-Wasco Irrigation District
Attn: Bryan J. Rosales
Street Address: 16294 Highway 43
City, State, Zip: Wasco, CA 93280
Phone: (661) 758-5153 Fax:
Email: bjerosales@swid.org
Work Order #: 23-03814

Analysis Requested

| Sample # | Description | Date Sampled | Time Sampled | Irrigation Water | Sludge | Drinking Water | Ground Water | Waste Water | Other |
|----------|------------------|--------------|--------------|------------------|--------|----------------|--------------|-------------|-------|
| -1 | 5.8-2.0-2(North) | 02/22/23 | 145 | X | | | | | X |
| -2 | 1.1-10(South) | 02/22/23 | 200 | X | | | | | X |

Sample Matrix
 Irrigation Water X
 Other X

Result Request **Surcharge
 STD 5 Day** 4 Day**
 3 Day** 2 Day** 1 Day**
 Flush requests must be approved

Notes

SHORT HOLDING TIME
 C++ NO. (NS) OP SS
 DO Cl₂ BOD MBAS COT

CHK BY DISTRIBUTION
 [Signature]

Global ID Yes No

EDF Required Geotracker Yes No

1. Relinquished By Bryan J. Rosales **Date** 02/22/23 **Time** 2:25
2. Relinquished By **Date** **Time**
3. Relinquished By **Date** **Time**

System # (Needed for CUF)
 GISKey Well Star

Billing Same as above
Client: Shafter-Wasco Irrigation District
Address: P.O. Box 1168
City: Wasco **State:** CA **Zip:** 93280
Attn:
P.O. #:

Pace Analytical Bakersfield does not accept samples containing radioactive material above background levels. Samples containing radioactive material must be disclosed prior to receipt. Any samples suspected of containing radioactive material above background levels will not be accepted and will be returned to client.

REV 12/02/21

| | | | | | |
|---|--|---|--|---|---|
| PACE ANALYTICAL | | COOLER RECEIPT FORM | | Page <u> </u> Of <u> </u> | |
| Submission #: <u>23-03814</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) <u> </u> | | | SHIPPING CONTAINER Ice Chest <input type="checkbox"/> None <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) <u> </u> | | 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> </u> | | | | | |
| Custody Seals <input checked="" type="checkbox"/> Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> | | None <input checked="" type="checkbox"/> Comments: <u>Client took sample a little before showing up</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 YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | | Emissivity: <u>0.97</u> Container: <u>PE</u> Thermometer ID: <u>337</u> Temperature: (A) <u>15.0</u> °C / (C) <u>14.8</u> °C | | Date/Time <u>2-22-23</u> Analyst Init <u>SCR MZT</u> | |

| SAMPLE CONTAINERS | SAMPLE NUMBERS | | | | | | | | | |
|--|----------------|---|---|---|---|---|---|---|---|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| QT PE UNPRES | A | A | | | | | | | | |
| 4oz / 8oz / 16oz PE UNPRES | | | | | | | | | | |
| 2oz Cr ⁶ | | | | | | | | | | |
| QT INORGANIC CHEMICAL METALS | | | | | | | | | | |
| INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz | | | | | | | | | | |
| PT CYANIDE | | | | | | | | | | |
| PT NITROGEN FORMS | | | | | | | | | | |
| PT TOTAL SULFIDE | | | | | | | | | | |
| 2oz NITRATE / NITRITE | | | | | | | | | | |
| PT TOTAL ORGANIC CARBON | | | | | | | | | | |
| PT CHEMICAL OXYGEN DEMAND | | | | | | | | | | |
| PIA PHENOLICS | | | | | | | | | | |
| 40ml VOA VIAL TRAVEL BLANK | | | | | | | | | | |
| 40ml VOA VIAL | | | | | | | | | | |
| QT EPA 1664B | | | | | | | | | | |
| PT OBOR | | | | | | | | | | |
| RADIOLOGICAL | | | | | | | | | | |
| BACTERIOLOGICAL | | | | | | | | | | |
| 40 ml VOA VIAL- 504 | | | | | | | | | | |
| QT EPA 508/608.3/081A | | | | | | | | | | |
| QT EPA 515.1/0151A | | | | | | | | | | |
| QT EPA 525.2 | | | | | | | | | | |
| QT EPA 525.2 TRAVEL BLANK | | | | | | | | | | |
| 40ml EPA 547 | | | | | | | | | | |
| 40ml EPA 531.1 | | | | | | | | | | |
| 8oz EPA 545.1 | | | | | | | | | | |
| QT EPA 549.2 | | | | | | | | | | |
| QT EPA 8015M | | | | | | | | | | |
| QT EPA 8270C | | | | | | | | | | |
| 8oz / 16oz / 32oz AMBER | | | | | | | | | | |
| 8oz / 16oz / 32oz JAR | | | | | | | | | | |
| SOIL SLEEVE | | | | | | | | | | |
| PCB VIAL | | | | | | | | | | |
| PLASTIC BAG | | | | | | | | | | |
| TEDLAR BAG | | | | | | | | | | |
| FERROUS IRON | | | | | | | | | | |
| ENCORE | | | | | | | | | | |
| SMART KIT | | | | | | | | | | |
| SUMMA CANISTER | | | | | | | | | | |

Comments: _____ Date/Time: 2/22/23 1500 Rev 23 05/20/22
 Sample Numbering Completed By: THZ
 A = Actual / C = Corrected [S:\NPD\c\Wor\p\loc\LAB_DOC\CFORMS\8AMREC\rev 23]



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

Reported: 03/17/2023 7:00
 Project: Irrigation Water
 Project Number: [none]
 Project Manager: Bryan J. Rosales

Laboratory / Client Sample Cross Reference

| Laboratory | Client Sample Information | | | |
|------------|---------------------------|------------------|--|------------------|
| 2303814-01 | COC Number: | --- | Receive Date: | 02/22/2023 14:27 |
| | Project Number: | --- | Sampling Date: | 02/22/2023 13:45 |
| | Sampling Location: | --- | Sample Depth: | --- |
| | Sampling Point: | 5.8-2.0-2(North) | Lab Matrix: | Water |
| | Sampled By: | Bryan J. Rosales | Sample Type: | Irrigation |
| | | | Metal Analysis: 2-Lab Filtered and Acidified past 15 minute holding time | |
| | | | | |
| 2303814-02 | COC Number: | --- | Receive Date: | 02/22/2023 14:27 |
| | Project Number: | --- | Sampling Date: | 02/22/2023 14:00 |
| | Sampling Location: | --- | Sample Depth: | --- |
| | Sampling Point: | 1.1-10 (South) | Lab Matrix: | Water |
| | Sampled By: | Bryan J. Rosales | Sample Type: | Irrigation |
| | | | Metal Analysis: 2-Lab Filtered and Acidified past 15 minute holding time | |
| | | | | |

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

Reported: 03/17/2023 7:00
Project: Irrigation Water
Project Number: [none]
Project Manager: Bryan J. Rosales

Water Analysis (General Chemistry)

| | |
|---------------------------|---|
| BCL Sample ID: 2303814-01 | Client Sample Name: 5.8-2.0-2(North), 2/22/2023 1:45:00PM, Bryan J. Rosales |
|---------------------------|---|

| Constituent | Result | Units | PQL | MDL | Method | MB Bias | Lab Quals | DCN |
|--|--------|-----------------------------|-------|-------|-----------|---------|-----------|-----|
| Dissolved Calcium | 5.1 | mg/L | 0.10 | 0.016 | EPA-6010B | ND | | 1 |
| Dissolved Magnesium | 0.89 | mg/L | 0.050 | 0.022 | EPA-6010B | ND | | 1 |
| Dissolved Sodium | 4.4 | mg/L | 1.0 | 0.051 | EPA-6010B | ND | | 1 |
| Dissolved Potassium | 1.2 | mg/L | 1.0 | 0.10 | EPA-6010B | ND | | 1 |
| Bicarbonate | 30 | 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 | 2.4 | mg/L | 0.50 | 0.13 | EPA-300.0 | 0.18 | | 3 |
| Nitrate as N | 0.16 | mg/L | 0.10 | 0.024 | EPA-300.0 | ND | | 3 |
| Nitrate as NO3 | 0.71 | mg/L | 0.44 | 0.11 | Calc | ND | | 4 |
| Sulfate | 1.8 | mg/L | 1.0 | 0.14 | EPA-300.0 | 0.24 | | 3 |
| Dissolved Total Cations | 0.55 | meq/L | 0.10 | 0.10 | Calc | ND | | 4 |
| Total Anions | 0.61 | meq/L | 0.10 | 0.10 | Calc | ND | | 4 |
| Adjusted Sodium Adsorption Ratio (SAR-adj) | 0.090 | NA | 0.010 | 0.010 | Calc | ND | | 4 |
| Extractable Sodium Percentage (ESP) | ND | NA | 0.010 | 0.010 | Calc | ND | | 4 |
| Gypsum Requirement | 0.72 | # gyp/hr/10 0 gal/min | 0.010 | 0.010 | Calc | ND | | 4 |
| Dissolved Hardness as CaCO3 | 16 | mg/L | 0.50 | 0.10 | Calc | ND | | 4 |
| pHc | 9.2 | NA | 0.010 | 0.010 | Calc | ND | | 4 |
| Sodium Adsorption Ratio (SAR) | 0.48 | NA | 0.10 | 0.10 | Calc | ND | | 4 |
| TDS (by summation) | 31 | mg/L | 10 | 10 | Calc | ND | | 4 |
| pH | 7.37 | pH Units | 0.05 | 0.05 | EPA-150.1 | S05 | | 5 |
| Electrical Conductivity @ 25 C | 54.4 | umhos/cm | 1.00 | 1.00 | EPA-120.1 | | | 6 |

| DCN | Method | Prep Date | Run Date/Time | Analyst | Instrument | Dilution | QC Batch ID | Prep Method |
|-----|-----------|----------------|----------------|---------|------------|----------|-------------|--------------------|
| 1 | EPA-6010B | 02/23/23 20:03 | 03/02/23 13:33 | JCC | PE-OP3 | 1 | B160655 | 6010B/No Digestion |
| 2 | EPA-310.1 | 02/28/23 12:30 | 02/28/23 15:53 | RML | MET-1 | 1 | B160296 | No Prep |
| 3 | EPA-300.0 | 02/22/23 20:00 | 02/23/23 10:06 | SAV | IC5 | 1 | B160594 | No Prep |
| 4 | Calc | 02/22/23 15:06 | 03/06/23 08:47 | AMM | Calc | 1 | B160523 | Calc |
| 5 | EPA-150.1 | 02/28/23 12:30 | 02/28/23 15:53 | RML | MET-1 | 1 | B160296 | No Prep |
| 6 | EPA-120.1 | 02/28/23 12:30 | 02/28/23 15:53 | RML | MET-1 | 1 | B160296 | No Prep |

DCN = Data Continuation Number

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

Reported: 03/17/2023 7:00
Project: Irrigation Water
Project Number: [none]
Project Manager: Bryan J. Rosales

Metals Analysis

| | |
|----------------------------------|--|
| BCL Sample ID: 2303814-01 | Client Sample Name: 5.8-2.0-2(North), 2/22/2023 1:45:00PM, Bryan J. Rosales |
|----------------------------------|--|

| Constituent | Result | Units | PQL | MDL | Method | MB Bias | Lab Quals | DCN |
|-----------------|--------|-------|------|-------|-----------|---------|-----------|-----|
| Dissolved Boron | 0.032 | mg/L | 0.10 | 0.010 | EPA-6010B | 0.013 | J | 1 |

| DCN | Method | Prep Date | Run Date/Time | Analyst | Instrument | Dilution | QC Batch ID | Prep Method |
|-----|-----------|----------------|----------------|---------|------------|----------|-------------|-------------|
| 1 | EPA-6010B | 02/23/23 20:03 | 03/02/23 13:33 | JCC | PE-OP3 | 1 | B160655 | EPA 3005A |

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

Reported: 03/17/2023 7:00
 Project: Irrigation Water
 Project Number: [none]
 Project Manager: Bryan J. Rosales

Water Analysis (General Chemistry)

| | |
|---------------------------|---|
| BCL Sample ID: 2303814-02 | Client Sample Name: 1.1-10 (South), 2/22/2023 2:00:00PM, Bryan J. Rosales |
|---------------------------|---|

| Constituent | Result | Units | PQL | MDL | Method | MB Bias | Lab Quals | DCN |
|--|--------|-----------------------------|-------|-------|-----------|---------|-----------|-----|
| Dissolved Calcium | 5.0 | mg/L | 0.10 | 0.016 | EPA-6010B | ND | | 1 |
| Dissolved Magnesium | 0.92 | mg/L | 0.050 | 0.022 | EPA-6010B | ND | | 1 |
| Dissolved Sodium | 4.4 | mg/L | 1.0 | 0.051 | EPA-6010B | ND | | 1 |
| Dissolved Potassium | 1.3 | mg/L | 1.0 | 0.10 | EPA-6010B | ND | | 1 |
| Bicarbonate | 30 | 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 | 2.4 | mg/L | 0.50 | 0.13 | EPA-300.0 | 0.18 | | 3 |
| Nitrate as N | 0.16 | mg/L | 0.10 | 0.024 | EPA-300.0 | ND | | 3 |
| Nitrate as NO3 | 0.71 | mg/L | 0.44 | 0.11 | Calc | ND | | 4 |
| Sulfate | 1.5 | mg/L | 1.0 | 0.14 | EPA-300.0 | 0.24 | | 3 |
| Dissolved Total Cations | 0.55 | meq/L | 0.10 | 0.10 | Calc | ND | | 4 |
| Total Anions | 0.60 | meq/L | 0.10 | 0.10 | Calc | ND | | 4 |
| Adjusted Sodium Adsorption Ratio (SAR-adj) | 0.090 | NA | 0.010 | 0.010 | Calc | ND | | 4 |
| Extractable Sodium Percentage (ESP) | ND | NA | 0.010 | 0.010 | Calc | ND | | 4 |
| Gypsum Requirement | 0.70 | # gyp/hr/10 0 gal/min | 0.010 | 0.010 | Calc | ND | | 4 |
| Dissolved Hardness as CaCO3 | 16 | mg/L | 0.50 | 0.10 | Calc | ND | | 4 |
| pHc | 9.2 | NA | 0.010 | 0.010 | Calc | ND | | 4 |
| Sodium Adsorption Ratio (SAR) | 0.48 | NA | 0.10 | 0.10 | Calc | ND | | 4 |
| TDS (by summation) | 31 | mg/L | 10 | 10 | Calc | ND | | 4 |
| pH | 7.41 | pH Units | 0.05 | 0.05 | EPA-150.1 | S05 | | 5 |
| Electrical Conductivity @ 25 C | 54.1 | umhos/cm | 1.00 | 1.00 | EPA-120.1 | | | 6 |

| DCN | Method | Prep Date | Run Date/Time | Analyst | Instrument | Dilution | QC Batch ID | Prep Method |
|-----|-----------|----------------|----------------|---------|------------|----------|-------------|--------------------|
| 1 | EPA-6010B | 02/23/23 20:03 | 03/02/23 13:38 | JCC | PE-OP3 | 1 | B160655 | 6010B/No Digestion |
| 2 | EPA-310.1 | 02/28/23 12:30 | 02/28/23 16:00 | RML | MET-1 | 1 | B160296 | No Prep |
| 3 | EPA-300.0 | 02/22/23 20:00 | 02/23/23 10:24 | SAV | IC5 | 1 | B160594 | No Prep |
| 4 | Calc | 02/22/23 15:06 | 03/06/23 08:47 | AMM | Calc | 1 | B160523 | Calc |
| 5 | EPA-150.1 | 02/28/23 12:30 | 02/28/23 16:00 | RML | MET-1 | 1 | B160296 | No Prep |
| 6 | EPA-120.1 | 02/28/23 12:30 | 02/28/23 16:00 | RML | MET-1 | 1 | B160296 | No Prep |

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

Reported: 03/17/2023 7:00
Project: Irrigation Water
Project Number: [none]
Project Manager: Bryan J. Rosales

Metals Analysis

| | |
|----------------------------------|--|
| BCL Sample ID: 2303814-02 | Client Sample Name: 1.1-10 (South), 2/22/2023 2:00:00PM, Bryan J. Rosales |
|----------------------------------|--|

| Constituent | Result | Units | PQL | MDL | Method | MB Bias | Lab Quals | DCN |
|-----------------|--------|-------|------|-------|-----------|---------|-----------|-----|
| Dissolved Boron | 0.040 | mg/L | 0.10 | 0.010 | EPA-6010B | 0.013 | J | 1 |

| DCN | Method | Prep Date | Run Date/Time | Analyst | Instrument | Dilution | QC Batch ID | Prep Method |
|-----|-----------|----------------|----------------|---------|------------|----------|-------------|-------------|
| 1 | EPA-6010B | 02/23/23 20:03 | 03/02/23 13:38 | JCC | PE-OP3 | 1 | B160655 | EPA 3005A |

DCN = Data Continuation Number

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

Reported: 03/17/2023 7:00
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: B160296

| | | | | | | | |
|-------------|--------------|----|------|-----|-----|--|---|
| Bicarbonate | B160296-BLK1 | ND | mg/L | 5.0 | 5.0 | | 1 |
| Carbonate | B160296-BLK1 | ND | mg/L | 2.5 | 2.5 | | 1 |
| Hydroxide | B160296-BLK1 | ND | mg/L | 1.4 | 1.4 | | 1 |

QC Batch ID: B160523

| | | | | | | | |
|--|--------------|----|----------------------|-------|-------|--|---|
| Nitrate as NO3 | B160523-BLK1 | ND | mg/L | 0.44 | 0.11 | | 2 |
| Dissolved Total Cations | B160523-BLK1 | ND | meq/L | 0.10 | 0.10 | | 3 |
| Total Anions | B160523-BLK1 | ND | meq/L | 0.10 | 0.10 | | 3 |
| Adjusted Sodium Adsorption Ratio (SAR-adj) | B160523-BLK1 | ND | NA | 0.010 | 0.010 | | 3 |
| Extractable Sodium Percentage (ESP) | B160523-BLK1 | ND | NA | 0.010 | 0.010 | | 3 |
| Gypsum Requirement | B160523-BLK1 | ND | ‡ gyp/hr/100 gal/mir | 0.010 | 0.010 | | 3 |
| Dissolved Hardness as CaCO3 | B160523-BLK1 | ND | mg/L | 0.50 | 0.10 | | 3 |
| pHc | B160523-BLK1 | ND | NA | 0.010 | 0.010 | | 3 |
| Sodium Adsorption Ratio (SAR) | B160523-BLK1 | ND | NA | 0.10 | 0.10 | | 3 |
| TDS (by summation) | B160523-BLK1 | ND | mg/L | 10 | 10 | | 3 |

QC Batch ID: B160594

| | | | | | | | |
|--------------|--------------|---------|------|------|-------|---|---|
| Chloride | B160594-BLK1 | 0.18300 | mg/L | 0.50 | 0.13 | J | 4 |
| Nitrate as N | B160594-BLK1 | ND | mg/L | 0.10 | 0.024 | | 4 |
| Sulfate | B160594-BLK1 | 0.24100 | mg/L | 1.0 | 0.14 | J | 4 |

QC Batch ID: B160655

| | | | | | | | |
|---------------------|--------------|----|------|-------|-------|--|---|
| Dissolved Calcium | B160655-BLK1 | ND | mg/L | 0.10 | 0.016 | | 5 |
| Dissolved Magnesium | B160655-BLK1 | ND | mg/L | 0.050 | 0.022 | | 5 |
| Dissolved Sodium | B160655-BLK1 | ND | mg/L | 1.0 | 0.051 | | 5 |
| Dissolved Potassium | B160655-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 | B160296-BLK1 | PB | EPA-310.1 | 02/28/23 | 02/28/23 13:44 | RML | MET-1 | 1 |
| 2 | B160523-BLK1 | PB | Calc | 02/22/23 | 02/27/23 12:24 | AMM | Calc | 1 |
| 3 | B160523-BLK1 | PB | Calc | 02/22/23 | 03/06/23 08:47 | AMM | Calc | 1 |
| 4 | B160594-BLK1 | PB | EPA-300.0 | 02/22/23 | 02/23/23 13:34 | RC1 | IC5 | 1 |
| 5 | B160655-BLK1 | PB | EPA-6010B | 02/23/23 | 02/23/23 22:53 | DVS | PE-OP3 | 1 |

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

Reported: 03/17/2023 7:00
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: B160296 | | | | | | | | | | | |
| pH | B160296-BS2 | LCS | 7.1100 | 7.0000 | pH Units | 102 | | 95 - 105 | | | 1 |
| Electrical Conductivity @ 25 C | B160296-BS1 | LCS | 301.10 | 303.00 | umhos/cm | 99.4 | | 90 - 110 | | | 2 |
| QC Batch ID: B160594 | | | | | | | | | | | |
| Chloride | B160594-BS1 | LCS | 48.978 | 50.000 | mg/L | 98.0 | | 90 - 110 | | | 3 |
| Nitrate as N | B160594-BS1 | LCS | 5.0150 | 5.0000 | mg/L | 100 | | 90 - 110 | | | 3 |
| Sulfate | B160594-BS1 | LCS | 94.556 | 100.00 | mg/L | 94.6 | | 90 - 110 | | | 3 |
| QC Batch ID: B160655 | | | | | | | | | | | |
| Dissolved Calcium | B160655-BS1 | LCS | 10.774 | 10.000 | mg/L | 108 | | 80 - 120 | | | 4 |
| Dissolved Magnesium | B160655-BS1 | LCS | 10.108 | 10.000 | mg/L | 101 | | 80 - 120 | | | 4 |
| Dissolved Sodium | B160655-BS1 | LCS | 10.617 | 10.000 | mg/L | 106 | | 80 - 120 | | | 4 |
| Dissolved Potassium | B160655-BS1 | LCS | 10.432 | 10.000 | mg/L | 104 | | 80 - 120 | | | 4 |

| Run # | QC Sample ID | QC Type | Method | Prep Date | Run | | Analyst | Instrument | Dilution |
|-------|--------------|---------|-----------|-----------|----------|-------|---------|------------|----------|
| | | | | | Date | Time | | | |
| 1 | B160296-BS2 | LCS | EPA-150.1 | 02/28/23 | 02/28/23 | 13:35 | RML | MET-1 | 1 |
| 2 | B160296-BS1 | LCS | EPA-120.1 | 02/28/23 | 02/28/23 | 13:00 | RML | MET-1 | 1 |
| 3 | B160594-BS1 | LCS | EPA-300.0 | 02/22/23 | 02/23/23 | 13:16 | RC1 | IC5 | 1 |
| 4 | B160655-BS1 | LCS | EPA-6010B | 02/23/23 | 02/23/23 | 22:55 | DVS | PE-OP3 | 1 |

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

Reported: 03/17/2023 7:00
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: B160296 | | Used client sample: N | | | | | | | | | | |
| Bicarbonate | DUP | 2304007-01 | 66.780 | 47.491 | | mg/L | 33.8 | | 10 | | Q01 | 1 |
| Carbonate | DUP | 2304007-01 | ND | 8.2081 | | mg/L | | | 10 | | | 1 |
| Hydroxide | DUP | 2304007-01 | ND | ND | | mg/L | | | 10 | | | 1 |
| pH | DUP | 2304007-01 | 8.3200 | 9.1100 | | pH Units | 9.1 | | 20 | | | 2 |
| Electrical Conductivity @ 25 C | DUP | 2304007-01 | 281.40 | 279.20 | | umhos/cm | 0.8 | | 10 | | | 3 |
| QC Batch ID: B160594 | | Used client sample: N | | | | | | | | | | |
| Chloride | DUP | 2303832-01 | 43.735 | 43.767 | | mg/L | 0.1 | | 10 | | | 4 |
| | MS | 2303832-01 | 43.735 | 100.58 | 50.505 | mg/L | | 113 | | 80 - 120 | | 5 |
| | MSD | 2303832-01 | 43.735 | 100.83 | 50.505 | mg/L | 0.2 | 113 | 10 | 80 - 120 | | 6 |
| Nitrate as N | DUP | 2303832-01 | 5.0800 | 5.1490 | | mg/L | 1.3 | | 10 | | | 4 |
| | MS | 2303832-01 | 5.0800 | 10.469 | 5.0505 | mg/L | | 107 | | 80 - 120 | | 5 |
| | MSD | 2303832-01 | 5.0800 | 10.469 | 5.0505 | mg/L | 0 | 107 | 10 | 80 - 120 | | 6 |
| Sulfate | DUP | 2303832-01 | 367.46 | 365.48 | | mg/L | 0.5 | | 10 | | | 4 |
| | MS | 2303832-01 | 367.46 | 463.67 | 101.01 | mg/L | | 95.2 | | 80 - 120 | | 5 |
| | MSD | 2303832-01 | 367.46 | 463.21 | 101.01 | mg/L | 0.1 | 94.8 | 10 | 80 - 120 | | 6 |
| QC Batch ID: B160655 | | Used client sample: N | | | | | | | | | | |
| Dissolved Calcium | DUP | 2303637-01 | 89.979 | 88.422 | | mg/L | 1.7 | | 20 | | | 7 |
| | MS | 2303637-01 | 89.979 | 101.68 | 10.204 | mg/L | | 115 | | 75 - 125 | | 8 |
| | MSD | 2303637-01 | 89.979 | 100.36 | 10.204 | mg/L | 1.3 | 102 | 20 | 75 - 125 | | 9 |
| Dissolved Magnesium | DUP | 2303637-01 | 130.94 | 128.56 | | mg/L | 1.8 | | 20 | | | 7 |
| | MS | 2303637-01 | 130.94 | 143.60 | 10.204 | mg/L | | 124 | | 75 - 125 | | 8 |
| | MSD | 2303637-01 | 130.94 | 142.11 | 10.204 | mg/L | 1.0 | 109 | 20 | 75 - 125 | | 9 |
| Dissolved Sodium | DUP | 2303637-01 | 291.63 | 290.48 | | mg/L | 0.4 | | 20 | | | 7 |
| | MS | 2303637-01 | 291.63 | 314.49 | 10.204 | mg/L | | 224 | | 75 - 125 | A03 | 8 |
| | MSD | 2303637-01 | 291.63 | 318.56 | 10.204 | mg/L | 1.3 | 264 | 20 | 75 - 125 | A03 | 9 |
| Dissolved Potassium | DUP | 2303637-01 | 0.78931 | 0.84759 | | mg/L | 7.1 | | 20 | | J | 7 |
| | MS | 2303637-01 | 0.78931 | 11.836 | 10.204 | mg/L | | 108 | | 75 - 125 | | 8 |
| | MSD | 2303637-01 | 0.78931 | 11.844 | 10.204 | mg/L | 0.1 | 108 | 20 | 75 - 125 | | 9 |

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

Reported: 03/17/2023 7:00
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 | B160296-DUP1 | DUP | EPA-310.1 | 02/28/23 | 02/28/23 15:07 | RML | MET-1 | 1 |
| 2 | B160296-DUP1 | DUP | EPA-150.1 | 02/28/23 | 02/28/23 15:07 | RML | MET-1 | 1 |
| 3 | B160296-DUP1 | DUP | EPA-120.1 | 02/28/23 | 02/28/23 15:07 | RML | MET-1 | 1 |
| 4 | B160594-DUP1 | DUP | EPA-300.0 | 02/22/23 | 02/23/23 13:52 | RC1 | IC5 | 1 |
| 5 | B160594-MS1 | MS | EPA-300.0 | 02/22/23 | 02/23/23 14:10 | RC1 | IC5 | 1.010 |
| 6 | B160594-MSD1 | MSD | EPA-300.0 | 02/22/23 | 02/23/23 14:28 | RC1 | IC5 | 1.010 |
| 7 | B160655-DUP1 | DUP | EPA-6010B | 02/23/23 | 02/23/23 22:58 | DVS | PE-OP3 | 1 |
| 8 | B160655-MS1 | MS | EPA-6010B | 02/23/23 | 02/23/23 23:01 | DVS | PE-OP3 | 1.020 |
| 9 | B160655-MSD1 | MSD | EPA-6010B | 02/23/23 | 02/23/23 23:03 | DVS | PE-OP3 | 1.020 |

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

Reported: 03/17/2023 7:00
 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: B160655

| | | | | | | | |
|-----------------|--------------|----------|------|------|-------|---|---|
| Dissolved Boron | B160655-BLK1 | 0.012860 | mg/L | 0.10 | 0.010 | J | 1 |
|-----------------|--------------|----------|------|------|-------|---|---|

| Run # | QC Sample ID | QC Type | Method | Prep Date | Run Date Time | Analyst | Instrument | Dilution |
|-------|--------------|---------|-----------|-----------|----------------|---------|------------|----------|
| 1 | B160655-BLK1 | PB | EPA-6010B | 02/23/23 | 02/23/23 22:53 | DVS | PE-OP3 | 1 |

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

Reported: 03/17/2023 7:00
 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: B160655 | | | | | | | | | | | |
| Dissolved Boron | B160655-BS1 | LCS | 0.96698 | 1.0000 | mg/L | 96.7 | | 80 - 120 | | | 1 |

| Run # | QC Sample ID | QC Type | Method | Prep Date | Run Date Time | Analyst | Instrument | Dilution |
|-------|--------------|---------|-----------|-----------|----------------|---------|------------|----------|
| 1 | B160655-BS1 | LCS | EPA-6010B | 02/23/23 | 02/23/23 22:55 | DVS | PE-OP3 | 1 |

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

Reported: 03/17/2023 7:00
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: B160655 | | Used client sample: N | | | | | | | | | | |
| Dissolved Boron | DUP | 2303637-01 | 0.84091 | 0.81266 | | mg/L | 3.4 | | 20 | | | 1 |
| | MS | 2303637-01 | 0.84091 | 1.9378 | 1.0204 | mg/L | | 107 | | 75 - 125 | | 2 |
| | MSD | 2303637-01 | 0.84091 | 1.9352 | 1.0204 | mg/L | 0.1 | 107 | 20 | 75 - 125 | | 3 |

| Run # | QC Sample ID | QC Type | Method | Prep Date | Run Date Time | Analyst | Instrument | Dilution |
|-------|--------------|---------|-----------|-----------|----------------|---------|------------|----------|
| 1 | B160655-DUP1 | DUP | EPA-6010B | 02/23/23 | 02/23/23 22:58 | DVS | PE-OP3 | 1 |
| 2 | B160655-MS1 | MS | EPA-6010B | 02/23/23 | 02/23/23 23:01 | DVS | PE-OP3 | 1.020 |
| 3 | B160655-MSD1 | MSD | EPA-6010B | 02/23/23 | 02/23/23 23:03 | DVS | PE-OP3 | 1.020 |

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Shafter-Wasco Irrigation
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Wasco, CA 93280

Reported: 03/17/2023 7:00
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.
- Q01 Sample precision is not within the control limits.
- S05 The sample holding time was exceeded.