



May 21, 2024

Kelsey Bicknell
Environmental Manager
ABCWUA
Albuquerque, New Mexico

kbicknell@abcwua.org

RE: Results of First Quarter 2024 Water Authority Data Gap Well Monitoring

Dear Kelsey:

John Shomaker & Associates, Inc. (JSAI) was contracted by the Albuquerque Bernalillo County Water Utility Authority (Water Authority) to assist with Data Gap Well Monitoring at well WUABFFMW-01 for four quarters beginning with the 3rd Quarter (Q3) 2023 event. The results herein are for the sampling event conducted during the 1st Quarter (Q1) 2024. The sampling event began on March 4, 2024 when the passive sampling devices were deployed. The sampling event concluded on March 21, 2024 when the passive sampling devices were retrieved and the passive samples collected and active sampling took place.

On March 4, 2024, JSAI removed the pressure transducer, measured depth to water, and then deployed 4 dual membrane passive diffusion bags (DMPDB) and one passive diffusion bag (PDB) in WUABFFMW-01. The passive sampling devices were retrieved and samples were collected for laboratory analysis on March 21, 2024, once the passive sampling devices had been deployed in the well for at least three weeks, per manufacturer's recommendations. Following retrieval of the passive sampling devices, the Water Authority-owned Bennett sample pump was deployed for active sampling. The well was pumped at a rate of about 0.75 gpm until three well volumes had been purged. Samples were then collected for laboratory analysis for the analytes and methods presented in Table 1. Deployed depths of the passive sampling devices and the setting of the Bennett sample pump are presented in Table 2. Laboratory analytical results, chains-of-custody, and field documents including purge logs are attached.

Samples were delivered to Eurofins Albuquerque (formerly Hall Environmental Analytical Laboratory) and shipped overnight to Eurofins Environment Testing (Eurofins) in Denver, CO for analytical analyses. Table 3 is a summary of analytes that were detected during the Q1 2024 sampling. None of the detected analytes were reported above the New Mexico Environmental Department Drinking Water Bureau (NMED-DWB) standards aside from manganese. Manganese falls under the secondary drinking water standards, which are non-enforceable standards related to aesthetics.

Bis(2-ethylhexyl) phthalate was detected only in the equip rinsate. According to Eurofins, the level in the method blank is consistent with common lab contamination and it is implied and likely that the results are lab contamination.

Compared to the sampling event in the Q4 2023 sampling event, Bis(2-ethylhexyl) phthalate concentrations in WUABFFMW-01 BP and WUABFFMW-01 PDB, went below the laboratory detection limits in the Q1 2024 sampling event. The other analytes remained under laboratory detection limit, in the Q1 2024 sampling event.

Table 1. Analytes for samples at WUABFFMW-01, deployed March 4, 2024, retrieved March 21, 2024, Albuquerque, Bernalillo County, New Mexico

analyte suite	method of analysis
anions (Cl, Br, SO ₄ , NO ₃ , NO ₂)	EPA E300.0, E353.2
ethylene dibromide (EDB)	EPA 8011
volatile organic compounds (VOCs)	EPA 8260
semi-volatile organic compounds (SVOCs)	EPA 8270
total metals (Ca, Mg, Na, K, As, Pb)	EPA 6010C/6020A
dissolved metals (Fe, Mg)	EPA 6010C/6020A
alkalinity	EPA SM2320B

Table 2. Sample collection depths at WUABFFMW-01, deployed March 4, 2024, retrieved March 21, 2024, Albuquerque, Bernalillo County, New Mexico

sample type	equipment	sample collection depth ft bgl
passive	DMPDB	574*
passive	DMPDB	577*
passive	DMPDB	580*
passive	DMPDB	583*
passive	PDB	586*
active	Bennett pump	580**

*passive samples

**pump intake

Prior to deploying and post-sampling, the Bennett pump was decontaminated by pumping 5 gallons of a distilled water and Liquinox mix, distilled water, and lab-grade deionized water through the pump and tubing. After final field decontamination, post-purging, and sampling of the well, a sample final rinse sample (Equip Rinsate) was collected and submitted for laboratory analysis. All decontamination water and industrial derived waste (IDW) water produced during purging was collected in a container provided by Advanced Environmental Solutions, Inc. (AES) and delivered to their facility for disposal. The disposal manifest is attached.

Table 3. Analytes above the detection limit for samples at WUABFFMW-01, deployed March 4, 2024, retrieved March 21, 2024, Albuquerque, Bernalillo County, New Mexico

sample ID		WUABFFMW-01 PDB	WUABFFMW-01 BP	equip rinsate	method	NMED/DWB standard
Analyte	units					
Bis(2-ethylhexyl) phthalate	µg/L	nd	nd	11	8270E	6
Benzaldehyde	µg/L	nd	nd	nd	8270E	no standard
Di-n-butyl phthalate	µg/L	nd	nd	nd	8270E	20
Alkalinity	mg/L	110	110	110	SM 2320B	no standard
sulfate	mg/L	28	27	27	300.0	250 ^a
chloride	mg/L	7.8	8.0	7.9	300.0	250 ^a
nitrate-N	mg/L	0.056 ^b	0.048 ^b	0.051 ^b	353.2	10
calcium	mg/L	36	34	33	6010D	no standard
magnesium	mg/L	4.8	4.7	4.5	6010D	no standard
manganese	mg/L	0.07	0.15	0.15	6010D	0.05 ^a
potassium	mg/L	2.8 ^b	2.7 ^b	2.6 ^b	6010D	no standard
sodium	mg/L	26	25	24	6010D	no standard
total arsenic	µg/L	1.2 ^b	0.94 ^b	0.84 ^b	6010D	10
iron	mg/L	0.03 ^b	0.048 ^b	0.026 ^b	6010D	0.30 ^a

^a secondary drinking water standard (non-enforceable, aesthetic guideline)

nd – not detected

^b estimated: the analyte was positively identified; the quantitation is an estimation

µg/L - micrograms per liter

bold indicates concentration exceeds NMED/DWB standard

mg/L - milligrams per liter

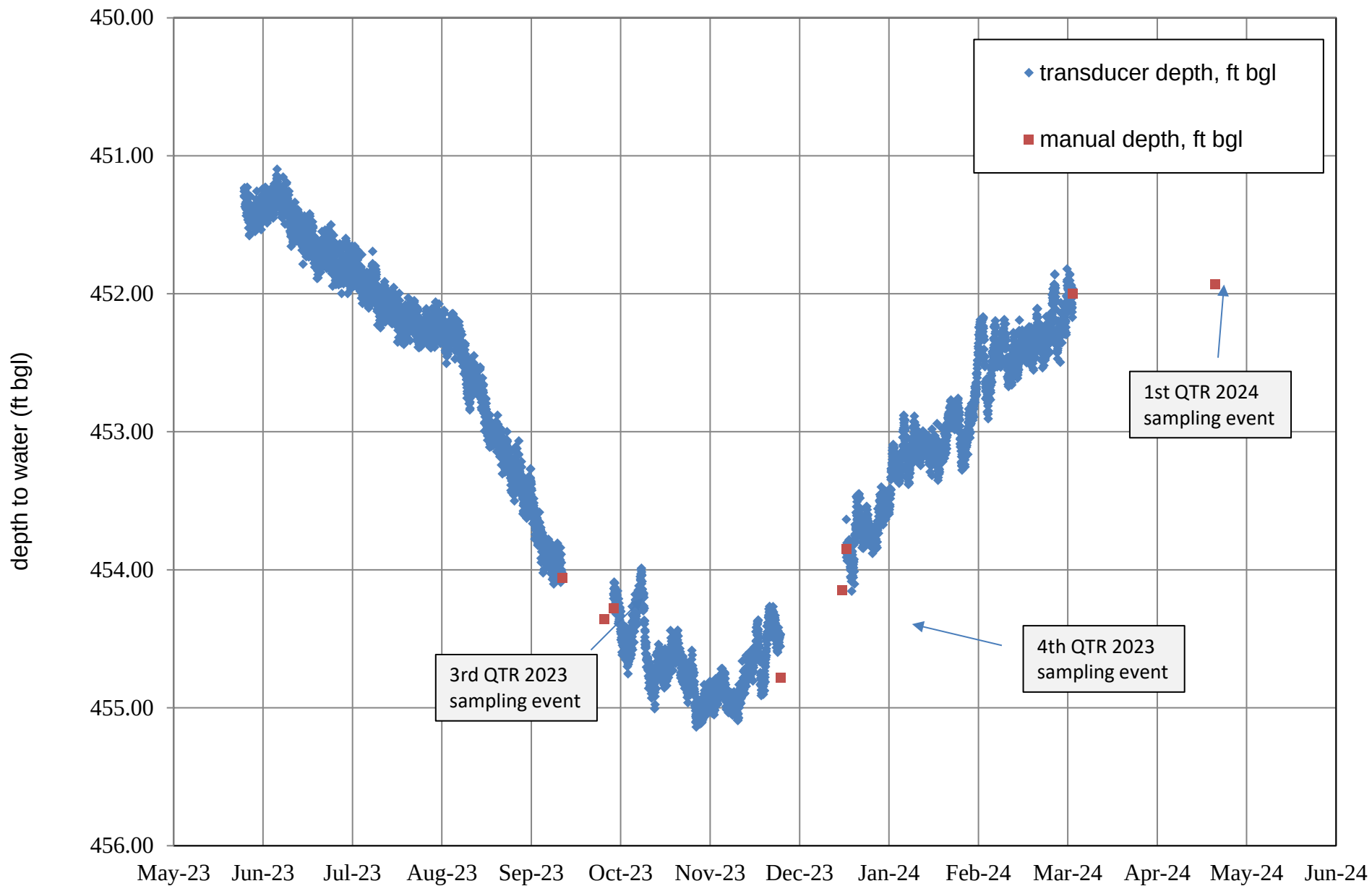
Sincerely,

JOHN SHOMAKER & ASSOCIATES, INC.



Steven T. Finch, Jr., CPG,
Principal Hydrogeologist-Geochemist

Enc: Figure 1. Hydrograph for WUABFFMW-01
Field documents
Disposal manifest
Laboratory analytical results & data, via Dropbox



Hydrograph for WUABFFMW-01



STANDARD PURGING and SAMPLING DATA

PROJECT NAME: Dcta Gap well WELL NO.: LO11ABEF-MW-01
PROJECT NO.: _____ DATE: 3/21/24 FIELD CREW: ZAC & CPC

WATER LEVEL, WATER COLUMN HEIGHT, PUMP DETAILS

TIME	DEPTH TO BOTTOM OF WELL (ft btoc)	DEPTH TO WATER (DTW) (ft btoc)	Water Column Height (DTB-DTW) (ft)	PUMP TYPE	PUMP DEPTH (ft btoc)
<u>11:20</u>	<u>597</u>	<u>451.60</u>	<u>145.4</u>	<u>Beacon</u>	<u>580</u>

ft btoc: feet below top of casing from designated measuring point

PURGE VOLUME

Well Casing Diameter (inches)	Volume/Linear Foot (see conversion table below)	1 Well Volume (gal)	2 Well Volumes (gal)	3 Well Volumes (gal)
<u>3</u>	<u>0.38</u>	<u>55.25</u>	<u>110.504</u>	<u>165.75</u>

VOLUME/LINEAR FOOT (gal/ft) (Use well casing ID)

1" = 0.04	1.5" = 0.09	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.5	8" = 2.6	10" = 4.1
-----------	-------------	-----------	-----------	-----------	----------	----------	-----------

1 well casing volume = Volume/Linear Foot x Water Column Height

METHOD OF PURGING: Low flow + 3 well volumes
METHOD OF SAMPLING: grab

WATER LEVEL/WATER QUALITY INSTRUMENTS USED

INSTRUMENT	SERIAL NO.	TIME CALIBRATION PERFORMED	TECH	COMMENTS
<u>Hach 2100Q</u>	<u>1708-T2</u>	<u>-</u>		
<u>Hach 2100Q</u>				

WATER QUALITY READINGS DURING PURGING

TIME	TEMP (°C)	pH	SP. COND. (µS/cm)	ORP (mV)	TURB. (NTU)*	Water Level (ft bTOC)	Flow Rate (gal/min)	Total Volume Purged (gal)	Comments (color/odor)
<u>13:00</u>	<u>-</u>	<u>-</u>	<u>Start Pump</u>			<u>-</u>	<u>~.75</u>	<u>-</u>	<u>Don't</u>
<u>13:15</u>	<u>17.7</u>	<u>7.89</u>	<u>302.4</u>	<u>-118.9</u>	<u>-</u>	<u>451.70</u>	<u>~0.75</u>	<u>~6.0</u>	<u>clear, none</u>
<u>13:30</u>	<u>19.3</u>	<u>7.88</u>	<u>303.1</u>	<u>-53.6</u>	<u>-</u>	<u>451.66</u>	<u>~0.75</u>	<u>~15.0</u>	<u>clear, none</u>
<u>13:45</u>	<u>19.4</u>	<u>7.93</u>	<u>302.7</u>	<u>-90.4</u>	<u>0.59</u>	<u>451.62</u>	<u>~0.75</u>	<u>25</u>	<u>clear, none</u>
<u>14:00</u>	<u>19.6</u>	<u>7.95</u>	<u>299.5</u>	<u>-114.7</u>	<u>0.59</u>	<u>451.61</u>	<u>~0.75</u>	<u>35</u>	<u>1.93, clear, none</u>
<u>14:15</u>	<u>19.0</u>	<u>7.94</u>	<u>301.9</u>	<u>-125.7</u>	<u>0.83</u>	<u>451.62</u>	<u>~0.75</u>	<u>45</u>	<u>1.53, clear, none, 2+</u>
<u>14:30</u>	<u>18.8</u>	<u>7.97</u>	<u>300.1</u>	<u>-119.8</u>	<u>0.58</u>	<u>451.62</u>	<u>~0.75</u>	<u>55</u>	<u>1.74, clear, none</u>
<u>14:45</u>	<u>19.1</u>	<u>7.97</u>	<u>301.9</u>	<u>-113.8</u>	<u>0.73</u>	<u>451.62</u>	<u>~0.75</u>	<u>65</u>	<u>1.99, clear, none</u>
<u>15:00</u>	<u>19.1</u>	<u>7.98</u>	<u>301.9</u>	<u>-120.0</u>	<u>0.34</u>	<u>451.62</u>	<u>~0.75</u>	<u>78</u>	<u>2.62, clear, none</u>
<u>15:15</u>	<u>19.4</u>	<u>7.97</u>	<u>302.6</u>	<u>-128.5</u>	<u>0.44</u>	<u>451.63</u>	<u>~0.75</u>	<u>89</u>	<u>1.77, clear, none</u>
<u>15:30</u>	<u>19.6</u>	<u>7.97</u>	<u>302.7</u>	<u>-129.2</u>	<u>0.43</u>	<u>451.62</u>	<u>~0.75</u>	<u>100</u>	<u>1.7, clear, none</u>
<u>15:45</u>	<u>19.7</u>	<u>7.98</u>	<u>300.3</u>	<u>-128.9</u>	<u>0.40</u>	<u>451.60</u>	<u>~0.75</u>	<u>112</u>	<u>1.84, clear, none</u>
<u>16:00</u>	<u>19.5</u>	<u>7.97</u>	<u>301.5</u>	<u>-130.7</u>	<u>0.56</u>	<u>451.60</u>	<u>~0.75</u>	<u>122</u>	<u>2.53, clear, none</u>
<u>16:15</u>	<u>19.4</u>	<u>7.98</u>	<u>301.1</u>	<u>-118.0</u>	<u>0.36</u>	<u>451.62</u>	<u>~0.75</u>	<u>133</u>	<u>2.36, clear, none</u>

[illegible]

Stabilization = Temp $\pm 1^{\circ}\text{C}$; pH ± 0.2 units; Sp. Cond. $\pm 10\%$; Turb. $\pm 10\%$

GROUNDWATER SAMPLE ID: WUABAFMW-01(B?) DUPLICATE SAMPLE ID: _____

Sampler: _____
(Printed Name) (Signature)



DAILY FIELD LOG

ACTIVITY: Deploy Samplers
GEOLOGIST: ZBC + CPE

DATE: 3/4/24
CLIENT: ABC WMA
PROJECT: Data Gap

13:20 - ZBC + CPE on-site, begin setting up for deployment
- Decon table, transducer test

13:30 - ABC WMA on-site

13:40 - Kelsey on-site

13:47 - Pulled transducer onto decon table

13:50 - Prepping to deploy bags

13:55 - WL: 451.60 ft bwp (blue, mark)

14:00 - Deploy PDB's

14:01 - Finish deploying PDB's

DAILY FIELD LOGACTIVITY: Retrieve PDB's / SampleDATE: March 21, 2024GEOLOGIST: ZBL & CPCCLIENT: ABCWUAPROJECT: Data Gap

7:30 - on-site to pick up pump @ treatment plant, guard was not informed like we're coming

- try calling Kaley + Powers, no answer

7:53 - Powers called back, she is calling security to let us in

8:00 Got to Bennett pump in parking garage. Hitch was key, leaving to get key.

8:30 Back at ABCWUA on Renaissance, Picked up trailer

9:30 CPC onsite at Data Gap well. ABCWUA onsite / EA / KAFB on-site
Setting up for PDB sampling. Decon table.

10:00 Collecting PDB samples.

11:00 Samples collected from DPDBs. Next task collect our VOAS* from black bag

11:08 Taking W/L : 51.53 ft bwp

- Decon sampler as it is inserted

12:00 Decon Bennett pump.

12:20 Finish decon. Deploying pump. ABCWUA EA / KAFB on-site

13:00 Start pumping

17:00 166 gallons purged

17:15 Samples taken

17:30 EA Takes their samples

17:45 ABCWUA + KAFB + EA off-site, start recing pump

18:15 finish recing pump

18:45 Take Rinseate Samples w/lab grade DI water

18:50 Decon pump

19:09 Clean up site

2611 Broadbent Parkway NE
Albuquerque, New Mexico 87107
505-345-3407 • www.shomaker.com

JOHN SHOMAKER & ASSOCIATES, INC.
WATER-RESOURCE AND ENVIRONMENTAL CONSULTANTS

19:30 - ZBL / CPC off site



PASSIVE DIFFUSION WATER SAMPLING DATA SHEET

Well Location ID:

DEPLOYMENT RECORD

Sample ID	Wua hff MWDJ		
Deployment Team	ZBC + CPC		
Date/Time Deployed	Date: MM/DD/YYYY 3/4/2024	Time:	14:05
Water Level Meter	451.60 ft bmp		

Well Stats (feet below top of casing [ft btoc])	
Well Total Depth ¹	597
Top of Screen	572
Bottom of Screen	592
Depth to Water	451.60 ft bmp
Notes	

Sampler Number	Top of Sampler Depth (ft btoc)
1*	574
2*	577
3*	580
4*	583
5**	586

¹Total Depth is based on construction data, not measured

*Dual Membrane Bag; ** Passive Diffusive Bag

Signed

Date

SAMPLING RECORD

Sample ID	WUA RFF-01 (PDB)		
Sampling Team	ZBC + CPC		
Date/Time Sampled	Date: MM/DD/YYYY 03/21/2024	Time:	11:00
Water Level Meter	Heron dipper - T2		
Water Quality Meter	not enough for WQ sample		

Water Quality Readings

Time	Temp (C)	pH	SP. COND. (mS/cm)	ORP (mV)	TURB. (NTU)*	Comments (color/odor)



PASSIVE DIFFUSION WATER SAMPLING DATA SHEET

Groundwater Analyses

Analytes/Method	1	2	3	4	5	Notes
VOCs EPA Method 8260.	☐	☐	☐	☐	☒	
SVOCs via EPA Method 8270.	☐	☐	☒	☒	☐	Collected from PDB#4
Total Metals (As, Pb, Ca, Mg, K, Na) via EPA Method 6010/6020.	☒	☐	☐	☐	☐	
Dissolved Metals (Fe, Mn) via EPA 6010	☒	☐	☐	☐	☐	
Anions (Cl, Br, SO ₄) via EPA Method E300.0.	☐	☒	☐	☐	☐	
Nitrate/Nitrite nitrogen via EPA 353.2	☐	☒	☐	☐	☐	
EDB via EPA Method 8011.	☐	☐	☐	☐	☒	
Alkalinity via EPA Method SM2320B.	☐	☒	☐	☐	☐	


Signed

11/27/23
Date

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number V S Q G	2. Page 1 of 1	3. Emergency Response Phone 800-861-1700	4. Waste Tracking Number 1 4 2 9 2 - 3	
5. Generator's Name and Mailing Address Albuquerque Bernalillo County Water Utility Authority 1 Civic Plaza NW Albuquerque NM 87103 Generator's Phone: 505 289-3009			Generator's Site Address (if different than mailing address) Albuquerque Bernalillo County Water Utility Authority Kathryn and Indiana SE Albuquerque NM 87103			
6. Transporter 1 Company Name Advanced Environmental Solutions, Inc.			U.S. EPA ID Number N M R 0 0 0 0 0 6 5 0 2			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address Advanced Environmental Solutions, Inc. 2318 Roldan Drive Belen NM 87002 Facility's Phone: 505 861-1700			U.S. EPA ID Number N M R 0 0 0 0 0 6 5 0 2			
GENERATOR	9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt./Vol.
			No.	Type		
	1. Non RCRA Regulated, Non DOT Hazardous IDW Water		0 0 1	TP	175	G
	2.					
	3.					
4.						
13. Special Handling Instructions and Additional Information 1)(L) AES Profile # AES1186 NON-HAZ 9.1) A10541 JOB# J14292						
14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.						
Generator's/Officer's Printed/Typed Name Zachary Chavez			Signature <i>[Signature]</i>		Month Day Year 3 22 24	
INT'L	15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:					
TRANSPORTER	16. Transporter Acknowledgment of Receipt of Materials					
	Transporter 1 Printed/Typed Name Ryan Chavez			Signature <i>[Signature]</i>		Month Day Year 3 22 24
	Transporter 2 Printed/Typed Name			Signature		Month Day Year
DESIGNATED FACILITY	17. Discrepancy					
	17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection					
	Manifest Reference Number:					
	17b. Alternate Facility (or Generator) U.S. EPA ID Number					
	Facility's Phone:					
	17c. Signature of Alternate Facility (or Generator) Month Day Year					
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a						
Printed/Typed Name Chris Rael			Signature <i>[Signature]</i>		Month Day Year 3 22 24	



ANALYTICAL REPORT

PREPARED FOR

Attn: Zach Weathers
John Shomaker and Associates Inc
2611 Broadbent Pkwy Ne
Albuquerque NM 87107

Generated 4/10/2024 9:42 AM

JOB DESCRIPTION

Water Authority Data Gap Well Monitoring

JOB NUMBER

280-189151-1

Eurofins Denver

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



Generated
4/10/2024 9:42 AM

Authorized for release by
Natalie B Stone, Project Manager
Natalie.Stone@et.eurofinsus.com

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Definitions/Glossary

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

GC/MS Semi VOA

Qualifier	Qualifier Description
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

GC Semi VOA

Qualifier	Qualifier Description
M	Manual integrated compound.
U	Undetected at the Limit of Detection.

Metals

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
U	Undetected at the Limit of Detection.

General Chemistry

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
M	Manual integrated compound.
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control

Definitions/Glossary

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative 280-189151-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Receipt

The samples were received on 3/23/2024 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

Receipt Exceptions

One VOA container for the following sample was received broken: WUABAFMW-01 (Rinsate) (280-189151-3).

All samples request MS/MSD analysis; however, none of the samples were submitted with additional volume. As such, no MS/MSD will be reported.

Method 8260D - Volatile Organic Compounds (GC/MS)

Samples WUABAFMW-01 (PDB) (280-189151-1), WUABAFMW-01 (BP) (280-189151-2) and WUABAFMW-01 (Rinsate) (280-189151-3) were analyzed for Volatile Organic Compounds (GC/MS). The samples were analyzed on 3/29/2024.

The continuing calibration verification (CCV) associated with batch 280-647592 recovered above the upper control limit (20%D): 2-Hexanone (22.7%D) and Methyl Acetate (21.0%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: WUABAFMW-01 (PDB) (280-189151-1), WUABAFMW-01 (BP) (280-189151-2), WUABAFMW-01 (Rinsate) (280-189151-3) and (CCV 280-647592/2).

The initial calibration verification (ICV) result for batch 280-647592 was outside the control limit for Bromomethane, Iodomethane and Dichlorodifluoromethane. Sample results were non-detects and have been reported as qualified data with NCM. The failing compound is considered a poor performing compound and is allowed up to 30%D.

Method 8270E - Semivolatile Organic Compounds (GC/MS)

Samples WUABAFMW-01 (PDB) (280-189151-1), WUABAFMW-01 (BP) (280-189151-2) and WUABAFMW-01 (Rinsate) (280-189151-3) were analyzed for Semivolatile Organic Compounds (GC/MS). The samples were prepared on 3/28/2024 and analyzed on 3/27/2024, 4/1/2024 and 4/3/2024.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 280-647471. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 280-647471 and analytical batch 280-647795 recovered outside control limits for the multiple analytes. Both the LCS and the LCSD had all analytes recover within acceptable recovery limits.

The continuing calibration verification (CCV) associated with batch 280-648146 recovered above the upper control limit for Benzaldehyde. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: WUABAFMW-01 (BP) (280-189151-2) and

(CCV 280-648146/33).

Method 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Samples WUABAFMW-01 (PDB) (280-189151-1), WUABAFMW-01 (BP) (280-189151-2) and WUABAFMW-01 (Rinsate) (280-189151-3) were analyzed for EDB, DBCP, and 1,2,3-TCP (GC). The samples were prepared and analyzed on 3/26/2024.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 280-647144. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 6010D - Metals (ICP)

Samples WUABAFMW-01 (PDB) (280-189151-1), WUABAFMW-01 (BP) (280-189151-2) and WUABAFMW-01 (Rinsate) (280-189151-3) were analyzed for Metals (ICP). The samples were prepared on 3/26/2024 and analyzed on 3/29/2024.

Method 6010D - Metals (ICP) - Dissolved

Samples WUABAFMW-01 (PDB) (280-189151-1), WUABAFMW-01 (BP) (280-189151-2) and WUABAFMW-01 (Rinsate) (280-189151-3) were analyzed for Metals (ICP) - Dissolved. The samples were prepared on 3/29/2024 and analyzed on 3/30/2024.

Method 6020B - Metals (ICP/MS)

Samples WUABAFMW-01 (PDB) (280-189151-1), WUABAFMW-01 (BP) (280-189151-2) and WUABAFMW-01 (Rinsate) (280-189151-3) were analyzed for Metals (ICP/MS). The samples were prepared on 3/26/2024 and analyzed on 3/28/2024.

Method SM 2320B - Alkalinity

Samples WUABAFMW-01 (PDB) (280-189151-1), WUABAFMW-01 (BP) (280-189151-2) and WUABAFMW-01 (Rinsate) (280-189151-3) were analyzed for Alkalinity. The samples were analyzed on 4/2/2024.

Method 300.0 - Anions, Ion Chromatography

Samples WUABAFMW-01 (PDB) (280-189151-1), WUABAFMW-01 (BP) (280-189151-2) and WUABAFMW-01 (Rinsate) (280-189151-3) were analyzed for Anions, Ion Chromatography. The samples were analyzed on 3/26/2024 and 3/27/2024.

The Continuing calibration blank (CCB) for analytical batch 280-647160 contained Chloride above the method detection limit. This target analyte concentration was less than half of the reporting limit (1/2RL) in the CCB; therefore, re-analysis of samples was not performed. (CCB 280-647160/21)

The method blank for analytical batch 280-647330 contained Chloride above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL) in the method blank; therefore, re-analysis of samples was not performed.

The Continuing calibration blank (CCB) for analytical batch 280-647330 contained Chloride above the method detection limit. This target analyte concentration was less than half of the reporting limit (1/2RL) in the CCB; therefore, re-analysis of samples was not performed. (CCB 280-647330/21)

The matrix spike duplicate (MSD) recoveries for analytical batch 280-647330 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits as well as the associated matrix spike (MS).

Method 353.2 - Nitrogen, Nitrate-Nitrite

Samples WUABAFMW-01 (PDB) (280-189151-1), WUABAFMW-01 (BP) (280-189151-2) and WUABAFMW-01 (Rinsate) (280-189151-3) were analyzed for Nitrogen, Nitrate-Nitrite. The samples were analyzed on 4/8/2024 and 4/9/2024.

Detection Summary

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Client Sample ID: WUABAFMW-01 (PDB)

Lab Sample ID: 280-189151-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Calcium	36000		200	64	24	ug/L	1		6010D	Total/NA
Magnesium	4800		200	15	4.2	ug/L	1		6010D	Total/NA
Potassium	2800	J	3000	940	240	ug/L	1		6010D	Total/NA
Sodium	26000		1000	320	97	ug/L	1		6010D	Total/NA
Iron	30	J	100	34	9.1	ug/L	1		6010D	Dissolved
Manganese	70		10	1.8	0.45	ug/L	1		6010D	Dissolved
Arsenic	1.2	J	5.0	2.0	0.50	ug/L	1		6020B	Total/NA
Chloride	7.8		3.0	2.5	1.0	mg/L	1		300.0	Total/NA
Sulfate	28		5.0	2.5	1.0	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.056	J	0.10	0.080	0.044	mg/L	1		353.2	Total/NA
Alkalinity	110		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: WUABAFMW-01 (BP)

Lab Sample ID: 280-189151-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Calcium	34000		200	64	24	ug/L	1		6010D	Total/NA
Magnesium	4700		200	15	4.2	ug/L	1		6010D	Total/NA
Potassium	2700	J	3000	940	240	ug/L	1		6010D	Total/NA
Sodium	25000		1000	320	97	ug/L	1		6010D	Total/NA
Iron	48	J	100	34	9.1	ug/L	1		6010D	Dissolved
Manganese	150		10	1.8	0.45	ug/L	1		6010D	Dissolved
Arsenic	0.94	J	5.0	2.0	0.50	ug/L	1		6020B	Total/NA
Chloride	8.0		3.0	2.5	1.0	mg/L	1		300.0	Total/NA
Sulfate	27		5.0	2.5	1.0	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.048	J	0.10	0.080	0.044	mg/L	1		353.2	Total/NA
Alkalinity	110		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: WUABAFMW-01 (Rinsate)

Lab Sample ID: 280-189151-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	11		10	8.0	3.3	ug/L	1		8270E	Total/NA
Calcium	33000		200	64	24	ug/L	1		6010D	Total/NA
Magnesium	4500		200	15	4.2	ug/L	1		6010D	Total/NA
Potassium	2600	J	3000	940	240	ug/L	1		6010D	Total/NA
Sodium	24000		1000	320	97	ug/L	1		6010D	Total/NA
Iron	26	J	100	34	9.1	ug/L	1		6010D	Dissolved
Manganese	150		10	1.8	0.45	ug/L	1		6010D	Dissolved
Arsenic	0.84	J	5.0	2.0	0.50	ug/L	1		6020B	Total/NA
Chloride	7.9	M	3.0	2.5	1.0	mg/L	1		300.0	Total/NA
Sulfate	27		5.0	2.5	1.0	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.051	J	0.10	0.080	0.044	mg/L	1		353.2	Total/NA
Alkalinity	110		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Client Sample ID: WUABAFMW-01 (PDB)

Lab Sample ID: 280-189151-1

Date Collected: 03/21/24 11:00

Matrix: Water

Date Received: 03/23/24 09:20

Method: SW846 8260D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylbenzene	0.40	U	1.0	0.40	0.30	ug/L		03/29/24 13:48	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		03/29/24 13:48	1
cis-1,3-Dichloropropene	1.8	U	2.0	1.8	0.63	ug/L		03/29/24 13:48	1
trans-1,3-Dichloropropene	1.8	U	2.0	1.8	0.65	ug/L		03/29/24 13:48	1
N-Propylbenzene	0.80	U	1.0	0.80	0.53	ug/L		03/29/24 13:48	1
n-Butylbenzene	0.80	U	1.0	0.80	0.48	ug/L		03/29/24 13:48	1
4-Chlorotoluene	0.80	U	1.0	0.80	0.21	ug/L		03/29/24 13:48	1
1,4-Dichlorobenzene	0.50	U	1.0	0.50	0.39	ug/L		03/29/24 13:48	1
Ethylene Dibromide	0.80	U	1.0	0.80	0.40	ug/L		03/29/24 13:48	1
3-Chloro-1-propene	0.40	U	2.0	0.40	0.17	ug/L		03/29/24 13:48	1
1,2-Dichloroethane	0.80	U	1.0	0.80	0.54	ug/L		03/29/24 13:48	1
Acrylonitrile	8.0	U	20	8.0	4.5	ug/L		03/29/24 13:48	1
Vinyl acetate	2.0	U	3.0	2.0	0.94	ug/L		03/29/24 13:48	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		03/29/24 13:48	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.37	ug/L		03/29/24 13:48	1
Bromobenzene	0.50	U	1.0	0.50	0.40	ug/L		03/29/24 13:48	1
Methylcyclohexane	0.40	U	1.0	0.40	0.31	ug/L		03/29/24 13:48	1
Toluene	0.40	U	1.0	0.40	0.32	ug/L		03/29/24 13:48	1
Chlorobenzene	0.80	U	1.0	0.80	0.42	ug/L		03/29/24 13:48	1
Tetrahydrofuran	6.4	U	7.0	6.4	2.0	ug/L		03/29/24 13:48	1
Hexane	0.80	U	2.0	0.80	0.16	ug/L		03/29/24 13:48	1
trans-1,4-Dichloro-2-butene	1.6	U	3.0	1.6	1.4	ug/L		03/29/24 13:48	1
Cyclohexane	0.80	U	1.0	0.80	0.44	ug/L		03/29/24 13:48	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.58	ug/L		03/29/24 13:48	1
Chlorodibromomethane	1.8	U	2.0	1.8	0.62	ug/L		03/29/24 13:48	1
Tetrachloroethene	0.80	U	1.0	0.80	0.40	ug/L		03/29/24 13:48	1
sec-Butylbenzene	0.80	U	1.0	0.80	0.45	ug/L		03/29/24 13:48	1
1,3-Dichloropropane	0.80	U	1.0	0.80	0.38	ug/L		03/29/24 13:48	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.32	ug/L		03/29/24 13:48	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	0.37	ug/L		03/29/24 13:48	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		03/29/24 13:48	1
m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.36	ug/L		03/29/24 13:48	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.33	ug/L		03/29/24 13:48	1
Carbon tetrachloride	0.80	U	1.0	0.80	0.57	ug/L		03/29/24 13:48	1
1,1-Dichloropropene	0.80	U	1.0	0.80	0.42	ug/L		03/29/24 13:48	1
2-Hexanone	4.0	U Q	5.0	4.0	1.7	ug/L		03/29/24 13:48	1
2,2-Dichloropropane	0.80	U	1.0	0.80	0.38	ug/L		03/29/24 13:48	1
Ethyl ether	0.80	U	2.0	0.80	0.35	ug/L		03/29/24 13:48	1
1,1,1,2-Tetrachloroethane	0.80	U	1.0	0.80	0.58	ug/L		03/29/24 13:48	1
Acetone	8.0	U	15	8.0	6.6	ug/L		03/29/24 13:48	1
Chloroform	0.80	U	1.0	0.80	0.36	ug/L		03/29/24 13:48	1
Benzene	0.80	U	1.0	0.80	0.31	ug/L		03/29/24 13:48	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	0.39	ug/L		03/29/24 13:48	1
Bromomethane	4.0	U Q	5.0	4.0	2.4	ug/L		03/29/24 13:48	1
Chloromethane	1.0	U	2.0	1.0	0.75	ug/L		03/29/24 13:48	1
Iodomethane	4.0	U Q	5.0	4.0	2.6	ug/L		03/29/24 13:48	1
Dibromomethane	0.40	U	1.0	0.40	0.34	ug/L		03/29/24 13:48	1
Chlorobromomethane	0.80	U	1.0	0.80	0.40	ug/L		03/29/24 13:48	1
Chloroethane	1.6	U	4.0	1.6	1.4	ug/L		03/29/24 13:48	1

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Client Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Client Sample ID: WUABAFMW-01 (PDB)

Lab Sample ID: 280-189151-1

Date Collected: 03/21/24 11:00

Matrix: Water

Date Received: 03/23/24 09:20

Method: SW846 8260D - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Vinyl chloride	1.0	U	2.0	1.0	0.51	ug/L		03/29/24 13:48	1
Methylene Chloride	1.8	U	2.0	1.8	0.94	ug/L		03/29/24 13:48	1
Carbon disulfide	0.80	U	2.0	0.80	0.63	ug/L		03/29/24 13:48	1
Bromoform	1.8	U	2.0	1.8	1.2	ug/L		03/29/24 13:48	1
Dichlorobromomethane	0.50	U	1.0	0.50	0.39	ug/L		03/29/24 13:48	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		03/29/24 13:48	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		03/29/24 13:48	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.57	ug/L		03/29/24 13:48	1
Dichlorodifluoromethane	2.5	U Q	3.0	2.5	0.96	ug/L		03/29/24 13:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.8	U	3.0	1.8	0.73	ug/L		03/29/24 13:48	1
1,2-Dichloropropane	0.80	U	1.0	0.80	0.52	ug/L		03/29/24 13:48	1
2-Butanone (MEK)	12	U	15	12	6.0	ug/L		03/29/24 13:48	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		03/29/24 13:48	1
Trichloroethene	0.40	U	1.0	0.40	0.30	ug/L		03/29/24 13:48	1
Methyl acetate	4.0	U Q	5.0	4.0	1.6	ug/L		03/29/24 13:48	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		03/29/24 13:48	1
1,2,3-Trichlorobenzene	0.80	U	2.0	0.80	0.70	ug/L		03/29/24 13:48	1
Hexachlorobutadiene	1.8	U	2.0	1.8	1.2	ug/L		03/29/24 13:48	1
Naphthalene	0.80	U	2.0	0.80	0.63	ug/L		03/29/24 13:48	1
o-Xylene	0.40	U	1.0	0.40	0.33	ug/L		03/29/24 13:48	1
2-Chlorotoluene	0.40	U	1.0	0.40	0.34	ug/L		03/29/24 13:48	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	0.37	ug/L		03/29/24 13:48	1
1,2,4-Trimethylbenzene	0.40	U	1.0	0.40	0.15	ug/L		03/29/24 13:48	1
1,2-Dibromo-3-Chloropropane	4.0	U	5.0	4.0	1.8	ug/L		03/29/24 13:48	1
1,2,3-Trichloropropane	1.8	U	2.5	1.8	0.86	ug/L		03/29/24 13:48	1
Ethyl methacrylate	2.0	U	3.0	2.0	0.86	ug/L		03/29/24 13:48	1
tert-Butylbenzene	0.80	U	1.0	0.80	0.42	ug/L		03/29/24 13:48	1
Isopropylbenzene	0.50	U	1.0	0.50	0.36	ug/L		03/29/24 13:48	1
4-Isopropyltoluene	0.80	U	1.0	0.80	0.43	ug/L		03/29/24 13:48	1
1,2-Dichloroethene, Total	0.40	U	1.0	0.40	0.32	ug/L		03/29/24 13:48	1
1,3-Dichloropropene, Total	0.80	U	2.0	0.80	0.63	ug/L		03/29/24 13:48	1
Trihalomethanes, Total	0.80	U	1.0	0.80	0.36	ug/L		03/29/24 13:48	1
Total BTEX	0.40	U	1.0	0.40	0.30	ug/L		03/29/24 13:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		81 - 118		03/29/24 13:48	1
Dibromofluoromethane (Surr)	95		80 - 119		03/29/24 13:48	1
Toluene-d8 (Surr)	100		89 - 112		03/29/24 13:48	1
4-Bromofluorobenzene (Surr)	105		85 - 114		03/29/24 13:48	1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1'-Biphenyl	9.3	U Q	12	9.3	1.4	ug/L		04/01/24 15:37	1
2,4-Dichlorophenol	9.3	U	12	9.3	3.5	ug/L		04/01/24 15:37	1
2,4-Dimethylphenol	9.3	U	12	9.3	1.6	ug/L		04/01/24 15:37	1
2,4-Dinitrophenol	23	U	35	23	15	ug/L		04/01/24 15:37	1
2,4-Dinitrotoluene	9.3	U	12	9.3	1.7	ug/L		04/01/24 15:37	1
2,4,6-Trichlorophenol	9.3	U	12	9.3	2.7	ug/L		04/01/24 15:37	1
2,4,5-Trichlorophenol	9.3	U	12	9.3	3.0	ug/L		04/01/24 15:37	1
2,2'-oxybis[1-chloropropane]	9.3	U	12	9.3	1.5	ug/L		04/01/24 15:37	1

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Client Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Client Sample ID: WUABAFMW-01 (PDB)

Lab Sample ID: 280-189151-1

Date Collected: 03/21/24 11:00

Matrix: Water

Date Received: 03/23/24 09:20

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Di-n-butyl phthalate	3.7	U	4.7	3.7	2.4	ug/L		04/01/24 15:37	1
Di-n-octyl phthalate	9.3	U	12	9.3	4.2	ug/L		04/01/24 15:37	1
Benzo[a]anthracene	3.7	U	4.7	3.7	1.1	ug/L		04/01/24 15:37	1
Benzo[a]pyrene	3.7	U	4.7	3.7	0.58	ug/L		04/01/24 15:37	1
Benzo[b]fluoranthene	3.7	U	4.7	3.7	2.5	ug/L		04/01/24 15:37	1
Benzo[g,h,i]perylene	3.7	U	4.7	3.7	3.3	ug/L		04/01/24 15:37	1
Benzo[k]fluoranthene	3.7	U	4.7	3.7	1.2	ug/L		04/01/24 15:37	1
Acenaphthene	3.7	U Q	4.7	3.7	1.1	ug/L		04/01/24 15:37	1
Acenaphthylene	3.7	U	4.7	3.7	0.87	ug/L		04/01/24 15:37	1
Acetophenone	9.3	U	12	9.3	2.6	ug/L		04/01/24 15:37	1
Anthracene	3.7	U	4.7	3.7	0.67	ug/L		04/01/24 15:37	1
Atrazine	3.7	U	12	3.7	0.76	ug/L		04/01/24 15:37	1
Benzaldehyde	3.7	U	5.8	3.7	1.3	ug/L		04/01/24 15:37	1
Butyl benzyl phthalate	3.7	U	4.7	3.7	1.8	ug/L		04/01/24 15:37	1
Caprolactam	12	U M	17	12	6.4	ug/L		04/01/24 15:37	1
Chrysene	3.7	U	4.7	3.7	1.1	ug/L		04/01/24 15:37	1
Dibenz(a,h)anthracene	9.3	U	12	9.3	5.5	ug/L		04/01/24 15:37	1
Dibenzofuran	3.7	U Q	4.7	3.7	1.1	ug/L		04/01/24 15:37	1
Diethyl phthalate	3.7	U	4.7	3.7	1.6	ug/L		04/01/24 15:37	1
Hexachlorobenzene	9.3	U	12	9.3	2.7	ug/L		04/01/24 15:37	1
Hexachlorocyclopentadiene	56	U Q	58	56	19	ug/L		04/01/24 15:37	1
Hexachlorobutadiene	9.3	U Q	12	9.3	3.3	ug/L		04/01/24 15:37	1
Hexachloroethane	9.3	U Q	12	9.3	5.2	ug/L		04/01/24 15:37	1
Fluoranthene	3.7	U	4.7	3.7	1.3	ug/L		04/01/24 15:37	1
Fluorene	3.7	U	4.7	3.7	0.91	ug/L		04/01/24 15:37	1
Indeno[1,2,3-cd]pyrene	9.3	U	12	9.3	4.0	ug/L		04/01/24 15:37	1
Isophorone	9.3	U	12	9.3	2.3	ug/L		04/01/24 15:37	1
N-Nitrosodi-n-propylamine	9.3	U M	12	9.3	2.2	ug/L		04/01/24 15:37	1
N-Nitrosodiphenylamine	9.3	U	12	9.3	2.1	ug/L		04/01/24 15:37	1
Naphthalene	3.7	U	4.7	3.7	1.8	ug/L		04/01/24 15:37	1
Nitrobenzene	9.3	U	12	9.3	1.5	ug/L		04/01/24 15:37	1
Pentachlorophenol	56	U	58	56	23	ug/L		04/01/24 15:37	1
Phenanthrene	3.7	U	4.7	3.7	1.8	ug/L		04/01/24 15:37	1
Phenol	9.3	U	12	9.3	1.1	ug/L		04/01/24 15:37	1
Pyrene	9.3	U	12	9.3	2.8	ug/L		04/01/24 15:37	1
2-Chloronaphthalene	3.7	U Q	4.7	3.7	1.5	ug/L		04/01/24 15:37	1
2-Chlorophenol	9.3	U	12	9.3	3.0	ug/L		04/01/24 15:37	1
2-Methylnaphthalene	3.7	U Q	4.7	3.7	1.4	ug/L		04/01/24 15:37	1
2-Methylphenol	9.3	U	12	9.3	0.90	ug/L		04/01/24 15:37	1
2-Nitroaniline	3.7	U	12	3.7	3.0	ug/L		04/01/24 15:37	1
2-Nitrophenol	9.3	U	12	9.3	4.0	ug/L		04/01/24 15:37	1
3,3'-Dichlorobenzidine	35	U	58	35	3.9	ug/L		04/01/24 15:37	1
3-Nitroaniline	9.3	U M	12	9.3	3.9	ug/L		04/01/24 15:37	1
4,6-Dinitro-2-methylphenol	35	U M	58	35	4.7	ug/L		04/01/24 15:37	1
4-Bromophenyl phenyl ether	9.3	U	12	9.3	1.2	ug/L		04/01/24 15:37	1
4-Nitroaniline	9.3	U	12	9.3	3.0	ug/L		04/01/24 15:37	1
4-Nitrophenol	15	U M	29	15	11	ug/L		04/01/24 15:37	1
Bis(2-chloroethoxy)methane	9.3	U	12	9.3	2.8	ug/L		04/01/24 15:37	1
Bis(2-chloroethyl)ether	9.3	U	12	9.3	2.3	ug/L		04/01/24 15:37	1

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Client Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Client Sample ID: WUABAFMW-01 (PDB)

Lab Sample ID: 280-189151-1

Date Collected: 03/21/24 11:00

Matrix: Water

Date Received: 03/23/24 09:20

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	9.3	U	12	9.3	3.9	ug/L		04/01/24 15:37	1
2,6-Dinitrotoluene	9.3	U	12	9.3	1.7	ug/L		04/01/24 15:37	1
4-Chloro-3-methylphenol	9.3	U	12	9.3	2.0	ug/L		04/01/24 15:37	1
4-Chloroaniline	15	U	23	15	7.3	ug/L		04/01/24 15:37	1
4-Chlorophenyl phenyl ether	9.3	U	12	9.3	1.4	ug/L		04/01/24 15:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	40		19 - 119	03/28/24 11:50	04/01/24 15:37	1
Phenol-d5 (Surr)	31		10 - 115	03/28/24 11:50	04/01/24 15:37	1
Nitrobenzene-d5 (Surr)	60		44 - 120	03/28/24 11:50	04/01/24 15:37	1
2-Fluorobiphenyl	50		44 - 119	03/28/24 11:50	04/01/24 15:37	1
2,4,6-Tribromophenol (Surr)	78		43 - 140	03/28/24 11:50	04/01/24 15:37	1
Terphenyl-d14 (Surr)	94		50 - 134	03/28/24 11:50	04/01/24 15:37	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide	0.014	U	0.020	0.014	0.0037	ug/L		03/26/24 22:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane	117	M	70 - 130	03/26/24 09:50	03/26/24 22:04	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Calcium	36000		200	64	24	ug/L		03/29/24 16:21	1
Magnesium	4800		200	15	4.2	ug/L		03/29/24 16:21	1
Potassium	2800	J	3000	940	240	ug/L		03/29/24 16:21	1
Sodium	26000		1000	320	97	ug/L		03/29/24 16:21	1

Method: SW846 6010D - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	30	J	100	34	9.1	ug/L		03/30/24 02:17	1
Manganese	70		10	1.8	0.45	ug/L		03/30/24 02:17	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	1.2	J	5.0	2.0	0.50	ug/L		03/28/24 13:53	1
Lead	0.70	U	1.0	0.70	0.23	ug/L		03/28/24 13:53	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bromide (EPA 300.0)	0.40	U	0.50	0.40	0.23	mg/L		03/27/24 14:31	1
Chloride (EPA 300.0)	7.8		3.0	2.5	1.0	mg/L		03/26/24 15:09	1
Sulfate (EPA 300.0)	28		5.0	2.5	1.0	mg/L		03/26/24 15:09	1
Nitrate Nitrite as N (EPA 353.2)	0.056	J	0.10	0.080	0.044	mg/L		04/08/24 19:29	1
Alkalinity (SM 2320B)	110		10	6.4	3.1	mg/L		04/02/24 19:33	1

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Client Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Client Sample ID: WUABAFMW-01 (BP)

Lab Sample ID: 280-189151-2

Date Collected: 03/21/24 17:15

Matrix: Water

Date Received: 03/23/24 09:20

Method: SW846 8260D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylbenzene	0.40	U	1.0	0.40	0.30	ug/L		03/29/24 14:09	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		03/29/24 14:09	1
cis-1,3-Dichloropropene	1.8	U	2.0	1.8	0.63	ug/L		03/29/24 14:09	1
trans-1,3-Dichloropropene	1.8	U	2.0	1.8	0.65	ug/L		03/29/24 14:09	1
N-Propylbenzene	0.80	U	1.0	0.80	0.53	ug/L		03/29/24 14:09	1
n-Butylbenzene	0.80	U	1.0	0.80	0.48	ug/L		03/29/24 14:09	1
4-Chlorotoluene	0.80	U	1.0	0.80	0.21	ug/L		03/29/24 14:09	1
1,4-Dichlorobenzene	0.50	U	1.0	0.50	0.39	ug/L		03/29/24 14:09	1
Ethylene Dibromide	0.80	U	1.0	0.80	0.40	ug/L		03/29/24 14:09	1
3-Chloro-1-propene	0.40	U	2.0	0.40	0.17	ug/L		03/29/24 14:09	1
1,2-Dichloroethane	0.80	U	1.0	0.80	0.54	ug/L		03/29/24 14:09	1
Acrylonitrile	8.0	U	20	8.0	4.5	ug/L		03/29/24 14:09	1
Vinyl acetate	2.0	U	3.0	2.0	0.94	ug/L		03/29/24 14:09	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		03/29/24 14:09	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.37	ug/L		03/29/24 14:09	1
Bromobenzene	0.50	U	1.0	0.50	0.40	ug/L		03/29/24 14:09	1
Methylcyclohexane	0.40	U	1.0	0.40	0.31	ug/L		03/29/24 14:09	1
Toluene	0.40	U	1.0	0.40	0.32	ug/L		03/29/24 14:09	1
Chlorobenzene	0.80	U	1.0	0.80	0.42	ug/L		03/29/24 14:09	1
Tetrahydrofuran	6.4	U	7.0	6.4	2.0	ug/L		03/29/24 14:09	1
Hexane	0.80	U	2.0	0.80	0.16	ug/L		03/29/24 14:09	1
trans-1,4-Dichloro-2-butene	1.6	U	3.0	1.6	1.4	ug/L		03/29/24 14:09	1
Cyclohexane	0.80	U	1.0	0.80	0.44	ug/L		03/29/24 14:09	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.58	ug/L		03/29/24 14:09	1
Chlorodibromomethane	1.8	U	2.0	1.8	0.62	ug/L		03/29/24 14:09	1
Tetrachloroethene	0.80	U	1.0	0.80	0.40	ug/L		03/29/24 14:09	1
sec-Butylbenzene	0.80	U	1.0	0.80	0.45	ug/L		03/29/24 14:09	1
1,3-Dichloropropane	0.80	U	1.0	0.80	0.38	ug/L		03/29/24 14:09	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.32	ug/L		03/29/24 14:09	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	0.37	ug/L		03/29/24 14:09	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		03/29/24 14:09	1
m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.36	ug/L		03/29/24 14:09	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.33	ug/L		03/29/24 14:09	1
Carbon tetrachloride	0.80	U	1.0	0.80	0.57	ug/L		03/29/24 14:09	1
1,1-Dichloropropene	0.80	U	1.0	0.80	0.42	ug/L		03/29/24 14:09	1
2-Hexanone	4.0	U Q	5.0	4.0	1.7	ug/L		03/29/24 14:09	1
2,2-Dichloropropane	0.80	U	1.0	0.80	0.38	ug/L		03/29/24 14:09	1
Ethyl ether	0.80	U	2.0	0.80	0.35	ug/L		03/29/24 14:09	1
1,1,1,2-Tetrachloroethane	0.80	U	1.0	0.80	0.58	ug/L		03/29/24 14:09	1
Acetone	8.0	U	15	8.0	6.6	ug/L		03/29/24 14:09	1
Chloroform	0.80	U	1.0	0.80	0.36	ug/L		03/29/24 14:09	1
Benzene	0.80	U	1.0	0.80	0.31	ug/L		03/29/24 14:09	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	0.39	ug/L		03/29/24 14:09	1
Bromomethane	4.0	U Q	5.0	4.0	2.4	ug/L		03/29/24 14:09	1
Chloromethane	1.0	U	2.0	1.0	0.75	ug/L		03/29/24 14:09	1
Iodomethane	4.0	U Q	5.0	4.0	2.6	ug/L		03/29/24 14:09	1
Dibromomethane	0.40	U	1.0	0.40	0.34	ug/L		03/29/24 14:09	1
Chlorobromomethane	0.80	U	1.0	0.80	0.40	ug/L		03/29/24 14:09	1
Chloroethane	1.6	U	4.0	1.6	1.4	ug/L		03/29/24 14:09	1

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Client Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Client Sample ID: WUABAFMW-01 (BP)

Lab Sample ID: 280-189151-2

Date Collected: 03/21/24 17:15

Matrix: Water

Date Received: 03/23/24 09:20

Method: SW846 8260D - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Vinyl chloride	1.0	U	2.0	1.0	0.51	ug/L		03/29/24 14:09	1
Methylene Chloride	1.8	U	2.0	1.8	0.94	ug/L		03/29/24 14:09	1
Carbon disulfide	0.80	U	2.0	0.80	0.63	ug/L		03/29/24 14:09	1
Bromoform	1.8	U	2.0	1.8	1.2	ug/L		03/29/24 14:09	1
Dichlorobromomethane	0.50	U	1.0	0.50	0.39	ug/L		03/29/24 14:09	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		03/29/24 14:09	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		03/29/24 14:09	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.57	ug/L		03/29/24 14:09	1
Dichlorodifluoromethane	2.5	U Q	3.0	2.5	0.96	ug/L		03/29/24 14:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.8	U	3.0	1.8	0.73	ug/L		03/29/24 14:09	1
1,2-Dichloropropane	0.80	U	1.0	0.80	0.52	ug/L		03/29/24 14:09	1
2-Butanone (MEK)	12	U	15	12	6.0	ug/L		03/29/24 14:09	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		03/29/24 14:09	1
Trichloroethene	0.40	U	1.0	0.40	0.30	ug/L		03/29/24 14:09	1
Methyl acetate	4.0	U Q	5.0	4.0	1.6	ug/L		03/29/24 14:09	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		03/29/24 14:09	1
1,2,3-Trichlorobenzene	0.80	U	2.0	0.80	0.70	ug/L		03/29/24 14:09	1
Hexachlorobutadiene	1.8	U	2.0	1.8	1.2	ug/L		03/29/24 14:09	1
Naphthalene	0.80	U	2.0	0.80	0.63	ug/L		03/29/24 14:09	1
o-Xylene	0.40	U	1.0	0.40	0.33	ug/L		03/29/24 14:09	1
2-Chlorotoluene	0.40	U	1.0	0.40	0.34	ug/L		03/29/24 14:09	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	0.37	ug/L		03/29/24 14:09	1
1,2,4-Trimethylbenzene	0.40	U	1.0	0.40	0.15	ug/L		03/29/24 14:09	1
1,2-Dibromo-3-Chloropropane	4.0	U	5.0	4.0	1.8	ug/L		03/29/24 14:09	1
1,2,3-Trichloropropane	1.8	U	2.5	1.8	0.86	ug/L		03/29/24 14:09	1
Ethyl methacrylate	2.0	U	3.0	2.0	0.86	ug/L		03/29/24 14:09	1
tert-Butylbenzene	0.80	U	1.0	0.80	0.42	ug/L		03/29/24 14:09	1
Isopropylbenzene	0.50	U	1.0	0.50	0.36	ug/L		03/29/24 14:09	1
4-Isopropyltoluene	0.80	U	1.0	0.80	0.43	ug/L		03/29/24 14:09	1
1,2-Dichloroethene, Total	0.40	U	1.0	0.40	0.32	ug/L		03/29/24 14:09	1
1,3-Dichloropropene, Total	0.80	U	2.0	0.80	0.63	ug/L		03/29/24 14:09	1
Trihalomethanes, Total	0.80	U	1.0	0.80	0.36	ug/L		03/29/24 14:09	1
Total BTEX	0.40	U	1.0	0.40	0.30	ug/L		03/29/24 14:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		81 - 118		03/29/24 14:09	1
Dibromofluoromethane (Surr)	97		80 - 119		03/29/24 14:09	1
Toluene-d8 (Surr)	99		89 - 112		03/29/24 14:09	1
4-Bromofluorobenzene (Surr)	105		85 - 114		03/29/24 14:09	1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1'-Biphenyl	8.0	U Q	10	8.0	1.2	ug/L		04/03/24 16:43	1
2,4-Dichlorophenol	8.0	U	10	8.0	3.0	ug/L		04/03/24 16:43	1
2,4-Dimethylphenol	8.0	U	10	8.0	1.4	ug/L		04/03/24 16:43	1
2,4-Dinitrophenol	20	U	30	20	13	ug/L		04/03/24 16:43	1
2,4-Dinitrotoluene	8.0	U	10	8.0	1.4	ug/L		04/03/24 16:43	1
2,4,6-Trichlorophenol	8.0	U	10	8.0	2.3	ug/L		04/03/24 16:43	1
2,4,5-Trichlorophenol	8.0	U	10	8.0	2.6	ug/L		04/03/24 16:43	1
2,2'-oxybis[1-chloropropane]	8.0	U	10	8.0	1.3	ug/L		04/03/24 16:43	1

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Client Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Client Sample ID: WUABAFMW-01 (BP)

Lab Sample ID: 280-189151-2

Date Collected: 03/21/24 17:15

Matrix: Water

Date Received: 03/23/24 09:20

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Di-n-butyl phthalate	3.2	U	4.0	3.2	2.1	ug/L		04/03/24 16:43	1
Di-n-octyl phthalate	8.0	U M	10	8.0	3.6	ug/L		04/03/24 16:43	1
Benzo[a]anthracene	3.2	U	4.0	3.2	0.96	ug/L		04/03/24 16:43	1
Benzo[a]pyrene	3.2	U	4.0	3.2	0.50	ug/L		04/03/24 16:43	1
Benzo[b]fluoranthene	3.2	U	4.0	3.2	2.2	ug/L		04/03/24 16:43	1
Benzo[g,h,i]perylene	3.2	U	4.0	3.2	2.8	ug/L		04/03/24 16:43	1
Benzo[k]fluoranthene	3.2	U	4.0	3.2	1.1	ug/L		04/03/24 16:43	1
Acenaphthene	3.2	U Q	4.0	3.2	0.96	ug/L		04/03/24 16:43	1
Acenaphthylene	3.2	U	4.0	3.2	0.75	ug/L		04/03/24 16:43	1
Acetophenone	8.0	U	10	8.0	2.3	ug/L		04/03/24 16:43	1
Anthracene	3.2	U	4.0	3.2	0.58	ug/L		04/03/24 16:43	1
Atrazine	3.2	U	10	3.2	0.65	ug/L		04/03/24 16:43	1
Benzaldehyde	3.2	U Q	5.0	3.2	1.2	ug/L		04/03/24 16:43	1
Butyl benzyl phthalate	3.2	U	4.0	3.2	1.5	ug/L		04/03/24 16:43	1
Caprolactam	10	U M	15	10	5.5	ug/L		04/03/24 16:43	1
Chrysene	3.2	U	4.0	3.2	0.97	ug/L		04/03/24 16:43	1
Dibenz(a,h)anthracene	8.0	U	10	8.0	4.8	ug/L		04/03/24 16:43	1
Dibenzofuran	3.2	U Q	4.0	3.2	0.95	ug/L		04/03/24 16:43	1
Diethyl phthalate	3.2	U	4.0	3.2	1.4	ug/L		04/03/24 16:43	1
Hexachlorobenzene	8.0	U	10	8.0	2.3	ug/L		04/03/24 16:43	1
Hexachlorocyclopentadiene	48	U Q	50	48	16	ug/L		04/03/24 16:43	1
Hexachlorobutadiene	8.0	U Q	10	8.0	2.9	ug/L		04/03/24 16:43	1
Hexachloroethane	8.0	U Q	10	8.0	4.5	ug/L		04/03/24 16:43	1
Fluoranthene	3.2	U	4.0	3.2	1.1	ug/L		04/03/24 16:43	1
Fluorene	3.2	U	4.0	3.2	0.79	ug/L		04/03/24 16:43	1
Indeno[1,2,3-cd]pyrene	8.0	U	10	8.0	3.4	ug/L		04/03/24 16:43	1
Isophorone	8.0	U	10	8.0	2.0	ug/L		04/03/24 16:43	1
N-Nitrosodi-n-propylamine	8.0	U M	10	8.0	1.9	ug/L		04/03/24 16:43	1
N-Nitrosodiphenylamine	8.0	U	10	8.0	1.8	ug/L		04/03/24 16:43	1
Naphthalene	3.2	U	4.0	3.2	1.5	ug/L		04/03/24 16:43	1
Nitrobenzene	8.0	U	10	8.0	1.3	ug/L		04/03/24 16:43	1
Pentachlorophenol	48	U	50	48	20	ug/L		04/03/24 16:43	1
Phenanthrene	3.2	U	4.0	3.2	1.6	ug/L		04/03/24 16:43	1
Phenol	8.0	U	10	8.0	0.92	ug/L		04/03/24 16:43	1
Pyrene	8.0	U M	10	8.0	2.4	ug/L		04/03/24 16:43	1
2-Chloronaphthalene	3.2	U Q	4.0	3.2	1.3	ug/L		04/03/24 16:43	1
2-Chlorophenol	8.0	U	10	8.0	2.6	ug/L		04/03/24 16:43	1
2-Methylnaphthalene	3.2	U Q	4.0	3.2	1.2	ug/L		04/03/24 16:43	1
2-Methylphenol	8.0	U	10	8.0	0.77	ug/L		04/03/24 16:43	1
2-Nitroaniline	3.2	U	10	3.2	2.6	ug/L		04/03/24 16:43	1
2-Nitrophenol	8.0	U	10	8.0	3.5	ug/L		04/03/24 16:43	1
3,3'-Dichlorobenzidine	30	U	50	30	3.4	ug/L		04/03/24 16:43	1
3-Nitroaniline	8.0	U M	10	8.0	3.3	ug/L		04/03/24 16:43	1
4,6-Dinitro-2-methylphenol	30	U M	50	30	4.0	ug/L		04/03/24 16:43	1
4-Bromophenyl phenyl ether	8.0	U	10	8.0	1.0	ug/L		04/03/24 16:43	1
4-Nitroaniline	8.0	U	10	8.0	2.6	ug/L		04/03/24 16:43	1
4-Nitrophenol	13	U	25	13	9.1	ug/L		04/03/24 16:43	1
Bis(2-chloroethoxy)methane	8.0	U	10	8.0	2.4	ug/L		04/03/24 16:43	1
Bis(2-chloroethyl)ether	8.0	U	10	8.0	2.0	ug/L		04/03/24 16:43	1

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Client Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Client Sample ID: WUABAFMW-01 (BP)

Lab Sample ID: 280-189151-2

Date Collected: 03/21/24 17:15

Matrix: Water

Date Received: 03/23/24 09:20

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	8.0	U	10	8.0	3.3	ug/L		04/03/24 16:43	1
2,6-Dinitrotoluene	8.0	U M	10	8.0	1.4	ug/L		04/03/24 16:43	1
4-Chloro-3-methylphenol	8.0	U	10	8.0	1.7	ug/L		04/03/24 16:43	1
4-Chloroaniline	13	U	20	13	6.3	ug/L		04/03/24 16:43	1
4-Chlorophenyl phenyl ether	8.0	U	10	8.0	1.2	ug/L		04/03/24 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	40		19 - 119	03/28/24 11:50	04/03/24 16:43	1
Phenol-d5 (Surr)	28		10 - 115	03/28/24 11:50	04/03/24 16:43	1
Nitrobenzene-d5 (Surr)	62		44 - 120	03/28/24 11:50	04/03/24 16:43	1
2-Fluorobiphenyl	59		44 - 119	03/28/24 11:50	04/03/24 16:43	1
2,4,6-Tribromophenol (Surr)	75		43 - 140	03/28/24 11:50	04/03/24 16:43	1
Terphenyl-d14 (Surr)	123		50 - 134	03/28/24 11:50	04/03/24 16:43	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide	0.014	U	0.020	0.014	0.0036	ug/L		03/26/24 22:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane	118		70 - 130	03/26/24 09:50	03/26/24 22:31	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Calcium	34000		200	64	24	ug/L		03/29/24 16:25	1
Magnesium	4700		200	15	4.2	ug/L		03/29/24 16:25	1
Potassium	2700	J	3000	940	240	ug/L		03/29/24 16:25	1
Sodium	25000		1000	320	97	ug/L		03/29/24 16:25	1

Method: SW846 6010D - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	48	J	100	34	9.1	ug/L		03/30/24 02:21	1
Manganese	150		10	1.8	0.45	ug/L		03/30/24 02:21	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	0.94	J	5.0	2.0	0.50	ug/L		03/28/24 13:57	1
Lead	0.70	U	1.0	0.70	0.23	ug/L		03/28/24 13:57	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bromide (EPA 300.0)	0.40	U	0.50	0.40	0.23	mg/L		03/27/24 15:16	1
Chloride (EPA 300.0)	8.0		3.0	2.5	1.0	mg/L		03/26/24 15:55	1
Sulfate (EPA 300.0)	27		5.0	2.5	1.0	mg/L		03/26/24 15:55	1
Nitrate Nitrite as N (EPA 353.2)	0.048	J	0.10	0.080	0.044	mg/L		04/09/24 15:21	1
Alkalinity (SM 2320B)	110		10	6.4	3.1	mg/L		04/02/24 19:21	1

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Client Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Client Sample ID: WUABAFMW-01 (Rinsate)

Lab Sample ID: 280-189151-3

Date Collected: 03/21/24 18:45

Matrix: Water

Date Received: 03/23/24 09:20

Method: SW846 8260D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylbenzene	0.40	U	1.0	0.40	0.30	ug/L		03/29/24 14:29	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		03/29/24 14:29	1
cis-1,3-Dichloropropene	1.8	U	2.0	1.8	0.63	ug/L		03/29/24 14:29	1
trans-1,3-Dichloropropene	1.8	U	2.0	1.8	0.65	ug/L		03/29/24 14:29	1
N-Propylbenzene	0.80	U	1.0	0.80	0.53	ug/L		03/29/24 14:29	1
n-Butylbenzene	0.80	U	1.0	0.80	0.48	ug/L		03/29/24 14:29	1
4-Chlorotoluene	0.80	U	1.0	0.80	0.21	ug/L		03/29/24 14:29	1
1,4-Dichlorobenzene	0.50	U	1.0	0.50	0.39	ug/L		03/29/24 14:29	1
Ethylene Dibromide	0.80	U	1.0	0.80	0.40	ug/L		03/29/24 14:29	1
3-Chloro-1-propene	0.40	U	2.0	0.40	0.17	ug/L		03/29/24 14:29	1
1,2-Dichloroethane	0.80	U	1.0	0.80	0.54	ug/L		03/29/24 14:29	1
Acrylonitrile	8.0	U	20	8.0	4.5	ug/L		03/29/24 14:29	1
Vinyl acetate	2.0	U	3.0	2.0	0.94	ug/L		03/29/24 14:29	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		03/29/24 14:29	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.37	ug/L		03/29/24 14:29	1
Bromobenzene	0.50	U	1.0	0.50	0.40	ug/L		03/29/24 14:29	1
Methylcyclohexane	0.40	U	1.0	0.40	0.31	ug/L		03/29/24 14:29	1
Toluene	0.40	U	1.0	0.40	0.32	ug/L		03/29/24 14:29	1
Chlorobenzene	0.80	U	1.0	0.80	0.42	ug/L		03/29/24 14:29	1
Tetrahydrofuran	6.4	U	7.0	6.4	2.0	ug/L		03/29/24 14:29	1
Hexane	0.80	U	2.0	0.80	0.16	ug/L		03/29/24 14:29	1
trans-1,4-Dichloro-2-butene	1.6	U	3.0	1.6	1.4	ug/L		03/29/24 14:29	1
Cyclohexane	0.80	U	1.0	0.80	0.44	ug/L		03/29/24 14:29	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.58	ug/L		03/29/24 14:29	1
Chlorodibromomethane	1.8	U	2.0	1.8	0.62	ug/L		03/29/24 14:29	1
Tetrachloroethene	0.80	U	1.0	0.80	0.40	ug/L		03/29/24 14:29	1
sec-Butylbenzene	0.80	U	1.0	0.80	0.45	ug/L		03/29/24 14:29	1
1,3-Dichloropropane	0.80	U	1.0	0.80	0.38	ug/L		03/29/24 14:29	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.32	ug/L		03/29/24 14:29	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	0.37	ug/L		03/29/24 14:29	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		03/29/24 14:29	1
m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.36	ug/L		03/29/24 14:29	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.33	ug/L		03/29/24 14:29	1
Carbon tetrachloride	0.80	U	1.0	0.80	0.57	ug/L		03/29/24 14:29	1
1,1-Dichloropropene	0.80	U	1.0	0.80	0.42	ug/L		03/29/24 14:29	1
2-Hexanone	4.0	U Q	5.0	4.0	1.7	ug/L		03/29/24 14:29	1
2,2-Dichloropropane	0.80	U	1.0	0.80	0.38	ug/L		03/29/24 14:29	1
Ethyl ether	0.80	U	2.0	0.80	0.35	ug/L		03/29/24 14:29	1
1,1,1,2-Tetrachloroethane	0.80	U	1.0	0.80	0.58	ug/L		03/29/24 14:29	1
Acetone	8.0	U	15	8.0	6.6	ug/L		03/29/24 14:29	1
Chloroform	0.80	U M	1.0	0.80	0.36	ug/L		03/29/24 14:29	1
Benzene	0.80	U	1.0	0.80	0.31	ug/L		03/29/24 14:29	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	0.39	ug/L		03/29/24 14:29	1
Bromomethane	4.0	U Q	5.0	4.0	2.4	ug/L		03/29/24 14:29	1
Chloromethane	1.0	U	2.0	1.0	0.75	ug/L		03/29/24 14:29	1
Iodomethane	4.0	U Q	5.0	4.0	2.6	ug/L		03/29/24 14:29	1
Dibromomethane	0.40	U	1.0	0.40	0.34	ug/L		03/29/24 14:29	1
Chlorobromomethane	0.80	U	1.0	0.80	0.40	ug/L		03/29/24 14:29	1
Chloroethane	1.6	U	4.0	1.6	1.4	ug/L		03/29/24 14:29	1

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Client Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Client Sample ID: WUABAFMW-01 (Rinsate)

Lab Sample ID: 280-189151-3

Date Collected: 03/21/24 18:45

Matrix: Water

Date Received: 03/23/24 09:20

Method: SW846 8260D - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Vinyl chloride	1.0	U	2.0	1.0	0.51	ug/L		03/29/24 14:29	1
Methylene Chloride	1.8	U	2.0	1.8	0.94	ug/L		03/29/24 14:29	1
Carbon disulfide	0.80	U	2.0	0.80	0.63	ug/L		03/29/24 14:29	1
Bromoform	1.8	U	2.0	1.8	1.2	ug/L		03/29/24 14:29	1
Dichlorobromomethane	0.50	U	1.0	0.50	0.39	ug/L		03/29/24 14:29	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		03/29/24 14:29	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		03/29/24 14:29	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.57	ug/L		03/29/24 14:29	1
Dichlorodifluoromethane	2.5	U Q	3.0	2.5	0.96	ug/L		03/29/24 14:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.8	U	3.0	1.8	0.73	ug/L		03/29/24 14:29	1
1,2-Dichloropropane	0.80	U	1.0	0.80	0.52	ug/L		03/29/24 14:29	1
2-Butanone (MEK)	12	U	15	12	6.0	ug/L		03/29/24 14:29	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		03/29/24 14:29	1
Trichloroethene	0.40	U	1.0	0.40	0.30	ug/L		03/29/24 14:29	1
Methyl acetate	4.0	U Q	5.0	4.0	1.6	ug/L		03/29/24 14:29	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		03/29/24 14:29	1
1,2,3-Trichlorobenzene	0.80	U	2.0	0.80	0.70	ug/L		03/29/24 14:29	1
Hexachlorobutadiene	1.8	U	2.0	1.8	1.2	ug/L		03/29/24 14:29	1
Naphthalene	0.80	U	2.0	0.80	0.63	ug/L		03/29/24 14:29	1
o-Xylene	0.40	U	1.0	0.40	0.33	ug/L		03/29/24 14:29	1
2-Chlorotoluene	0.40	U	1.0	0.40	0.34	ug/L		03/29/24 14:29	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	0.37	ug/L		03/29/24 14:29	1
1,2,4-Trimethylbenzene	0.40	U	1.0	0.40	0.15	ug/L		03/29/24 14:29	1
1,2-Dibromo-3-Chloropropane	4.0	U	5.0	4.0	1.8	ug/L		03/29/24 14:29	1
1,2,3-Trichloropropane	1.8	U	2.5	1.8	0.86	ug/L		03/29/24 14:29	1
Ethyl methacrylate	2.0	U	3.0	2.0	0.86	ug/L		03/29/24 14:29	1
tert-Butylbenzene	0.80	U	1.0	0.80	0.42	ug/L		03/29/24 14:29	1
Isopropylbenzene	0.50	U	1.0	0.50	0.36	ug/L		03/29/24 14:29	1
4-Isopropyltoluene	0.80	U	1.0	0.80	0.43	ug/L		03/29/24 14:29	1
1,2-Dichloroethene, Total	0.40	U	1.0	0.40	0.32	ug/L		03/29/24 14:29	1
1,3-Dichloropropene, Total	0.80	U	2.0	0.80	0.63	ug/L		03/29/24 14:29	1
Trihalomethanes, Total	0.80	U	1.0	0.80	0.36	ug/L		03/29/24 14:29	1
Total BTEX	0.40	U	1.0	0.40	0.30	ug/L		03/29/24 14:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		81 - 118		03/29/24 14:29	1
Dibromofluoromethane (Surr)	95		80 - 119		03/29/24 14:29	1
Toluene-d8 (Surr)	98		89 - 112		03/29/24 14:29	1
4-Bromofluorobenzene (Surr)	102		85 - 114		03/29/24 14:29	1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1'-Biphenyl	8.0	U Q	10	8.0	1.2	ug/L		04/01/24 16:22	1
2,4-Dichlorophenol	8.0	U	10	8.0	3.0	ug/L		04/01/24 16:22	1
2,4-Dimethylphenol	8.0	U	10	8.0	1.4	ug/L		04/01/24 16:22	1
2,4-Dinitrophenol	20	U	30	20	13	ug/L		04/01/24 16:22	1
2,4-Dinitrotoluene	8.0	U	10	8.0	1.4	ug/L		04/01/24 16:22	1
2,4,6-Trichlorophenol	8.0	U	10	8.0	2.3	ug/L		04/01/24 16:22	1
2,4,5-Trichlorophenol	8.0	U	10	8.0	2.6	ug/L		04/01/24 16:22	1
2,2'-oxybis[1-chloropropane]	8.0	U	10	8.0	1.3	ug/L		04/01/24 16:22	1

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Client Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Client Sample ID: WUABAFMW-01 (Rinsate)

Lab Sample ID: 280-189151-3

Date Collected: 03/21/24 18:45

Matrix: Water

Date Received: 03/23/24 09:20

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Di-n-butyl phthalate	3.2	U	4.0	3.2	2.1	ug/L		04/01/24 16:22	1
Di-n-octyl phthalate	8.0	U M	10	8.0	3.6	ug/L		04/01/24 16:22	1
Benzo[a]anthracene	3.2	U	4.0	3.2	0.97	ug/L		04/01/24 16:22	1
Benzo[a]pyrene	3.2	U	4.0	3.2	0.50	ug/L		04/01/24 16:22	1
Benzo[b]fluoranthene	3.2	U	4.0	3.2	2.2	ug/L		04/01/24 16:22	1
Benzo[g,h,i]perylene	3.2	U	4.0	3.2	2.9	ug/L		04/01/24 16:22	1
Benzo[k]fluoranthene	3.2	U	4.0	3.2	1.1	ug/L		04/01/24 16:22	1
Acenaphthene	3.2	U Q	4.0	3.2	0.97	ug/L		04/01/24 16:22	1
Acenaphthylene	3.2	U	4.0	3.2	0.75	ug/L		04/01/24 16:22	1
Acetophenone	8.0	U	10	8.0	2.3	ug/L		04/01/24 16:22	1
Anthracene	3.2	U	4.0	3.2	0.58	ug/L		04/01/24 16:22	1
Atrazine	3.2	U	10	3.2	0.65	ug/L		04/01/24 16:22	1
Benzaldehyde	3.2	U	5.0	3.2	1.2	ug/L		04/01/24 16:22	1
Butyl benzyl phthalate	3.2	U	4.0	3.2	1.5	ug/L		04/01/24 16:22	1
Caprolactam	10	U	15	10	5.5	ug/L		04/01/24 16:22	1
Chrysene	3.2	U	4.0	3.2	0.98	ug/L		04/01/24 16:22	1
Dibenz(a,h)anthracene	8.0	U	10	8.0	4.8	ug/L		04/01/24 16:22	1
Dibenzofuran	3.2	U Q	4.0	3.2	0.96	ug/L		04/01/24 16:22	1
Diethyl phthalate	3.2	U	4.0	3.2	1.4	ug/L		04/01/24 16:22	1
Hexachlorobenzene	8.0	U	10	8.0	2.3	ug/L		04/01/24 16:22	1
Hexachlorocyclopentadiene	48	U Q	50	48	16	ug/L		04/01/24 16:22	1
Hexachlorobutadiene	8.0	U Q	10	8.0	2.9	ug/L		04/01/24 16:22	1
Hexachloroethane	8.0	U Q	10	8.0	4.5	ug/L		04/01/24 16:22	1
Fluoranthene	3.2	U	4.0	3.2	1.1	ug/L		04/01/24 16:22	1
Fluorene	3.2	U	4.0	3.2	0.79	ug/L		04/01/24 16:22	1
Indeno[1,2,3-cd]pyrene	8.0	U	10	8.0	3.4	ug/L		04/01/24 16:22	1
Isophorone	8.0	U	10	8.0	2.0	ug/L		04/01/24 16:22	1
N-Nitrosodi-n-propylamine	8.0	U M	10	8.0	1.9	ug/L		04/01/24 16:22	1
N-Nitrosodiphenylamine	8.0	U	10	8.0	1.8	ug/L		04/01/24 16:22	1
Naphthalene	3.2	U	4.0	3.2	1.5	ug/L		04/01/24 16:22	1
Nitrobenzene	8.0	U M	10	8.0	1.3	ug/L		04/01/24 16:22	1
Pentachlorophenol	48	U	50	48	20	ug/L		04/01/24 16:22	1
Phenanthrene	3.2	U	4.0	3.2	1.6	ug/L		04/01/24 16:22	1
Phenol	8.0	U	10	8.0	0.93	ug/L		04/01/24 16:22	1
Pyrene	8.0	U	10	8.0	2.4	ug/L		04/01/24 16:22	1
2-Chloronaphthalene	3.2	U Q	4.0	3.2	1.3	ug/L		04/01/24 16:22	1
2-Chlorophenol	8.0	U	10	8.0	2.6	ug/L		04/01/24 16:22	1
2-Methylnaphthalene	3.2	U Q	4.0	3.2	1.2	ug/L		04/01/24 16:22	1
2-Methylphenol	8.0	U	10	8.0	0.77	ug/L		04/01/24 16:22	1
2-Nitroaniline	3.2	U	10	3.2	2.6	ug/L		04/01/24 16:22	1
2-Nitrophenol	8.0	U	10	8.0	3.5	ug/L		04/01/24 16:22	1
3,3'-Dichlorobenzidine	30	U	50	30	3.4	ug/L		04/01/24 16:22	1
3-Nitroaniline	8.0	U M	10	8.0	3.4	ug/L		04/01/24 16:22	1
4,6-Dinitro-2-methylphenol	30	U M	50	30	4.1	ug/L		04/01/24 16:22	1
4-Bromophenyl phenyl ether	8.0	U	10	8.0	1.0	ug/L		04/01/24 16:22	1
4-Nitroaniline	8.0	U	10	8.0	2.6	ug/L		04/01/24 16:22	1
4-Nitrophenol	13	U	25	13	9.1	ug/L		04/01/24 16:22	1
Bis(2-chloroethoxy)methane	8.0	U	10	8.0	2.4	ug/L		04/01/24 16:22	1
Bis(2-chloroethyl)ether	8.0	U	10	8.0	2.0	ug/L		04/01/24 16:22	1

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Client Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Client Sample ID: WUABAFMW-01 (Rinsate)

Lab Sample ID: 280-189151-3

Date Collected: 03/21/24 18:45

Matrix: Water

Date Received: 03/23/24 09:20

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	11		10	8.0	3.3	ug/L		04/01/24 16:22	1
2,6-Dinitrotoluene	8.0	U M	10	8.0	1.4	ug/L		04/01/24 16:22	1
4-Chloro-3-methylphenol	8.0	U	10	8.0	1.7	ug/L		04/01/24 16:22	1
4-Chloroaniline	13	U	20	13	6.3	ug/L		04/01/24 16:22	1
4-Chlorophenyl phenyl ether	8.0	U	10	8.0	1.2	ug/L		04/01/24 16:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	38		19 - 119	03/28/24 11:50	04/01/24 16:22	1
Phenol-d5 (Surr)	28		10 - 115	03/28/24 11:50	04/01/24 16:22	1
Nitrobenzene-d5 (Surr)	62		44 - 120	03/28/24 11:50	04/01/24 16:22	1
2-Fluorobiphenyl	51		44 - 119	03/28/24 11:50	04/01/24 16:22	1
2,4,6-Tribromophenol (Surr)	77		43 - 140	03/28/24 11:50	04/01/24 16:22	1
Terphenyl-d14 (Surr)	95		50 - 134	03/28/24 11:50	04/01/24 16:22	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide	0.014	U	0.020	0.014	0.0037	ug/L		03/26/24 22:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane	115		70 - 130	03/26/24 09:50	03/26/24 22:58	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Calcium	33000		200	64	24	ug/L		03/29/24 16:30	1
Magnesium	4500		200	15	4.2	ug/L		03/29/24 16:30	1
Potassium	2600	J	3000	940	240	ug/L		03/29/24 16:30	1
Sodium	24000		1000	320	97	ug/L		03/29/24 16:30	1

Method: SW846 6010D - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	26	J	100	34	9.1	ug/L		03/30/24 02:26	1
Manganese	150		10	1.8	0.45	ug/L		03/30/24 02:26	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	0.84	J	5.0	2.0	0.50	ug/L		03/28/24 14:00	1
Lead	0.70	U	1.0	0.70	0.23	ug/L		03/28/24 14:00	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bromide (EPA 300.0)	0.40	U	0.50	0.40	0.23	mg/L		03/27/24 15:27	1
Chloride (EPA 300.0)	7.9	M	3.0	2.5	1.0	mg/L		03/26/24 16:06	1
Sulfate (EPA 300.0)	27		5.0	2.5	1.0	mg/L		03/26/24 16:06	1
Nitrate Nitrite as N (EPA 353.2)	0.051	J	0.10	0.080	0.044	mg/L		04/09/24 15:23	1
Alkalinity (SM 2320B)	110		10	6.4	3.1	mg/L		04/02/24 19:27	1

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Default Detection Limits

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8260D - Volatile Organic Compounds (GC/MS)

Analyte	LOQ	DL	Units
1,1,1,2-Tetrachloroethane	1.0	0.58	ug/L
1,1,1-Trichloroethane	1.0	0.39	ug/L
1,1,2,2-Tetrachloroethane	1.0	0.21	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	3.0	0.73	ug/L
1,1,2-Trichloroethane	1.0	0.27	ug/L
1,1-Dichloroethane	1.0	0.22	ug/L
1,1-Dichloroethene	1.0	0.23	ug/L
1,1-Dichloropropene	1.0	0.42	ug/L
1,2,3-Trichlorobenzene	2.0	0.70	ug/L
1,2,3-Trichloropropane	2.5	0.86	ug/L
1,2,4-Trichlorobenzene	1.0	0.58	ug/L
1,2,4-Trimethylbenzene	1.0	0.15	ug/L
1,2-Dibromo-3-Chloropropane	5.0	1.8	ug/L
1,2-Dichlorobenzene	1.0	0.37	ug/L
1,2-Dichloroethane	1.0	0.54	ug/L
1,2-Dichloroethene, Total	1.0	0.32	ug/L
1,2-Dichloropropane	1.0	0.52	ug/L
1,3,5-Trimethylbenzene	1.0	0.37	ug/L
1,3-Dichlorobenzene	1.0	0.33	ug/L
1,3-Dichloropropane	1.0	0.38	ug/L
1,3-Dichloropropene, Total	2.0	0.63	ug/L
1,4-Dichlorobenzene	1.0	0.39	ug/L
2,2-Dichloropropane	1.0	0.38	ug/L
2-Butanone (MEK)	15	6.0	ug/L
2-Chlorotoluene	1.0	0.34	ug/L
2-Hexanone	5.0	1.7	ug/L
3-Chloro-1-propene	2.0	0.17	ug/L
4-Chlorotoluene	1.0	0.21	ug/L
4-Isopropyltoluene	1.0	0.43	ug/L
4-Methyl-2-pentanone (MIBK)	5.0	0.98	ug/L
Acetone	15	6.6	ug/L
Acrylonitrile	20	4.5	ug/L
Benzene	1.0	0.31	ug/L
Bromobenzene	1.0	0.40	ug/L
Bromoform	2.0	1.2	ug/L
Bromomethane	5.0	2.4	ug/L
Carbon disulfide	2.0	0.63	ug/L
Carbon tetrachloride	1.0	0.57	ug/L
Chlorobenzene	1.0	0.42	ug/L
Chlorobromomethane	1.0	0.40	ug/L
Chlorodibromomethane	2.0	0.62	ug/L
Chloroethane	4.0	1.4	ug/L
Chloroform	1.0	0.36	ug/L
Chloromethane	2.0	0.75	ug/L
cis-1,2-Dichloroethene	1.0	0.32	ug/L
cis-1,3-Dichloropropene	2.0	0.63	ug/L
Cyclohexane	1.0	0.44	ug/L
Dibromomethane	1.0	0.34	ug/L
Dichlorobromomethane	1.0	0.39	ug/L
Dichlorodifluoromethane	3.0	0.96	ug/L
Ethyl ether	2.0	0.35	ug/L
Ethyl methacrylate	3.0	0.86	ug/L
Ethylbenzene	1.0	0.30	ug/L

Default Detection Limits

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8260D - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	LOQ	DL	Units
Ethylene Dibromide	1.0	0.40	ug/L
Hexachlorobutadiene	2.0	1.2	ug/L
Hexane	2.0	0.16	ug/L
Iodomethane	5.0	2.6	ug/L
Isopropylbenzene	1.0	0.36	ug/L
Methyl acetate	5.0	1.6	ug/L
Methyl tert-butyl ether	5.0	0.25	ug/L
Methylcyclohexane	1.0	0.31	ug/L
Methylene Chloride	2.0	0.94	ug/L
m-Xylene & p-Xylene	2.0	0.36	ug/L
Naphthalene	2.0	0.63	ug/L
n-Butylbenzene	1.0	0.48	ug/L
N-Propylbenzene	1.0	0.53	ug/L
o-Xylene	1.0	0.33	ug/L
sec-Butylbenzene	1.0	0.45	ug/L
Styrene	1.0	0.36	ug/L
tert-Butylbenzene	1.0	0.42	ug/L
Tetrachloroethene	1.0	0.40	ug/L
Tetrahydrofuran	7.0	2.0	ug/L
Toluene	1.0	0.32	ug/L
Total BTEX	1.0	0.30	ug/L
trans-1,2-Dichloroethene	1.0	0.37	ug/L
trans-1,3-Dichloropropene	2.0	0.65	ug/L
trans-1,4-Dichloro-2-butene	3.0	1.4	ug/L
Trichloroethene	1.0	0.30	ug/L
Trichlorofluoromethane	2.0	0.57	ug/L
Trihalomethanes, Total	1.0	0.36	ug/L
Vinyl acetate	3.0	0.94	ug/L
Vinyl chloride	2.0	0.51	ug/L

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Prep: 3510C

Analyte	LOQ	DL	Units
1,1'-Biphenyl	10	1.2	ug/L
2,2'-oxybis[1-chloropropane]	10	1.3	ug/L
2,4,5-Trichlorophenol	10	2.6	ug/L
2,4,6-Trichlorophenol	10	2.3	ug/L
2,4-Dichlorophenol	10	3.0	ug/L
2,4-Dimethylphenol	10	1.4	ug/L
2,4-Dinitrophenol	30	13	ug/L
2,4-Dinitrotoluene	10	1.4	ug/L
2,6-Dinitrotoluene	10	1.4	ug/L
2-Chloronaphthalene	4.0	1.3	ug/L
2-Chlorophenol	10	2.6	ug/L
2-Methylnaphthalene	4.0	1.2	ug/L
2-Methylphenol	10	0.77	ug/L
2-Nitroaniline	10	2.6	ug/L
2-Nitrophenol	10	3.5	ug/L
3,3'-Dichlorobenzidine	50	3.4	ug/L
3-Nitroaniline	10	3.3	ug/L
4,6-Dinitro-2-methylphenol	50	4.0	ug/L
4-Bromophenyl phenyl ether	10	1.0	ug/L

Default Detection Limits

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Prep: 3510C

Analyte	LOQ	DL	Units
4-Chloro-3-methylphenol	10	1.7	ug/L
4-Chloroaniline	20	6.3	ug/L
4-Chlorophenyl phenyl ether	10	1.2	ug/L
4-Nitroaniline	10	2.6	ug/L
4-Nitrophenol	25	9.1	ug/L
Acenaphthene	4.0	0.96	ug/L
Acenaphthylene	4.0	0.75	ug/L
Acetophenone	10	2.3	ug/L
Anthracene	4.0	0.58	ug/L
Atrazine	10	0.65	ug/L
Benzaldehyde	5.0	1.2	ug/L
Benzo[a]anthracene	4.0	0.96	ug/L
Benzo[a]pyrene	4.0	0.50	ug/L
Benzo[b]fluoranthene	4.0	2.2	ug/L
Benzo[g,h,i]perylene	4.0	2.8	ug/L
Benzo[k]fluoranthene	4.0	1.1	ug/L
Bis(2-chloroethoxy)methane	10	2.4	ug/L
Bis(2-chloroethyl)ether	10	2.0	ug/L
Bis(2-ethylhexyl) phthalate	10	3.3	ug/L
Butyl benzyl phthalate	4.0	1.5	ug/L
Caprolactam	15	5.5	ug/L
Chrysene	4.0	0.97	ug/L
Dibenz(a,h)anthracene	10	4.8	ug/L
Dibenzofuran	4.0	0.95	ug/L
Diethyl phthalate	4.0	1.4	ug/L
Di-n-butyl phthalate	4.0	2.1	ug/L
Di-n-octyl phthalate	10	3.6	ug/L
Fluoranthene	4.0	1.1	ug/L
Fluorene	4.0	0.78	ug/L
Hexachlorobenzene	10	2.3	ug/L
Hexachlorobutadiene	10	2.9	ug/L
Hexachlorocyclopentadiene	50	16	ug/L
Hexachloroethane	10	4.5	ug/L
Indeno[1,2,3-cd]pyrene	10	3.4	ug/L
Isophorone	10	2.0	ug/L
Naphthalene	4.0	1.5	ug/L
Nitrobenzene	10	1.3	ug/L
N-Nitrosodi-n-propylamine	10	1.9	ug/L
N-Nitrosodiphenylamine	10	1.8	ug/L
Pentachlorophenol	50	20	ug/L
Phenanthrene	4.0	1.6	ug/L
Phenol	10	0.92	ug/L
Pyrene	10	2.4	ug/L

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Prep: 8011

Analyte	LOQ	DL	Units
Ethylene Dibromide	0.020	0.0037	ug/L

Method: 6010D - Metals (ICP)

Prep: 3020A

Default Detection Limits

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 6010D - Metals (ICP)

Prep: 3020A

Analyte	LOQ	DL	Units
Calcium	200	24	ug/L
Magnesium	200	4.2	ug/L
Potassium	3000	240	ug/L
Sodium	1000	97	ug/L

Method: 6010D - Metals (ICP) - Dissolved

Prep: 3005A

Analyte	LOQ	DL	Units
Iron	100	9.1	ug/L
Manganese	10	0.45	ug/L

Method: 6020B - Metals (ICP/MS)

Prep: 3020A

Analyte	LOQ	DL	Units
Arsenic	5.0	0.50	ug/L
Lead	1.0	0.23	ug/L

General Chemistry

Analyte	LOQ	DL	Units
Bromide	0.50	0.23	mg/L
Chloride	3.0	1.0	mg/L
Sulfate	5.0	1.0	mg/L
Nitrate Nitrite as N	0.10	0.044	mg/L
Alkalinity	10	3.1	mg/L

Surrogate Summary

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8260D - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (81-118)	DBFM (80-119)	TOL (89-112)	BFB (85-114)
280-189151-1	WUABAFMW-01 (PDB)	98	95	100	105
280-189151-2	WUABAFMW-01 (BP)	99	97	99	105
280-189151-3	WUABAFMW-01 (Rinsate)	99	95	98	102
LCS 280-647592/4	Lab Control Sample	103	93	100	97
LCSD 280-647592/5	Lab Control Sample Dup	103	94	101	96
MB 280-647592/9	Method Blank	98	96	98	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (19-119)	PHL (10-115)	NBZ (44-120)	FBP (44-119)	TBP (43-140)	TPHL (50-134)
280-189151-1	WUABAFMW-01 (PDB)	40	31	60	50	78	94
280-189151-2	WUABAFMW-01 (BP)	40	28	62	59	75	123
280-189151-3	WUABAFMW-01 (Rinsate)	38	28	62	51	77	95
LCS 280-647471/2-A	Lab Control Sample	44	31	78	73	95	87
LCSD 280-647471/3-A	Lab Control Sample Dup	41	28	69	61	95	82
MB 280-647471/1-A	Method Blank	36	25	66	50	74	92

Surrogate Legend

2FP = 2-Fluorophenol (Surr)

PHL = Phenol-d5 (Surr)

NBZ = Nitrobenzene-d5 (Surr)

FBP = 2-Fluorobiphenyl

TBP = 2,4,6-Tribromophenol (Surr)

TPHL = Terphenyl-d14 (Surr)

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	12DBP1
		(70-130)
280-189151-1	WUABAFMW-01 (PDB)	117 M
280-189151-2	WUABAFMW-01 (BP)	118
280-189151-3	WUABAFMW-01 (Rinsate)	115
LCS 280-647144/2-A	Lab Control Sample	110
LCSD 280-647144/3-A	Lab Control Sample Dup	106
MB 280-647144/1-A	Method Blank	110

Surrogate Legend

12DBP = 1,2-Dibromopropane

QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8260D - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-647592/9

Matrix: Water

Analysis Batch: 647592

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylbenzene	0.40	U	1.0	0.40	0.30	ug/L		03/29/24 10:37	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		03/29/24 10:37	1
cis-1,3-Dichloropropene	1.8	U	2.0	1.8	0.63	ug/L		03/29/24 10:37	1
trans-1,3-Dichloropropene	1.8	U	2.0	1.8	0.65	ug/L		03/29/24 10:37	1
N-Propylbenzene	0.80	U	1.0	0.80	0.53	ug/L		03/29/24 10:37	1
n-Butylbenzene	0.80	U	1.0	0.80	0.48	ug/L		03/29/24 10:37	1
4-Chlorotoluene	0.80	U	1.0	0.80	0.21	ug/L		03/29/24 10:37	1
1,4-Dichlorobenzene	0.50	U	1.0	0.50	0.39	ug/L		03/29/24 10:37	1
Ethylene Dibromide	0.80	U	1.0	0.80	0.40	ug/L		03/29/24 10:37	1
3-Chloro-1-propene	0.40	U	2.0	0.40	0.17	ug/L		03/29/24 10:37	1
1,2-Dichloroethane	0.80	U	1.0	0.80	0.54	ug/L		03/29/24 10:37	1
Acrylonitrile	8.0	U	20	8.0	4.5	ug/L		03/29/24 10:37	1
Vinyl acetate	2.0	U	3.0	2.0	0.94	ug/L		03/29/24 10:37	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		03/29/24 10:37	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.37	ug/L		03/29/24 10:37	1
Bromobenzene	0.50	U	1.0	0.50	0.40	ug/L		03/29/24 10:37	1
Methylcyclohexane	0.40	U	1.0	0.40	0.31	ug/L		03/29/24 10:37	1
Toluene	0.40	U	1.0	0.40	0.32	ug/L		03/29/24 10:37	1
Chlorobenzene	0.80	U	1.0	0.80	0.42	ug/L		03/29/24 10:37	1
Tetrahydrofuran	6.4	U	7.0	6.4	2.0	ug/L		03/29/24 10:37	1
Hexane	0.80	U	2.0	0.80	0.16	ug/L		03/29/24 10:37	1
trans-1,4-Dichloro-2-butene	1.6	U	3.0	1.6	1.4	ug/L		03/29/24 10:37	1
Cyclohexane	0.80	U	1.0	0.80	0.44	ug/L		03/29/24 10:37	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.58	ug/L		03/29/24 10:37	1
Chlorodibromomethane	1.8	U	2.0	1.8	0.62	ug/L		03/29/24 10:37	1
Tetrachloroethene	0.80	U	1.0	0.80	0.40	ug/L		03/29/24 10:37	1
sec-Butylbenzene	0.80	U	1.0	0.80	0.45	ug/L		03/29/24 10:37	1
1,3-Dichloropropane	0.80	U	1.0	0.80	0.38	ug/L		03/29/24 10:37	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.32	ug/L		03/29/24 10:37	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	0.37	ug/L		03/29/24 10:37	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		03/29/24 10:37	1
m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.36	ug/L		03/29/24 10:37	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.33	ug/L		03/29/24 10:37	1
Carbon tetrachloride	0.80	U	1.0	0.80	0.57	ug/L		03/29/24 10:37	1
1,1-Dichloropropene	0.80	U	1.0	0.80	0.42	ug/L		03/29/24 10:37	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		03/29/24 10:37	1
2,2-Dichloropropane	0.80	U	1.0	0.80	0.38	ug/L		03/29/24 10:37	1
Ethyl ether	0.80	U	2.0	0.80	0.35	ug/L		03/29/24 10:37	1
1,1,1,2-Tetrachloroethane	0.80	U	1.0	0.80	0.58	ug/L		03/29/24 10:37	1
Acetone	8.0	U	15	8.0	6.6	ug/L		03/29/24 10:37	1
Chloroform	0.80	U	1.0	0.80	0.36	ug/L		03/29/24 10:37	1
Benzene	0.80	U	1.0	0.80	0.31	ug/L		03/29/24 10:37	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	0.39	ug/L		03/29/24 10:37	1
Bromomethane	4.0	U	5.0	4.0	2.4	ug/L		03/29/24 10:37	1
Chloromethane	1.0	U	2.0	1.0	0.75	ug/L		03/29/24 10:37	1
Iodomethane	4.0	U	5.0	4.0	2.6	ug/L		03/29/24 10:37	1
Dibromomethane	0.40	U	1.0	0.40	0.34	ug/L		03/29/24 10:37	1
Chlorobromomethane	0.80	U	1.0	0.80	0.40	ug/L		03/29/24 10:37	1

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QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8260D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-647592/9

Matrix: Water

Analysis Batch: 647592

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chloroethane	1.6	U	4.0	1.6	1.4	ug/L		03/29/24 10:37	1
Vinyl chloride	1.0	U	2.0	1.0	0.51	ug/L		03/29/24 10:37	1
Methylene Chloride	1.8	U	2.0	1.8	0.94	ug/L		03/29/24 10:37	1
Carbon disulfide	0.80	U	2.0	0.80	0.63	ug/L		03/29/24 10:37	1
Bromoform	1.8	U	2.0	1.8	1.2	ug/L		03/29/24 10:37	1
Dichlorobromomethane	0.50	U	1.0	0.50	0.39	ug/L		03/29/24 10:37	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		03/29/24 10:37	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		03/29/24 10:37	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.57	ug/L		03/29/24 10:37	1
Dichlorodifluoromethane	2.5	U	3.0	2.5	0.96	ug/L		03/29/24 10:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.8	U	3.0	1.8	0.73	ug/L		03/29/24 10:37	1
1,2-Dichloropropane	0.80	U	1.0	0.80	0.52	ug/L		03/29/24 10:37	1
2-Butanone (MEK)	12	U	15	12	6.0	ug/L		03/29/24 10:37	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		03/29/24 10:37	1
Trichloroethene	0.40	U	1.0	0.40	0.30	ug/L		03/29/24 10:37	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		03/29/24 10:37	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		03/29/24 10:37	1
1,2,3-Trichlorobenzene	0.80	U	2.0	0.80	0.70	ug/L		03/29/24 10:37	1
Hexachlorobutadiene	1.8	U	2.0	1.8	1.2	ug/L		03/29/24 10:37	1
Naphthalene	0.80	U	2.0	0.80	0.63	ug/L		03/29/24 10:37	1
o-Xylene	0.40	U	1.0	0.40	0.33	ug/L		03/29/24 10:37	1
2-Chlorotoluene	0.40	U	1.0	0.40	0.34	ug/L		03/29/24 10:37	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	0.37	ug/L		03/29/24 10:37	1
1,2,4-Trimethylbenzene	0.40	U	1.0	0.40	0.15	ug/L		03/29/24 10:37	1
1,2-Dibromo-3-Chloropropane	4.0	U	5.0	4.0	1.8	ug/L		03/29/24 10:37	1
1,2,3-Trichloropropane	1.8	U	2.5	1.8	0.86	ug/L		03/29/24 10:37	1
Ethyl methacrylate	2.0	U	3.0	2.0	0.86	ug/L		03/29/24 10:37	1
tert-Butylbenzene	0.80	U	1.0	0.80	0.42	ug/L		03/29/24 10:37	1
Isopropylbenzene	0.50	U	1.0	0.50	0.36	ug/L		03/29/24 10:37	1
4-Isopropyltoluene	0.80	U	1.0	0.80	0.43	ug/L		03/29/24 10:37	1
1,2-Dichloroethene, Total	0.40	U	1.0	0.40	0.32	ug/L		03/29/24 10:37	1
1,3-Dichloropropene, Total	0.80	U	2.0	0.80	0.63	ug/L		03/29/24 10:37	1
Trihalomethanes, Total	0.80	U	1.0	0.80	0.36	ug/L		03/29/24 10:37	1
Total BTEX	0.40	U	1.0	0.40	0.30	ug/L		03/29/24 10:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		81 - 118		03/29/24 10:37	1
Dibromofluoromethane (Surr)	96		80 - 119		03/29/24 10:37	1
Toluene-d8 (Surr)	98		89 - 112		03/29/24 10:37	1
4-Bromofluorobenzene (Surr)	100		85 - 114		03/29/24 10:37	1

Lab Sample ID: LCS 280-647592/4

Matrix: Water

Analysis Batch: 647592

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	50.0	54.0		ug/L		108	79 - 121
Styrene	50.0	57.5		ug/L		115	78 - 123

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QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8260D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-647592/4

Matrix: Water

Analysis Batch: 647592

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,3-Dichloropropene	50.0	54.6		ug/L		109	75 - 124
trans-1,3-Dichloropropene	50.0	53.5		ug/L		107	73 - 127
N-Propylbenzene	50.0	52.6		ug/L		105	76 - 126
n-Butylbenzene	50.0	48.1		ug/L		96	75 - 128
4-Chlorotoluene	50.0	52.8		ug/L		106	78 - 122
1,4-Dichlorobenzene	50.0	49.4		ug/L		99	79 - 118
Ethylene Dibromide	50.0	55.2		ug/L		110	77 - 121
3-Chloro-1-propene	50.0	49.9		ug/L		100	68 - 130
1,2-Dichloroethane	50.0	49.1		ug/L		98	73 - 128
Acrylonitrile	500	574		ug/L		115	63 - 135
Vinyl acetate	100	99.7		ug/L		100	54 - 146
4-Methyl-2-pentanone (MIBK)	200	228		ug/L		114	67 - 130
1,3,5-Trimethylbenzene	50.0	52.3		ug/L		105	75 - 124
Bromobenzene	50.0	51.9		ug/L		104	80 - 120
Methylcyclohexane	50.0	52.5		ug/L		105	72 - 132
Toluene	50.0	48.7		ug/L		97	80 - 121
Chlorobenzene	50.0	50.4		ug/L		101	82 - 118
Tetrahydrofuran	100	106		ug/L		106	57 - 133
Hexane	50.0	58.9		ug/L		118	48 - 143
trans-1,4-Dichloro-2-butene	50.0	48.6		ug/L		97	43 - 140
Cyclohexane	50.0	51.1		ug/L		102	71 - 130
1,2,4-Trichlorobenzene	50.0	45.2		ug/L		90	69 - 130
Chlorodibromomethane	50.0	54.2		ug/L		108	74 - 126
Tetrachloroethene	50.0	51.2		ug/L		102	74 - 129
sec-Butylbenzene	50.0	53.3		ug/L		107	77 - 126
1,3-Dichloropropane	50.0	54.2		ug/L		108	80 - 119
cis-1,2-Dichloroethene	50.0	52.9		ug/L		106	78 - 123
trans-1,2-Dichloroethene	50.0	52.5		ug/L		105	75 - 124
Methyl tert-butyl ether	50.0	50.6		ug/L		101	71 - 124
m-Xylene & p-Xylene	50.0	54.7		ug/L		109	80 - 121
1,3-Dichlorobenzene	50.0	51.5		ug/L		103	80 - 119
Carbon tetrachloride	50.0	50.9		ug/L		102	72 - 136
1,1-Dichloropropene	50.0	51.9		ug/L		104	79 - 125
2-Hexanone	200	245		ug/L		123	57 - 139
2,2-Dichloropropane	50.0	53.2		ug/L		106	60 - 139
Ethyl ether	50.0	54.4		ug/L		109	68 - 129
1,1,1,2-Tetrachloroethane	50.0	54.5		ug/L		109	78 - 124
Acetone	200	223		ug/L		112	39 - 160
Chloroform	50.0	51.2		ug/L		102	79 - 124
Benzene	50.0	51.5		ug/L		103	79 - 120
1,1,1-Trichloroethane	50.0	50.4		ug/L		101	74 - 131
Bromomethane	50.0	47.0		ug/L		94	53 - 141
Chloromethane	50.0	56.7		ug/L		113	50 - 139
Iodomethane	50.0	51.5		ug/L		103	69 - 131
Dibromomethane	50.0	51.9		ug/L		104	79 - 123
Chlorobromomethane	50.0	56.7		ug/L		113	78 - 123
Chloroethane	50.0	52.1		ug/L		104	60 - 138
Vinyl chloride	50.0	51.9		ug/L		104	58 - 137
Methylene Chloride	50.0	53.7		ug/L		107	74 - 124

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QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8260D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-647592/4

Matrix: Water

Analysis Batch: 647592

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon disulfide	50.0	51.3		ug/L		103	64 - 133
Bromoform	50.0	54.9		ug/L		110	66 - 130
Dichlorobromomethane	50.0	52.0		ug/L		104	79 - 125
1,1-Dichloroethane	50.0	53.6		ug/L		107	77 - 125
1,1-Dichloroethene	50.0	49.7		ug/L		99	71 - 131
Trichlorofluoromethane	50.0	46.7		ug/L		93	65 - 141
Dichlorodifluoromethane	50.0	53.2		ug/L		106	32 - 152
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.4		ug/L		103	70 - 136
1,2-Dichloropropane	50.0	51.9		ug/L		104	78 - 122
2-Butanone (MEK)	200	221		ug/L		111	56 - 143
1,1,2-Trichloroethane	50.0	51.7		ug/L		103	80 - 119
Trichloroethene	50.0	49.3		ug/L		99	79 - 123
Methyl acetate	100	121		ug/L		121	56 - 136
1,1,2,2-Tetrachloroethane	50.0	52.5		ug/L		105	71 - 121
1,2,3-Trichlorobenzene	50.0	44.2		ug/L		88	69 - 129
Hexachlorobutadiene	50.0	47.6		ug/L		95	66 - 134
Naphthalene	50.0	40.4		ug/L		81	61 - 128
o-Xylene	50.0	55.7		ug/L		111	78 - 122
2-Chlorotoluene	50.0	53.7		ug/L		107	79 - 122
1,2-Dichlorobenzene	50.0	51.8		ug/L		104	80 - 119
1,2,4-Trimethylbenzene	50.0	50.6		ug/L		101	76 - 124
1,2-Dibromo-3-Chloropropane	50.0	52.9		ug/L		106	62 - 128
1,2,3-Trichloropropane	50.0	54.2		ug/L		108	73 - 122
Ethyl methacrylate	50.0	55.7		ug/L		111	72 - 126
tert-Butylbenzene	50.0	51.9		ug/L		104	78 - 124
Isopropylbenzene	50.0	51.1		ug/L		102	72 - 131
4-Isopropyltoluene	50.0	50.9		ug/L		102	77 - 127
1,2-Dichloroethene, Total	100	105		ug/L		105	79 - 121
1,3-Dichloropropene, Total	100	108		ug/L		108	77 - 123
Trihalomethanes, Total	200	212		ug/L		106	66 - 130
Total BTEX	250	265		ug/L		106	78 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		81 - 118
Dibromofluoromethane (Surr)	93		80 - 119
Toluene-d8 (Surr)	100		89 - 112
4-Bromofluorobenzene (Surr)	97		85 - 114

Lab Sample ID: LCSD 280-647592/5

Matrix: Water

Analysis Batch: 647592

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethylbenzene	50.0	53.7		ug/L		107	79 - 121	1	20
Styrene	50.0	57.0		ug/L		114	78 - 123	1	20
cis-1,3-Dichloropropene	50.0	55.9		ug/L		112	75 - 124	2	20
trans-1,3-Dichloropropene	50.0	53.5		ug/L		107	73 - 127	0	20
N-Propylbenzene	50.0	52.4		ug/L		105	76 - 126	0	20

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QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8260D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-647592/5

Matrix: Water

Analysis Batch: 647592

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
n-Butylbenzene	50.0	47.8		ug/L		96	75 - 128	1	20
4-Chlorotoluene	50.0	53.7		ug/L		107	78 - 122	2	20
1,4-Dichlorobenzene	50.0	48.8		ug/L		98	79 - 118	1	20
Ethylene Dibromide	50.0	55.6		ug/L		111	77 - 121	1	20
3-Chloro-1-propene	50.0	48.3		ug/L		97	68 - 130	3	20
1,2-Dichloroethane	50.0	50.1		ug/L		100	73 - 128	2	20
Acrylonitrile	500	565		ug/L		113	63 - 135	2	20
Vinyl acetate	100	95.0		ug/L		95	54 - 146	5	20
4-Methyl-2-pentanone (MIBK)	200	223		ug/L		111	67 - 130	2	20
1,3,5-Trimethylbenzene	50.0	52.1		ug/L		104	75 - 124	0	20
Bromobenzene	50.0	51.6		ug/L		103	80 - 120	1	20
Methylcyclohexane	50.0	50.6		ug/L		101	72 - 132	4	20
Toluene	50.0	48.5		ug/L		97	80 - 121	1	20
Chlorobenzene	50.0	49.9		ug/L		100	82 - 118	1	20
Tetrahydrofuran	100	102		ug/L		102	57 - 133	4	20
Hexane	50.0	52.7		ug/L		105	48 - 143	11	20
trans-1,4-Dichloro-2-butene	50.0	51.1		ug/L		102	43 - 140	5	20
Cyclohexane	50.0	49.6		ug/L		99	71 - 130	3	20
1,2,4-Trichlorobenzene	50.0	45.4		ug/L		91	69 - 130	0	20
Chlorodibromomethane	50.0	54.7		ug/L		109	74 - 126	1	20
Tetrachloroethene	50.0	51.7		ug/L		103	74 - 129	1	20
sec-Butylbenzene	50.0	51.7		ug/L		103	77 - 126	3	20
1,3-Dichloropropane	50.0	54.3		ug/L		109	80 - 119	0	20
cis-1,2-Dichloroethene	50.0	51.9		ug/L		104	78 - 123	2	20
trans-1,2-Dichloroethene	50.0	51.4		ug/L		103	75 - 124	2	20
Methyl tert-butyl ether	50.0	50.5		ug/L		101	71 - 124	0	20
m-Xylene & p-Xylene	50.0	55.0		ug/L		110	80 - 121	0	20
1,3-Dichlorobenzene	50.0	51.4		ug/L		103	80 - 119	0	20
Carbon tetrachloride	50.0	50.2		ug/L		100	72 - 136	1	20
1,1-Dichloropropene	50.0	50.8		ug/L		102	79 - 125	2	20
2-Hexanone	200	240		ug/L		120	57 - 139	2	20
2,2-Dichloropropane	50.0	52.2		ug/L		104	60 - 139	2	20
Ethyl ether	50.0	54.3		ug/L		109	68 - 129	0	20
1,1,1,2-Tetrachloroethane	50.0	55.0		ug/L		110	78 - 124	1	20
Acetone	200	215		ug/L		107	39 - 160	4	20
Chloroform	50.0	50.9		ug/L		102	79 - 124	1	20
Benzene	50.0	51.7		ug/L		103	79 - 120	0	20
1,1,1-Trichloroethane	50.0	49.9		ug/L		100	74 - 131	1	20
Bromomethane	50.0	44.2		ug/L		88	53 - 141	6	20
Chloromethane	50.0	57.0		ug/L		114	50 - 139	1	20
Iodomethane	50.0	49.5		ug/L		99	69 - 131	4	20
Dibromomethane	50.0	50.4		ug/L		101	79 - 123	3	20
Chlorobromomethane	50.0	53.2		ug/L		106	78 - 123	7	20
Chloroethane	50.0	54.8		ug/L		110	60 - 138	5	20
Vinyl chloride	50.0	51.9		ug/L		104	58 - 137	0	20
Methylene Chloride	50.0	51.5		ug/L		103	74 - 124	4	20
Carbon disulfide	50.0	47.8		ug/L		96	64 - 133	7	20
Bromoform	50.0	54.5		ug/L		109	66 - 130	1	20
Dichlorobromomethane	50.0	51.8		ug/L		104	79 - 125	0	20

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QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8260D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-647592/5

Matrix: Water

Analysis Batch: 647592

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethane	50.0	52.1		ug/L		104	77 - 125	3	20
1,1-Dichloroethene	50.0	52.6		ug/L		105	71 - 131	6	20
Trichlorofluoromethane	50.0	48.1		ug/L		96	65 - 141	3	20
Dichlorodifluoromethane	50.0	51.9		ug/L		104	32 - 152	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.5		ug/L		99	70 - 136	4	20
1,2-Dichloropropane	50.0	51.5		ug/L		103	78 - 122	1	20
2-Butanone (MEK)	200	216		ug/L		108	56 - 143	2	20
1,1,2-Trichloroethane	50.0	51.9		ug/L		104	80 - 119	0	20
Trichloroethene	50.0	50.1		ug/L		100	79 - 123	2	20
Methyl acetate	100	119		ug/L		119	56 - 136	2	20
1,1,2,2-Tetrachloroethane	50.0	52.0		ug/L		104	71 - 121	1	20
1,2,3-Trichlorobenzene	50.0	45.0		ug/L		90	69 - 129	2	20
Hexachlorobutadiene	50.0	46.9		ug/L		94	66 - 134	1	20
Naphthalene	50.0	41.7		ug/L		83	61 - 128	3	20
o-Xylene	50.0	53.0		ug/L		106	78 - 122	5	20
2-Chlorotoluene	50.0	53.0		ug/L		106	79 - 122	1	20
1,2-Dichlorobenzene	50.0	50.9		ug/L		102	80 - 119	2	20
1,2,4-Trimethylbenzene	50.0	50.7		ug/L		101	76 - 124	0	20
1,2-Dibromo-3-Chloropropane	50.0	54.3		ug/L		109	62 - 128	3	20
1,2,3-Trichloropropane	50.0	54.0		ug/L		108	73 - 122	0	20
Ethyl methacrylate	50.0	55.9		ug/L		112	72 - 126	0	20
tert-Butylbenzene	50.0	51.3		ug/L		103	78 - 124	1	20
Isopropylbenzene	50.0	51.2		ug/L		102	72 - 131	0	20
4-Isopropyltoluene	50.0	49.9		ug/L		100	77 - 127	2	20
1,2-Dichloroethene, Total	100	103		ug/L		103	79 - 121	2	20
1,3-Dichloropropene, Total	100	109		ug/L		109	77 - 123	1	20
Trihalomethanes, Total	200	212		ug/L		106	66 - 130	0	20
Total BTEX	250	262		ug/L		105	78 - 122	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		81 - 118
Dibromofluoromethane (Surr)	94		80 - 119
Toluene-d8 (Surr)	101		89 - 112
4-Bromofluorobenzene (Surr)	96		85 - 114

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-647471/1-A

Matrix: Water

Analysis Batch: 647795

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 647471

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1'-Biphenyl	8.0	U	10	8.0	1.2	ug/L		04/01/24 12:17	1
2,4-Dichlorophenol	8.0	U	10	8.0	3.0	ug/L		04/01/24 12:17	1
2,4-Dimethylphenol	8.0	U	10	8.0	1.4	ug/L		04/01/24 12:17	1
2,4-Dinitrophenol	20	U	30	20	13	ug/L		04/01/24 12:17	1
2,4-Dinitrotoluene	8.0	U	10	8.0	1.4	ug/L		04/01/24 12:17	1
2,4,6-Trichlorophenol	8.0	U	10	8.0	2.3	ug/L		04/01/24 12:17	1

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QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-647471/1-A

Matrix: Water

Analysis Batch: 647795

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 647471

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4,5-Trichlorophenol	8.0	U	10	8.0	2.6	ug/L		04/01/24 12:17	1
2,2'-oxybis[1-chloropropane]	8.0	U	10	8.0	1.3	ug/L		04/01/24 12:17	1
Di-n-butyl phthalate	3.2	U	4.0	3.2	2.1	ug/L		04/01/24 12:17	1
Di-n-octyl phthalate	8.0	U M	10	8.0	3.6	ug/L		04/01/24 12:17	1
Benzo[a]anthracene	3.2	U	4.0	3.2	0.96	ug/L		04/01/24 12:17	1
Benzo[a]pyrene	3.2	U	4.0	3.2	0.50	ug/L		04/01/24 12:17	1
Benzo[b]fluoranthene	3.2	U	4.0	3.2	2.2	ug/L		04/01/24 12:17	1
Benzo[g,h,i]perylene	3.2	U	4.0	3.2	2.8	ug/L		04/01/24 12:17	1
Benzo[k]fluoranthene	3.2	U	4.0	3.2	1.1	ug/L		04/01/24 12:17	1
Acenaphthene	3.2	U	4.0	3.2	0.96	ug/L		04/01/24 12:17	1
Acenaphthylene	3.2	U	4.0	3.2	0.75	ug/L		04/01/24 12:17	1
Acetophenone	8.0	U	10	8.0	2.3	ug/L		04/01/24 12:17	1
Anthracene	3.2	U	4.0	3.2	0.58	ug/L		04/01/24 12:17	1
Atrazine	3.2	U	10	3.2	0.65	ug/L		04/01/24 12:17	1
Benzaldehyde	3.2	U	5.0	3.2	1.2	ug/L		04/01/24 12:17	1
Butyl benzyl phthalate	3.2	U	4.0	3.2	1.5	ug/L		04/01/24 12:17	1
Caprolactam	10	U M	15	10	5.5	ug/L		04/01/24 12:17	1
Chrysene	3.2	U	4.0	3.2	0.97	ug/L		04/01/24 12:17	1
Dibenz(a,h)anthracene	8.0	U	10	8.0	4.8	ug/L		04/01/24 12:17	1
Dibenzofuran	3.2	U	4.0	3.2	0.95	ug/L		04/01/24 12:17	1
Diethyl phthalate	3.2	U	4.0	3.2	1.4	ug/L		04/01/24 12:17	1
Hexachlorobenzene	8.0	U	10	8.0	2.3	ug/L		04/01/24 12:17	1
Hexachlorocyclopentadiene	48	U	50	48	16	ug/L		04/01/24 12:17	1
Hexachlorobutadiene	8.0	U	10	8.0	2.9	ug/L		04/01/24 12:17	1
Hexachloroethane	8.0	U	10	8.0	4.5	ug/L		04/01/24 12:17	1
Fluoranthene	3.2	U	4.0	3.2	1.1	ug/L		04/01/24 12:17	1
Fluorene	3.2	U	4.0	3.2	0.78	ug/L		04/01/24 12:17	1
Indeno[1,2,3-cd]pyrene	8.0	U	10	8.0	3.4	ug/L		04/01/24 12:17	1
Isophorone	8.0	U	10	8.0	2.0	ug/L		04/01/24 12:17	1
N-Nitrosodi-n-propylamine	8.0	U M	10	8.0	1.9	ug/L		04/01/24 12:17	1
N-Nitrosodiphenylamine	8.0	U	10	8.0	1.8	ug/L		04/01/24 12:17	1
Naphthalene	3.2	U	4.0	3.2	1.5	ug/L		04/01/24 12:17	1
Nitrobenzene	8.0	U	10	8.0	1.3	ug/L		04/01/24 12:17	1
Pentachlorophenol	48	U	50	48	20	ug/L		04/01/24 12:17	1
Phenanthrene	3.2	U	4.0	3.2	1.6	ug/L		04/01/24 12:17	1
Phenol	8.0	U	10	8.0	0.92	ug/L		04/01/24 12:17	1
Pyrene	8.0	U M	10	8.0	2.4	ug/L		04/01/24 12:17	1
2-Chloronaphthalene	3.2	U	4.0	3.2	1.3	ug/L		04/01/24 12:17	1
2-Chlorophenol	8.0	U	10	8.0	2.6	ug/L		04/01/24 12:17	1
2-Methylnaphthalene	3.2	U	4.0	3.2	1.2	ug/L		04/01/24 12:17	1
2-Methylphenol	8.0	U	10	8.0	0.77	ug/L		04/01/24 12:17	1
2-Nitroaniline	3.2	U	10	3.2	2.6	ug/L		04/01/24 12:17	1
2-Nitrophenol	8.0	U	10	8.0	3.5	ug/L		04/01/24 12:17	1
3,3'-Dichlorobenzidine	30	U	50	30	3.4	ug/L		04/01/24 12:17	1
3-Nitroaniline	8.0	U M	10	8.0	3.3	ug/L		04/01/24 12:17	1
4,6-Dinitro-2-methylphenol	30	U M	50	30	4.0	ug/L		04/01/24 12:17	1
4-Bromophenyl phenyl ether	8.0	U	10	8.0	1.0	ug/L		04/01/24 12:17	1
4-Nitroaniline	8.0	U	10	8.0	2.6	ug/L		04/01/24 12:17	1
4-Nitrophenol	13	U M	25	13	9.1	ug/L		04/01/24 12:17	1

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QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-647471/1-A

Matrix: Water

Analysis Batch: 647795

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 647471

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	8.0	U	10	8.0	2.4	ug/L		04/01/24 12:17	1
Bis(2-chloroethyl)ether	8.0	U	10	8.0	2.0	ug/L		04/01/24 12:17	1
Bis(2-ethylhexyl) phthalate	8.0	U	10	8.0	3.3	ug/L		04/01/24 12:17	1
2,6-Dinitrotoluene	8.0	U	10	8.0	1.4	ug/L		04/01/24 12:17	1
4-Chloro-3-methylphenol	8.0	U	10	8.0	1.7	ug/L		04/01/24 12:17	1
4-Chloroaniline	13	U	20	13	6.3	ug/L		04/01/24 12:17	1
4-Chlorophenyl phenyl ether	8.0	U	10	8.0	1.2	ug/L		04/01/24 12:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	36		19 - 119	03/28/24 11:50	04/01/24 12:17	1
Phenol-d5 (Surr)	25		10 - 115	03/28/24 11:50	04/01/24 12:17	1
Nitrobenzene-d5 (Surr)	66		44 - 120	03/28/24 11:50	04/01/24 12:17	1
2-Fluorobiphenyl	50		44 - 119	03/28/24 11:50	04/01/24 12:17	1
2,4,6-Tribromophenol (Surr)	74		43 - 140	03/28/24 11:50	04/01/24 12:17	1
Terphenyl-d14 (Surr)	92		50 - 134	03/28/24 11:50	04/01/24 12:17	1

Lab Sample ID: LCS 280-647471/2-A

Matrix: Water

Analysis Batch: 647795

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 647471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1'-Biphenyl	80.0	59.3		ug/L		74	49 - 115
2,4-Dichlorophenol	80.0	61.7		ug/L		77	47 - 121
2,4-Dimethylphenol	80.0	39.7		ug/L		50	31 - 124
2,4-Dinitrophenol	160	119		ug/L		75	23 - 143
2,4-Dinitrotoluene	80.0	80.1		ug/L		100	57 - 128
2,4,6-Trichlorophenol	80.0	63.3		ug/L		79	50 - 125
2,4,5-Trichlorophenol	80.0	66.0		ug/L		83	53 - 123
2,2'-oxybis[1-chloropropane]	80.0	67.5	M	ug/L		84	32 - 120
Di-n-butyl phthalate	80.0	82.5		ug/L		103	59 - 127
Di-n-octyl phthalate	80.0	67.1		ug/L		84	51 - 140
Benzo[a]anthracene	80.0	77.8		ug/L		97	58 - 125
Benzo[a]pyrene	80.0	78.1	M	ug/L		98	54 - 128
Benzo[b]fluoranthene	80.0	83.3	M	ug/L		104	53 - 131
Benzo[g,h,i]perylene	80.0	90.8		ug/L		114	50 - 134
Benzo[k]fluoranthene	80.0	69.0	M	ug/L		86	57 - 129
Acenaphthene	80.0	61.2		ug/L		77	47 - 122
Acenaphthylene	80.0	59.7		ug/L		75	41 - 130
Acetophenone	80.0	62.7		ug/L		78	46 - 118
Anthracene	80.0	70.7		ug/L		88	57 - 123
Atrazine	80.0	73.7		ug/L		92	44 - 142
Benzaldehyde	80.0	63.1		ug/L		79	12 - 120
Butyl benzyl phthalate	80.0	73.6		ug/L		92	53 - 134
Caprolactam	80.0	25.8	M	ug/L		32	10 - 120
Chrysene	80.0	71.2		ug/L		89	59 - 123
Dibenz(a,h)anthracene	80.0	88.4	M	ug/L		111	51 - 134
Dibenzofuran	80.0	63.3		ug/L		79	53 - 118
Diethyl phthalate	80.0	74.3		ug/L		93	56 - 125

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QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-647471/2-A

Matrix: Water

Analysis Batch: 647795

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 647471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorobenzene	80.0	73.5		ug/L		92	53 - 125
Hexachlorocyclopentadiene	160	103		ug/L		65	10 - 120
Hexachlorobutadiene	80.0	56.5		ug/L		71	22 - 124
Hexachloroethane	80.0	49.8		ug/L		62	21 - 115
Fluoranthene	80.0	82.0		ug/L		103	57 - 128
Fluorene	80.0	63.6		ug/L		79	52 - 124
Indeno[1,2,3-cd]pyrene	80.0	80.8		ug/L		101	52 - 134
Isophorone	80.0	63.7		ug/L		80	42 - 124
N-Nitrosodi-n-propylamine	80.0	60.9		ug/L		76	49 - 119
N-Nitrosodiphenylamine	80.0	69.0		ug/L		86	51 - 123
Naphthalene	80.0	56.3		ug/L		70	40 - 121
Nitrobenzene	80.0	63.6		ug/L		79	45 - 121
Pentachlorophenol	160	159		ug/L		99	35 - 138
Phenanthrene	80.0	72.2		ug/L		90	59 - 120
Phenol	80.0	27.4		ug/L		34	28 - 120
Pyrene	80.0	70.4		ug/L		88	57 - 126
2-Chloronaphthalene	80.0	61.7		ug/L		77	40 - 116
2-Chlorophenol	80.0	55.3		ug/L		69	38 - 117
2-Methylnaphthalene	80.0	56.9		ug/L		71	40 - 121
2-Methylphenol	80.0	51.2		ug/L		64	30 - 117
2-Nitroaniline	80.0	70.4		ug/L		88	55 - 127
2-Nitrophenol	80.0	62.6		ug/L		78	47 - 123
3,3'-Dichlorobenzidine	160	193		ug/L		121	27 - 129
3-Nitroaniline	80.0	76.5		ug/L		96	41 - 128
4,6-Dinitro-2-methylphenol	160	173		ug/L		108	44 - 137
4-Bromophenyl phenyl ether	80.0	67.3		ug/L		84	55 - 124
4-Nitroaniline	80.0	83.4		ug/L		104	49 - 122
4-Nitrophenol	160	96.6		ug/L		60	31 - 120
Bis(2-chloroethoxy)methane	80.0	61.7		ug/L		77	48 - 120
Bis(2-chloroethyl)ether	80.0	61.0		ug/L		76	43 - 118
Bis(2-ethylhexyl) phthalate	80.0	70.2		ug/L		88	55 - 135
2,6-Dinitrotoluene	80.0	70.7		ug/L		88	57 - 124
4-Chloro-3-methylphenol	80.0	63.6		ug/L		80	52 - 119
4-Chloroaniline	80.0	55.0		ug/L		69	33 - 117
4-Chlorophenyl phenyl ether	80.0	64.5	M	ug/L		81	53 - 121

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol (Surr)	44		19 - 119
Phenol-d5 (Surr)	31		10 - 115
Nitrobenzene-d5 (Surr)	78		44 - 120
2-Fluorobiphenyl	73		44 - 119
2,4,6-Tribromophenol (Surr)	95		43 - 140
Terphenyl-d14 (Surr)	87		50 - 134

QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-647471/3-A

Matrix: Water

Analysis Batch: 647795

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 647471

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1'-Biphenyl	80.0	45.9	Q	ug/L		57	49 - 115	26	20
2,4-Dichlorophenol	80.0	55.6		ug/L		69	47 - 121	10	20
2,4-Dimethylphenol	80.0	39.4		ug/L		49	31 - 124	1	20
2,4-Dinitrophenol	160	107		ug/L		67	23 - 143	11	20
2,4-Dinitrotoluene	80.0	71.8		ug/L		90	57 - 128	11	20
2,4,6-Trichlorophenol	80.0	56.5		ug/L		71	50 - 125	11	20
2,4,5-Trichlorophenol	80.0	60.3		ug/L		75	53 - 123	9	20
2,2'-oxybis[1-chloropropane]	80.0	58.3	M	ug/L		73	32 - 120	15	20
Di-n-butyl phthalate	80.0	74.6		ug/L		93	59 - 127	10	20
Di-n-octyl phthalate	80.0	59.2		ug/L		74	51 - 140	12	20
Benzo[a]anthracene	80.0	71.6		ug/L		89	58 - 125	8	20
Benzo[a]pyrene	80.0	69.3		ug/L		87	54 - 128	12	20
Benzo[b]fluoranthene	80.0	74.0		ug/L		92	53 - 131	12	20
Benzo[g,h,i]perylene	80.0	80.7		ug/L		101	50 - 134	12	20
Benzo[k]fluoranthene	80.0	61.5		ug/L		77	57 - 129	11	20
Acenaphthene	80.0	48.7	Q	ug/L		61	47 - 122	23	20
Acenaphthylene	80.0	48.7		ug/L		61	41 - 130	20	20
Acetophenone	80.0	56.6		ug/L		71	46 - 118	10	20
Anthracene	80.0	65.9		ug/L		82	57 - 123	7	20
Atrazine	80.0	81.1		ug/L		101	44 - 142	10	20
Benzaldehyde	80.0	56.6		ug/L		71	12 - 120	11	50
Butyl benzyl phthalate	80.0	67.2		ug/L		84	53 - 134	9	20
Caprolactam	80.0	25.0		ug/L		31	10 - 120	3	20
Chrysene	80.0	66.2		ug/L		83	59 - 123	7	20
Dibenz(a,h)anthracene	80.0	73.5	M	ug/L		92	51 - 134	18	20
Dibenzofuran	80.0	51.4	Q	ug/L		64	53 - 118	21	20
Diethyl phthalate	80.0	66.3		ug/L		83	56 - 125	11	20
Hexachlorobenzene	80.0	67.3		ug/L		84	53 - 125	9	20
Hexachlorocyclopentadiene	160	73.5	Q	ug/L		46	10 - 120	34	20
Hexachlorobutadiene	80.0	42.2	Q	ug/L		53	22 - 124	29	20
Hexachloroethane	80.0	38.3	Q	ug/L		48	21 - 115	26	20
Fluoranthene	80.0	75.4		ug/L		94	57 - 128	8	20
Fluorene	80.0	53.1		ug/L		66	52 - 124	18	20
Indeno[1,2,3-cd]pyrene	80.0	71.9		ug/L		90	52 - 134	12	20
Isophorone	80.0	57.5		ug/L		72	42 - 124	10	20
N-Nitrosodi-n-propylamine	80.0	54.2		ug/L		68	49 - 119	12	20
N-Nitrosodiphenylamine	80.0	63.3		ug/L		79	51 - 123	9	20
Naphthalene	80.0	46.4		ug/L		58	40 - 121	19	20
Nitrobenzene	80.0	56.6		ug/L		71	45 - 121	12	20
Pentachlorophenol	160	140		ug/L		88	35 - 138	13	20
Phenanthrene	80.0	66.4		ug/L		83	59 - 120	8	20
Phenol	80.0	25.6		ug/L		32	28 - 120	6	20
Pyrene	80.0	65.3		ug/L		82	57 - 126	8	20
2-Chloronaphthalene	80.0	48.2	Q	ug/L		60	40 - 116	25	20
2-Chlorophenol	80.0	50.1		ug/L		63	38 - 117	10	20
2-Methylnaphthalene	80.0	45.3	Q	ug/L		57	40 - 121	23	20
2-Methylphenol	80.0	48.0		ug/L		60	30 - 117	7	20
2-Nitroaniline	80.0	62.3		ug/L		78	55 - 127	12	20

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QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-647471/3-A
Matrix: Water
Analysis Batch: 647795

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 647471

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Nitrophenol	80.0	56.8		ug/L		71	47 - 123	10	20
3,3'-Dichlorobenzidine	160	183		ug/L		115	27 - 129	5	20
3-Nitroaniline	80.0	69.1		ug/L		86	41 - 128	10	20
4,6-Dinitro-2-methylphenol	160	159		ug/L		99	44 - 137	9	20
4-Bromophenyl phenyl ether	80.0	60.6		ug/L		76	55 - 124	10	20
4-Nitroaniline	80.0	76.4		ug/L		95	49 - 122	9	20
4-Nitrophenol	160	87.2		ug/L		54	31 - 120	10	20
Bis(2-chloroethoxy)methane	80.0	56.3		ug/L		70	48 - 120	9	20
Bis(2-chloroethyl)ether	80.0	54.3		ug/L		68	43 - 118	12	20
Bis(2-ethylhexyl) phthalate	80.0	64.4	M	ug/L		81	55 - 135	9	20
2,6-Dinitrotoluene	80.0	65.1		ug/L		81	57 - 124	8	20
4-Chloro-3-methylphenol	80.0	58.2		ug/L		73	52 - 119	9	20
4-Chloroaniline	80.0	49.4		ug/L		62	33 - 117	11	20
4-Chlorophenyl phenyl ether	80.0	53.2	M	ug/L		66	53 - 121	19	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorophenol (Surr)	41		19 - 119
Phenol-d5 (Surr)	28		10 - 115
Nitrobenzene-d5 (Surr)	69		44 - 120
2-Fluorobiphenyl	61		44 - 119
2,4,6-Tribromophenol (Surr)	95		43 - 140
Terphenyl-d14 (Surr)	82		50 - 134

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-647144/1-A
Matrix: Water
Analysis Batch: 647188

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 647144

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide	0.014	U	0.020	0.014	0.0037	ug/L		03/26/24 13:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane	110		70 - 130	03/26/24 09:50	03/26/24 13:04	1

Lab Sample ID: LCS 280-647144/2-A
Matrix: Water
Analysis Batch: 647188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 647144

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylene Dibromide	0.250	0.241		ug/L		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dibromopropane	110		70 - 130

QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 280-647144/3-A
Matrix: Water
Analysis Batch: 647188

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 647144

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethylene Dibromide	0.250	0.241	M	ug/L		96	70 - 130	0	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1,2-Dibromopropane	106		70 - 130						

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 280-647126/1-A
Matrix: Water
Analysis Batch: 647819

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 647126

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Calcium	64	U	200	64	24	ug/L		03/29/24 14:04	1
Magnesium	15	U	200	15	4.2	ug/L		03/29/24 14:04	1
Potassium	940	U	3000	940	240	ug/L		03/29/24 14:04	1
Sodium	320	U	1000	320	97	ug/L		03/29/24 14:04	1

Lab Sample ID: LCS 280-647126/2-A
Matrix: Water
Analysis Batch: 647819

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 647126

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium	50000	51100		ug/L		102	87 - 113		
Magnesium	50000	52000		ug/L		104	85 - 113		
Potassium	50000	51700		ug/L		103	86 - 114		
Sodium	50000	52000		ug/L		104	87 - 115		

Lab Sample ID: MB 280-647171/1-B
Matrix: Water
Analysis Batch: 647790

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 647387

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	12.4	J	100	34	9.1	ug/L		03/30/24 01:18	1
Manganese	0.691	J	10	1.8	0.45	ug/L		03/30/24 01:18	1

Lab Sample ID: LCS 280-647171/2-B
Matrix: Water
Analysis Batch: 647790

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 647387

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron	10000	9840		ug/L		98	87 - 115		
Manganese	1000	988		ug/L		99	90 - 114		

QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 280-647126/1-A
Matrix: Water
Analysis Batch: 647550

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 647126

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	2.0	U	5.0	2.0	0.50	ug/L		03/28/24 12:17	1
Lead	0.70	U	1.0	0.70	0.23	ug/L		03/28/24 12:17	1

Lab Sample ID: LCS 280-647126/25-A
Matrix: Water
Analysis Batch: 647550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 647126

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	42.7		ug/L		107	84 - 116
Lead	40.0	40.6		ug/L		102	88 - 115

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-647160/6
Matrix: Water
Analysis Batch: 647160

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chloride	2.5	U M	3.0	2.5	1.0	mg/L		03/26/24 12:24	1
Sulfate	2.5	U	5.0	2.5	1.0	mg/L		03/26/24 12:24	1

Lab Sample ID: LCS 280-647160/4
Matrix: Water
Analysis Batch: 647160

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	102	M	mg/L		102	90 - 110
Sulfate	100	102	M	mg/L		102	90 - 110

Lab Sample ID: LCSD 280-647160/5
Matrix: Water
Analysis Batch: 647160

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	102	M	mg/L		102	90 - 110	0	10
Sulfate	100	102		mg/L		102	90 - 110	0	10

Lab Sample ID: MRL 280-647160/3
Matrix: Water
Analysis Batch: 647160

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.78		mg/L		96	50 - 150
Sulfate	5.00	4.72	J	mg/L		94	50 - 150

QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-189151-1 MS

Matrix: Water

Analysis Batch: 647160

Client Sample ID: WUABAFMW-01 (PDB)

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	7.8		50.0	61.6	M	mg/L		107	80 - 120
Sulfate	28		50.0	84.5	M	mg/L		113	80 - 120

Lab Sample ID: 280-189151-1 MSD

Matrix: Water

Analysis Batch: 647160

Client Sample ID: WUABAFMW-01 (PDB)

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	7.8		50.0	63.1	M	mg/L		111	80 - 120	2	20
Sulfate	28		50.0	85.9	M	mg/L		116	80 - 120	2	20

Lab Sample ID: 280-189151-1 DU

Matrix: Water

Analysis Batch: 647160

Client Sample ID: WUABAFMW-01 (PDB)

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	7.8		7.80	M	mg/L		0.3	15
Sulfate	28		27.9		mg/L		0.3	15

Lab Sample ID: MB 280-647330/6

Matrix: Water

Analysis Batch: 647330

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bromide	0.40	U	0.50	0.40	0.23	mg/L		03/27/24 11:59	1

Lab Sample ID: LCS 280-647330/4

Matrix: Water

Analysis Batch: 647330

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	5.00	5.04	M	mg/L		101	90 - 110

Lab Sample ID: LCSD 280-647330/5

Matrix: Water

Analysis Batch: 647330

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	5.00	5.31	M	mg/L		106	90 - 110	5	10

Lab Sample ID: MRL 280-647330/3

Matrix: Water

Analysis Batch: 647330

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	0.500	0.481	J	mg/L		96	50 - 150

QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-189151-1 MS
Matrix: Water
Analysis Batch: 647330

Client Sample ID: WUABAFMW-01 (PDB)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	0.40	U	5.00	5.73	M	mg/L		115	80 - 120

Lab Sample ID: 280-189151-1 MSD
Matrix: Water
Analysis Batch: 647330

Client Sample ID: WUABAFMW-01 (PDB)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	0.40	U	5.00	5.96	M	mg/L		119	80 - 120	4	20

Lab Sample ID: 280-189151-1 DU
Matrix: Water
Analysis Batch: 647330

Client Sample ID: WUABAFMW-01 (PDB)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	0.40	U	0.40	U	mg/L				NC	15

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-648790/131
Matrix: Water
Analysis Batch: 648790

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.080	U	0.10	0.080	0.044	mg/L		04/08/24 18:33	1

Lab Sample ID: LCS 280-648790/129
Matrix: Water
Analysis Batch: 648790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	1.00	1.01		mg/L		101	90 - 110

Lab Sample ID: LCSD 280-648790/130
Matrix: Water
Analysis Batch: 648790

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	1.00		mg/L		100	90 - 110	1	10

Lab Sample ID: MB 280-648892/20
Matrix: Water
Analysis Batch: 648892

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.080	U	0.10	0.080	0.044	mg/L		04/09/24 15:09	1

QC Sample Results

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCS 280-648892/18
Matrix: Water
Analysis Batch: 648892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	1.00	0.980		mg/L		98	90 - 110

Lab Sample ID: LCSD 280-648892/19
Matrix: Water
Analysis Batch: 648892

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	0.973		mg/L		97	90 - 110	1	10

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-648165/6
Matrix: Water
Analysis Batch: 648165

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	3.47	J	10	6.4	3.1	mg/L		04/02/24 18:32	1

Lab Sample ID: LCS 280-648165/4
Matrix: Water
Analysis Batch: 648165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	200	199		mg/L		99	89 - 110

Lab Sample ID: LCSD 280-648165/5
Matrix: Water
Analysis Batch: 648165

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity	200	203		mg/L		102	89 - 110	2	10

QC Association Summary

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

GC/MS VOA

Analysis Batch: 647592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-1	WUABAFMW-01 (PDB)	Total/NA	Water	8260D	
280-189151-2	WUABAFMW-01 (BP)	Total/NA	Water	8260D	
280-189151-3	WUABAFMW-01 (Rinsate)	Total/NA	Water	8260D	
MB 280-647592/9	Method Blank	Total/NA	Water	8260D	
LCS 280-647592/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 280-647592/5	Lab Control Sample Dup	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 647471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-1	WUABAFMW-01 (PDB)	Total/NA	Water	3510C	
280-189151-2	WUABAFMW-01 (BP)	Total/NA	Water	3510C	
280-189151-3	WUABAFMW-01 (Rinsate)	Total/NA	Water	3510C	
MB 280-647471/1-A	Method Blank	Total/NA	Water	3510C	
LCS 280-647471/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 280-647471/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 647795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-1	WUABAFMW-01 (PDB)	Total/NA	Water	8270E	647471
280-189151-3	WUABAFMW-01 (Rinsate)	Total/NA	Water	8270E	647471
MB 280-647471/1-A	Method Blank	Total/NA	Water	8270E	647471
LCS 280-647471/2-A	Lab Control Sample	Total/NA	Water	8270E	647471
LCSD 280-647471/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	647471

Analysis Batch: 648146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-2	WUABAFMW-01 (BP)	Total/NA	Water	8270E	647471

GC Semi VOA

Prep Batch: 647144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-1	WUABAFMW-01 (PDB)	Total/NA	Water	8011	
280-189151-2	WUABAFMW-01 (BP)	Total/NA	Water	8011	
280-189151-3	WUABAFMW-01 (Rinsate)	Total/NA	Water	8011	
MB 280-647144/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-647144/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-647144/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 647188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-1	WUABAFMW-01 (PDB)	Total/NA	Water	8011	647144
280-189151-2	WUABAFMW-01 (BP)	Total/NA	Water	8011	647144
280-189151-3	WUABAFMW-01 (Rinsate)	Total/NA	Water	8011	647144
MB 280-647144/1-A	Method Blank	Total/NA	Water	8011	647144
LCS 280-647144/2-A	Lab Control Sample	Total/NA	Water	8011	647144
LCSD 280-647144/3-A	Lab Control Sample Dup	Total/NA	Water	8011	647144

QC Association Summary

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Metals

Prep Batch: 647126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-1	WUABAFMW-01 (PDB)	Total/NA	Water	3020A	
280-189151-2	WUABAFMW-01 (BP)	Total/NA	Water	3020A	
280-189151-3	WUABAFMW-01 (Rinsate)	Total/NA	Water	3020A	
MB 280-647126/1-A	Method Blank	Total/NA	Water	3020A	
LCS 280-647126/25-A	Lab Control Sample	Total/NA	Water	3020A	
LCS 280-647126/2-A	Lab Control Sample	Total/NA	Water	3020A	

Filtration Batch: 647171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-1	WUABAFMW-01 (PDB)	Dissolved	Water	Filtration	
280-189151-2	WUABAFMW-01 (BP)	Dissolved	Water	Filtration	
280-189151-3	WUABAFMW-01 (Rinsate)	Dissolved	Water	Filtration	
MB 280-647171/1-B	Method Blank	Dissolved	Water	Filtration	
LCS 280-647171/2-B	Lab Control Sample	Dissolved	Water	Filtration	

Prep Batch: 647387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-1	WUABAFMW-01 (PDB)	Dissolved	Water	3005A	647171
280-189151-2	WUABAFMW-01 (BP)	Dissolved	Water	3005A	647171
280-189151-3	WUABAFMW-01 (Rinsate)	Dissolved	Water	3005A	647171
MB 280-647171/1-B	Method Blank	Dissolved	Water	3005A	647171
LCS 280-647171/2-B	Lab Control Sample	Dissolved	Water	3005A	647171

Analysis Batch: 647550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-1	WUABAFMW-01 (PDB)	Total/NA	Water	6020B	647126
280-189151-2	WUABAFMW-01 (BP)	Total/NA	Water	6020B	647126
280-189151-3	WUABAFMW-01 (Rinsate)	Total/NA	Water	6020B	647126
MB 280-647126/1-A	Method Blank	Total/NA	Water	6020B	647126
LCS 280-647126/25-A	Lab Control Sample	Total/NA	Water	6020B	647126

Analysis Batch: 647790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-1	WUABAFMW-01 (PDB)	Dissolved	Water	6010D	647387
280-189151-2	WUABAFMW-01 (BP)	Dissolved	Water	6010D	647387
280-189151-3	WUABAFMW-01 (Rinsate)	Dissolved	Water	6010D	647387
MB 280-647171/1-B	Method Blank	Dissolved	Water	6010D	647387
LCS 280-647171/2-B	Lab Control Sample	Dissolved	Water	6010D	647387

Analysis Batch: 647819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-1	WUABAFMW-01 (PDB)	Total/NA	Water	6010D	647126
280-189151-2	WUABAFMW-01 (BP)	Total/NA	Water	6010D	647126
280-189151-3	WUABAFMW-01 (Rinsate)	Total/NA	Water	6010D	647126
MB 280-647126/1-A	Method Blank	Total/NA	Water	6010D	647126
LCS 280-647126/2-A	Lab Control Sample	Total/NA	Water	6010D	647126

QC Association Summary

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

General Chemistry

Analysis Batch: 647160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-1	WUABAFMW-01 (PDB)	Total/NA	Water	300.0	
280-189151-2	WUABAFMW-01 (BP)	Total/NA	Water	300.0	
280-189151-3	WUABAFMW-01 (Rinsate)	Total/NA	Water	300.0	
MB 280-647160/6	Method Blank	Total/NA	Water	300.0	
LCS 280-647160/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-647160/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-647160/3	Lab Control Sample	Total/NA	Water	300.0	
280-189151-1 MS	WUABAFMW-01 (PDB)	Total/NA	Water	300.0	
280-189151-1 MSD	WUABAFMW-01 (PDB)	Total/NA	Water	300.0	
280-189151-1 DU	WUABAFMW-01 (PDB)	Total/NA	Water	300.0	

Analysis Batch: 647330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-1	WUABAFMW-01 (PDB)	Total/NA	Water	300.0	
280-189151-2	WUABAFMW-01 (BP)	Total/NA	Water	300.0	
280-189151-3	WUABAFMW-01 (Rinsate)	Total/NA	Water	300.0	
MB 280-647330/6	Method Blank	Total/NA	Water	300.0	
LCS 280-647330/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-647330/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-647330/3	Lab Control Sample	Total/NA	Water	300.0	
280-189151-1 MS	WUABAFMW-01 (PDB)	Total/NA	Water	300.0	
280-189151-1 MSD	WUABAFMW-01 (PDB)	Total/NA	Water	300.0	
280-189151-1 DU	WUABAFMW-01 (PDB)	Total/NA	Water	300.0	

Analysis Batch: 648165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-1	WUABAFMW-01 (PDB)	Total/NA	Water	SM 2320B	
280-189151-2	WUABAFMW-01 (BP)	Total/NA	Water	SM 2320B	
280-189151-3	WUABAFMW-01 (Rinsate)	Total/NA	Water	SM 2320B	
MB 280-648165/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-648165/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-648165/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 648790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-1	WUABAFMW-01 (PDB)	Total/NA	Water	353.2	
MB 280-648790/131	Method Blank	Total/NA	Water	353.2	
LCS 280-648790/129	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-648790/130	Lab Control Sample Dup	Total/NA	Water	353.2	

Analysis Batch: 648892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-189151-2	WUABAFMW-01 (BP)	Total/NA	Water	353.2	
280-189151-3	WUABAFMW-01 (Rinsate)	Total/NA	Water	353.2	
MB 280-648892/20	Method Blank	Total/NA	Water	353.2	
LCS 280-648892/18	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-648892/19	Lab Control Sample Dup	Total/NA	Water	353.2	

Lab Chronicle

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Client Sample ID: WUABAFMW-01 (PDB)

Lab Sample ID: 280-189151-1

Date Collected: 03/21/24 11:00

Matrix: Water

Date Received: 03/23/24 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	647592	03/29/24 13:48	DMC	EET DEN
Total/NA	Prep	3510C			214.9 mL	1 mL	647471	03/28/24 11:50	EDW	EET DEN
Total/NA	Analysis	8270E		1			647795	04/01/24 15:37	DCM	EET DEN
Total/NA	Prep	8011			34.9 mL	35 mL	647144	03/26/24 09:50	MJL	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	647188	03/26/24 22:04	MJL	EET DEN
Dissolved	Filtration	Filtration			50 mL	50 mL	647171	03/26/24 11:12	KLG	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	647387	03/29/24 08:30	AES	EET DEN
Dissolved	Analysis	6010D		1			647790	03/30/24 02:17	ADL	EET DEN
Total/NA	Prep	3020A			50 mL	50 mL	647126	03/26/24 15:15	AES	EET DEN
Total/NA	Analysis	6010D		1			647819	03/29/24 16:21	ADL	EET DEN
Total/NA	Prep	3020A			50 mL	50 mL	647126	03/26/24 15:15	AES	EET DEN
Total/NA	Analysis	6020B		1			647550	03/28/24 13:53	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	647160	03/26/24 15:09	IRC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	647330	03/27/24 14:31	IRC	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	648790	04/08/24 19:29	BCR	EET DEN
Total/NA	Analysis	SM 2320B		1			648165	04/02/24 19:33	LL	EET DEN

Client Sample ID: WUABAFMW-01 (BP)

Lab Sample ID: 280-189151-2

Date Collected: 03/21/24 17:15

Matrix: Water

Date Received: 03/23/24 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	647592	03/29/24 14:09	DMC	EET DEN
Total/NA	Prep	3510C			249.6 mL	1 mL	647471	03/28/24 11:50	EDW	EET DEN
Total/NA	Analysis	8270E		1			648146	04/03/24 16:43	DCM	EET DEN
Total/NA	Prep	8011			35.5 mL	35 mL	647144	03/26/24 09:50	MJL	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	647188	03/26/24 22:31	MJL	EET DEN
Dissolved	Filtration	Filtration			50 mL	50 mL	647171	03/26/24 11:12	KLG	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	647387	03/29/24 08:30	AES	EET DEN
Dissolved	Analysis	6010D		1			647790	03/30/24 02:21	ADL	EET DEN
Total/NA	Prep	3020A			50 mL	50 mL	647126	03/26/24 15:15	AES	EET DEN
Total/NA	Analysis	6010D		1			647819	03/29/24 16:25	ADL	EET DEN
Total/NA	Prep	3020A			50 mL	50 mL	647126	03/26/24 15:15	AES	EET DEN
Total/NA	Analysis	6020B		1			647550	03/28/24 13:57	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	647160	03/26/24 15:55	IRC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	647330	03/27/24 15:16	IRC	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	648892	04/09/24 15:21	BCR	EET DEN
Total/NA	Analysis	SM 2320B		1			648165	04/02/24 19:21	LL	EET DEN

Eurofins Denver

Lab Chronicle

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Client Sample ID: WUABAFMW-01 (Rinsate)

Lab Sample ID: 280-189151-3

Date Collected: 03/21/24 18:45

Matrix: Water

Date Received: 03/23/24 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	647592	03/29/24 14:29	DMC	EET DEN
Total/NA	Prep	3510C			248.6 mL	1 mL	647471	03/28/24 11:50	EDW	EET DEN
Total/NA	Analysis	8270E		1			647795	04/01/24 16:22	DCM	EET DEN
Total/NA	Prep	8011			34.6 mL	35 mL	647144	03/26/24 09:50	MJL	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	647188	03/26/24 22:58	MJL	EET DEN
Dissolved	Filtration	Filtration			50 mL	50 mL	647171	03/26/24 11:12	KLG	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	647387	03/29/24 08:30	AES	EET DEN
Dissolved	Analysis	6010D		1			647790	03/30/24 02:26	ADL	EET DEN
Total/NA	Prep	3020A			50 mL	50 mL	647126	03/26/24 15:15	AES	EET DEN
Total/NA	Analysis	6010D		1			647819	03/29/24 16:30	ADL	EET DEN
Total/NA	Prep	3020A			50 mL	50 mL	647126	03/26/24 15:15	AES	EET DEN
Total/NA	Analysis	6020B		1			647550	03/28/24 14:00	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	647160	03/26/24 16:06	IRC	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	647330	03/27/24 15:27	IRC	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	648892	04/09/24 15:23	BCR	EET DEN
Total/NA	Analysis	SM 2320B		1			648165	04/02/24 19:27	LL	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Accreditation/Certification Summary

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Laboratory: Eurofins Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260D		Water	Trihalomethanes, Total

Method Summary

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	EET DEN
6010D	Metals (ICP)	SW846	EET DEN
6020B	Metals (ICP/MS)	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
3010A	Preparation, Total Metals	SW846	EET DEN
3020A	Preparation, Total Metals	SW846	EET DEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN
8011	Microextraction	SW846	EET DEN
Filtration	Sample Filtration	None	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: John Shomaker and Associates Inc
Project/Site: Water Authority Data Gap Well Monitoring

Job ID: 280-189151-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-189151-1	WUABAFMW-01 (PDB)	Water	03/21/24 11:00	03/23/24 09:20
280-189151-2	WUABAFMW-01 (BP)	Water	03/21/24 17:15	03/23/24 09:20
280-189151-3	WUABAFMW-01 (Rinsate)	Water	03/21/24 18:45	03/23/24 09:20