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January 22,2023

Hillary Young
Chief Engineer - Land Protection Division
Oklahoma Department of Environmental Quality
P.O. Box 1677
Oklahoma City, OK 73162

Re: Notification of Apparent Exceedances from Second 2022 Assessment Monitoring Western Farmers Electric Cooperative – Hugo Power Station, Fort Towson, Oklahoma

# Dear Ms. Young:

Western Farmers Electric Cooperative (WFEC) has been conducting assessment monitoring associated with Coal Combustion Residuals (CCR) Units at its Hugo Power Station (HPS). The second 2022 assessment monitoring was conducted October 3-6, 2022. Based upon review of data from the second 2022 assessment monitoring meeting QA/QC standards, WFEC has identified constituents listed in Appendix B of Oklahoma Administrative Code Chapter 517, Disposal of Coal Combustion Residuals from Electric Utilities (OAC 252:517) at statistically significant levels (SSLs) above the GWPS at wells associated with its Landfill CCR Unit. In particular, molybdenum was detected at SSLs above the GWPS at monitoring wells MW-15A, MW-16, MW-18, and MW-19S, where previous SSLs exceedances for molybdenum have been historically noted. This submittal addresses OAC 252:517-9-6(g), which requires the owner/operator to prepare a notification identifying OAC 252:517 Appendix B constituents detected at SSLs above the GWPS.

The laboratory reports for the second 2022 assessment monitoring of the Landfill CCR Unit monitoring wells are included in **Attachment A**. Groundwater data summary tables for the Landfill CCR Unit updated to include results from the second 2022 assessment monitoring are included in **Attachment B**.

Molybdenum has been historically detected at SSLs above the GWPS at the above mentioned wells and notifications have previously been provided to the Oklahoma Department of Environmental Quality (ODEQ). A <u>Plan and Schedule for Analyzing SSIs for Molybdenum</u> (Altamira; March 4, 2020) was submitted to and approved for implementation by ODEQ in its letter dated April 28, 2020. An <u>Assessment of Corrective Measures (ACM) Report</u> was submitted on October 29, 2020 and semi-annual sampling as proposed to establish the effectiveness of monitored natural attenuation as a groundwater remedy is underway. Molybdenum concentrations appear to have decreased in these wells over the sampling history and reported molybdenum concentrations from the second 2022 assessment monitoring are lower than those from the first 2022 sampling at MW-15A, MW-18, and MW-19S.

Other than as discussed above, no OAC 252:517 Appendix B constituents were detected at SSLs above the GWPS in monitoring wells associated with the Landfill CCR Unit. Also, no OAC 252:517 Appendix B constituents were detected at SSLs above the GWPS in monitoring wells associated with the Surface Impoundment CCR Unit.

Sincerely,

Kent Fletcher

**Environmental Coordinator** 

Attachments

cc: John McCreight / WFEC

Chris Schaefer and Bert Smith / Altamira-US, LLC.

# **ATTACHMENT A**

# SECOND 2022 ASSESSMENT MONITORING – OCTOBER 2022 LABORATORY REPORT (LANDFILL CCR UNIT)



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January 04, 2023

Heather Tiffany Altamira 525 central park Dr Suite 500 Oklahoma City, OK 73013

Work Order: **HS22100361** 

Laboratory Results for: WFEC / CCR Landfill

Dear Heather Tiffany,

ALS Environmental received 13 sample(s) on Oct 07, 2022 for the analysis presented in the following report.

This is a REVISED REPORT. Please see the Case Narrative for discussion concerning this revision.

Regards,

Generated By: JUMOKE.LAWAL

Anna Kinchen Project Manager

Client: Altamira

Project: WFEC / CCR Landfill SAMPLE SUMMARY

Work Order: HS22100361

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22100361-01	MW-3	Water		05-Oct-2022 18:16	07-Oct-2022 09:00	
HS22100361-02	MW-5S	Water		06-Oct-2022 11:30	07-Oct-2022 09:00	
HS22100361-03	MW-7S	Water		05-Oct-2022 15:20	07-Oct-2022 09:00	
HS22100361-04	MW-13	Water		05-Oct-2022 18:12	07-Oct-2022 09:00	
HS22100361-05	MW-19S	Water		06-Oct-2022 09:40	07-Oct-2022 09:00	
HS22100361-06	MW-20	Water		05-Oct-2022 16:48	07-Oct-2022 09:00	
HS22100361-07	MW-21	Water		05-Oct-2022 15:40	07-Oct-2022 09:00	
HS22100361-08	MW-14A	Water		06-Oct-2022 14:51	07-Oct-2022 09:00	
HS22100361-09	MW-15A	Water		06-Oct-2022 13:03	07-Oct-2022 09:00	
HS22100361-10	MW-17	Water		06-Oct-2022 15:33	07-Oct-2022 09:00	
HS22100361-11	MW-18	Water		06-Oct-2022 14:05	07-Oct-2022 09:00	
HS22100361-12	MW-16	Water		06-Oct-2022 17:30	08-Oct-2022 09:00	
HS22100361-13	DUP-3	Water		05-Oct-2022 15:20	07-Oct-2022 09:00	

Client: Altamira CASE NARRATIVE

Project: WFEC / CCR Landfill

Work Order: HS22100361

### **Work Order Comments**

Revised this report on 01-04-23 to include Alkalinity for sample MW-7S (HS22100361-03). Due to lab error, this sample was analyzed
out of hold.

Results are flagged with "H" and should be considered estimated.

### **Work Order Comments**

Revised this report on 12-12-2022 to include Mercury for samples MW-19S (HS22100361-05), MW-14A (HS22100361-08), MW-15A (HS22100361-09), MW-17 (HS22100361-10) and MW-18 (HS22100361-11). Added pH, TDS and Cond to sample MW-7S (HS22100361-03). Added pH and TDS to sample Dup-3 (HS22100361-13). Due to lab error, these samples were analyzed out of hold

Results are flagged with "H" and should be considered estimated.

• Sample received outside method holding time for pH. pH is an immediate test. Sample results are flagged with an "H" qualifier.

The temperature at the time of pH is reported. Please note that all pH results are already normalized to a temperature of 25 °C.

• The analyses for Radium-226 and Radium-228 were subcontracted to GEL Laboratories in Charleston, SC. Final reports attached.

### **Work Order Comments**

· Login Notes:

Limited volume for MW-16, Sulfide only 50ml and unpreserved volume only 100ml received.

## Metals by Method SW6020A

Batch ID: 184802

Sample ID: MW-19S (HS22100361-05MS)

• The MS and/or MSD recovery was outside of the control limits; however, the result in the parent sample is greater than 4x the spike amount. (Boron,Calcium,Molybdenum,Potassium,Sodium)

Sample ID: MW-19S (HS22100361-05PDS)

• The PDS recovery was outside method control limits, however the result in the parent sample is greater than 4x the spike amount. (Molybdenum)

Batch ID: 184803

Sample ID: MW-19S (HS22100361-05MS)

• The MS and/or MSD recovery was outside of the control limits; however, the result in the parent sample is greater than 4x the spike amount. (Molybdenum)

# **Metals by Method SW7470A**

Batch ID: 184786

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Batch ID: 187029

• Samples analyzed out of hold due to lab error. Results should be considered estimated.

### Wet Chemistry by Method SM4500H+ B

Batch ID: R423301,R419006,R419091

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client: Altamira CASE NARRATIVE

Project: WFEC / CCR Landfill

Work Order: HS22100361

# Wet Chemistry by Method M2540C

Batch ID: R423392

• Samples analyzed out of hold due to lab error. Results should be considered estimated.

# **Wet Chemistry by Method E300**

Batch ID: R418890

Sample ID: HS22100357-01MS

• MS and MSD are for an unrelated sample

Sample ID: MW-19S (HS22100361-05MS)

• MS and/or MSD recovered outside control limits for Nitrogen, Nitrite (As N)

The MS and/or MSD recovery was outside of the control limits; however, the result in the parent sample is greater than 4x the spike amount. Sulfate

Batch ID: R418893

Sample ID: HS22100190-10MS

• MS and MSD are for an unrelated sample

Batch ID: R418914

Sample ID: MW-16 (HS22100361-12MS)

• The MS and/or MSD recovery was outside of the control limits; however, the result in the parent sample is greater than 4x the spike amount. Sulfate

### Wet Chemistry by Method SM3500FED

Batch ID: R418882,R418883,R418923,R418924

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

# WetChemistry by Method E410.4

Batch ID: R419458

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

# WetChemistry by Method M2510 B

Batch ID: R419447,R423401

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

# WetChemistry by Method M2540C

Batch ID: R419366,R419454

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client: Altamira CASE NARRATIVE

Project: WFEC / CCR Landfill

Work Order: HS22100361

# WetChemistry by Method SM4500 S2-F

# Batch ID: R419364,R419523

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

# WetChemistry by Method SM2320B

Batch ID: R419195,R419513

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-3

Collection Date: 05-Oct-2022 18:16

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-01

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:	SW6020A		Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	14-Oct-2022 20:58
Arsenic	U		0.000400	0.00200	mg/L	1	14-Oct-2022 20:58
Barium	0.0108		0.00190	0.00400	mg/L	1	14-Oct-2022 20:58
Beryllium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 20:58
Boron	1.09		0.110	0.200	mg/L	10	17-Oct-2022 13:26
Cadmium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 20:58
Calcium	184		0.340	5.00	mg/L	10	17-Oct-2022 13:26
Chromium	U		0.000400	0.00400	mg/L	1	14-Oct-2022 20:58
Cobalt	U		0.000200	0.00500	mg/L	1	14-Oct-2022 20:58
Lead	U		0.000600	0.00200	mg/L	1	14-Oct-2022 20:58
Lithium	0.130		0.00100	0.00500	mg/L	1	14-Oct-2022 20:58
Molybdenum	U		0.000600	0.00500	mg/L	1	14-Oct-2022 20:58
Selenium	U		0.00110	0.00200	mg/L	1	14-Oct-2022 20:58
Thallium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 20:58
MERCURY BY SW7470A		Method:	SW7470A		Prep:SW7470A /	13-Oct-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Oct-2022 14:13
ANIONS BY E300.0, REV 2.1, 1	993	Metho	d:E300				Analyst: TH
Chloride	12.5		0.200	0.500	mg/L	1	07-Oct-2022 12:26
Fluoride	0.238		0.0500	0.100	mg/L	1	07-Oct-2022 12:26
Nitrogen, Nitrate (As N)	0.0481	J	0.0300	0.100	mg/L	1	07-Oct-2022 12:26
Sulfate	1,050		4.00	10.0	mg/L	20	07-Oct-2022 13:03
CHEMICAL OXYGEN DEMAND E410.4, REV 2.0, 1993	ВҮ	Method	l:E410.4				Analyst: TH
Chemical Oxygen Demand	12.0	J	5.00	15.0	mg/L	1	14-Oct-2022 15:30
SPECIFIC CONDUCTANCE BY 2011		Method:	M2510 B				Analyst: TH
Specific Conductivity	2,660		5.00	5.00	umhos/cm @ 25.0 °C	1	14-Oct-2022 14:00
TOTAL DISSOLVED SOLIDS B -2011		Method	M2540C				Analyst: CWG
Total Dissolved Solids (Residu Filterable)	ie, 1,900		5.00	10.0	mg/L	1	12-Oct-2022 18:14
PH BY SM4500H+ B-2011	ı	Method:SI	M4500H+ B				Analyst: MZD
рН	7.33	Н	0.100	0.100	pH Units	1	10-Oct-2022 15:15
Temp Deg C @pH	20.8	Н	0	0	°C	1	10-Oct-2022 15:15
SUBCONTRACT ANALYSIS - F 226		Metho	od:NA				Analyst: SUB
Subcontract Analysis	See Attached		0		NA	1	30-Nov-2022 09:14
SUBCONTRACT ANALYSIS - F		Meth	od:NA				Analyst: SUB
Subcontract Analysis	See Attached		0		NA	1	30-Nov-2022 09:14

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-5S

Collection Date: 06-Oct-2022 11:30

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-02

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION E SM3500FED	BY N	/lethod:SI	M3500FED				Analyst: JHD
Ferric Iron	U		0.0200	0.0500	mg/L	1	17-Oct-2022 16:11
FERRIC IRON (DISS)- BY CALCULA' BY SM3500FED	TION N	lethod:SI/ disso)	M3500FED olved)				Analyst: JHD
Ferric Iron, Dissolved	U	•	0.0200	0.0500	mg/L	1	17-Oct-2022 17:04
ICP-MS METALS BY SW6020A		Method:	SW6020A		Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	14-Oct-2022 21:00
Arsenic	0.000433	J	0.000400	0.00200	mg/L	1	14-Oct-2022 21:00
Barium	0.00653		0.00190	0.00400	mg/L	1	14-Oct-2022 21:00
Beryllium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:00
Boron	2.94		0.110	0.200	mg/L	10	17-Oct-2022 13:28
Cadmium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:00
Calcium	24.1		0.0340	0.500	mg/L	1	14-Oct-2022 21:00
Chromium	U		0.000400	0.00400	mg/L	1	14-Oct-2022 21:00
Cobalt	U		0.000200	0.00500	mg/L	1	14-Oct-2022 21:00
Iron	U		0.0120	0.200	mg/L	1	14-Oct-2022 21:00
Lead	U		0.000600	0.00200	mg/L	1	14-Oct-2022 21:00
Lithium	0.0572		0.00100	0.00500	mg/L	1	14-Oct-2022 21:00
Magnesium	4.79		0.0100	0.200	mg/L	1	14-Oct-2022 21:00
Molybdenum	0.00210	J	0.000600	0.00500	mg/L	1	14-Oct-2022 21:00
Potassium	4.17		0.0180	0.200	mg/L	1	14-Oct-2022 21:00
Selenium	U		0.00110	0.00200	mg/L	1	14-Oct-2022 21:00
Sodium	387		0.140	2.00	mg/L	10	17-Oct-2022 13:28
Thallium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:00
DISSOLVED METALS BY SW6020A	Metho	od:SW602	20A (dissolv	ved)	Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Iron	U		0.0120	0.200	mg/L	1	13-Oct-2022 23:50
Molybdenum	0.00232	J	0.000600	0.00500	mg/L	1	13-Oct-2022 23:50
MERCURY BY SW7470A		Method:S	SW7470A		Prep:SW7470A /	13-Oct-2022	Analyst: MSC
Mercury	U	(	0.0000300	0.000200	mg/L	1	13-Oct-2022 14:15
ANIONS BY E300.0, REV 2.1, 1993		Metho	d:E300				Analyst: TH
Chloride	25.6		0.200	0.500	mg/L	1	07-Oct-2022 12:32
Fluoride	1.40		0.0500	0.100	mg/L	1	07-Oct-2022 12:32
Nitrogen, Nitrate (As N)	0.243		0.0300	0.100	mg/L	1	07-Oct-2022 12:32
Sulfate	482		4.00	10.0	mg/L	20	07-Oct-2022 13:41
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Method	:E410.4				Analyst: TH
Chemical Oxygen Demand	7.00	J	5.00	15.0	mg/L	1	14-Oct-2022 15:30
SPECIFIC CONDUCTANCE BY SM 2 2011		Method:					Analyst: TH
Specific Conductivity	1,990		5.00	5.00	umhos/cm @ 25.0 °C	1	14-Oct-2022 14:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-5S

Collection Date: 06-Oct-2022 11:30

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-02

Matrix:Water

ANALYSES	RESULT (	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY S -2011	M2540C	Method:	M2540C				Analyst: KAl
Total Dissolved Solids (Residue, Filterable)	1,100		5.00	10.0	mg/L	1	13-Oct-2022 17:29
ALKALINITY BY SM 2320B-2011	r	Method:S	M2320B				Analyst: JA0
Alkalinity, Bicarbonate (As CaCO3)	430		5.00	5.00	mg/L	1	12-Oct-2022 03:10
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	12-Oct-2022 03:10
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	12-Oct-2022 03:10
Alkalinity, Total (As CaCO3)	430		5.00	5.00	mg/L	1	12-Oct-2022 03:10
FERROUS IRON BY SM3500 FE B	M	ethod:SN	M3500FED				Analyst: MZI
Ferrous Iron	U		0.0200	0.0500	mg/L	1	07-Oct-2022 14:2
FERROUS IRON BY SM3500 FE D	M	ethod:SM (disso	M3500FED blved)				Analyst: MZ
Ferrous Iron, Dissolved	U	•	0.0200	0.0500	mg/L	1	07-Oct-2022 18:3
SULFIDE BY SM4500 S2-F-2011	Me	ethod:SN	14500 S2-F				Analyst: MZ
Sulfide	U		1.00	1.00	mg/L	1	13-Oct-2022 17:5
PH BY SM4500H+ B-2011	Me	ethod:SN	14500H+ B				Analyst: MZ
рН	7.89	Н	0.100	0.100	pH Units	1	11-Oct-2022 13:04
Temp Deg C @pH	20.5	Н	0	0	°C	1	11-Oct-2022 13:04
SUBCONTRACT ANALYSIS - RAD 226	IUM	Metho	d:NA				Analyst: SU
Subcontract Analysis	See Attached		0		NA	1	30-Nov-2022 09:1
SUBCONTRACT ANALYSIS - RAD	IUM 228	Metho	d:NA				Analyst: SU
Subcontract Analysis	See Attached		0		NA	1	30-Nov-2022 09:1

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-7S

Collection Date: 05-Oct-2022 15:20

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-03

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION B SM3500FED	Υ	Method:S	M3500FED				Analyst: JHD
Ferric Iron	0.0310	J	0.0200	0.0500	mg/L	1	17-Oct-2022 16:11
FERRIC IRON (DISS)- BY CALCULAT BY SM3500FED	TION		M3500FED olved)				Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	17-Oct-2022 17:04
ICP-MS METALS BY SW6020A		Method:	SW6020A		Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	14-Oct-2022 21:02
Arsenic	U		0.000400	0.00200	mg/L	1	14-Oct-2022 21:02
Barium	0.0148		0.00190	0.00400	mg/L	1	14-Oct-2022 21:02
Beryllium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:02
Boron	2.70		0.110	0.200	mg/L	10	17-Oct-2022 13:30
Cadmium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:02
Calcium	100		0.0340	0.500	mg/L	1	14-Oct-2022 21:02
Chromium	0.000669	J	0.000400	0.00400	mg/L	1	14-Oct-2022 21:02
Cobalt	U		0.000200	0.00500	mg/L	1	14-Oct-2022 21:02
Iron	0.158	J	0.0120	0.200	mg/L	1	14-Oct-2022 21:02
Lead	U		0.000600	0.00200	mg/L	1	14-Oct-2022 21:02
Lithium	0.0685		0.00100	0.00500	mg/L	1	14-Oct-2022 21:02
Magnesium	12.2		0.0100	0.200	mg/L	1	14-Oct-2022 21:02
Molybdenum	0.00103	J	0.000600	0.00500	mg/L	1	14-Oct-2022 21:02
Potassium	5.34		0.0180	0.200	mg/L	1	14-Oct-2022 21:02
Selenium	U		0.00110	0.00200	mg/L	1	14-Oct-2022 21:02
Sodium	313		0.140	2.00	mg/L	10	17-Oct-2022 13:30
Thallium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:02
DISSOLVED METALS BY SW6020A	Meth	od:SW60	20A (dissolv	ed)	Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Iron	0.113	J	0.0120	0.200	mg/L	1	13-Oct-2022 23:52
Molybdenum	0.00112	J	0.000600	0.00500	mg/L	1	13-Oct-2022 23:52
MERCURY BY SW7470A		Method:	SW7470A		Prep:SW7470A /	13-Oct-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Oct-2022 14:16
ANIONS BY E300.0, REV 2.1, 1993		Metho	d:E300				Analyst: TH
Chloride	16.9		0.200	0.500	mg/L	1	07-Oct-2022 15:00
Fluoride	0.711		0.0500	0.100	mg/L	1	07-Oct-2022 15:00
Nitrogen, Nitrate (As N)	0.155		0.0300	0.100	mg/L	1	07-Oct-2022 15:00
Sulfate	687		4.00	10.0	mg/L	20	07-Oct-2022 19:30
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Method	d:E410.4				Analyst: TH
Chemical Oxygen Demand	U		5.00	15.0	mg/L	1	14-Oct-2022 15:30
SPECIFIC CONDUCTANCE BY SM 25 2011			:M2510 B				Analyst: MZD
Specific Conductivity	2,000	Н	5.00	5.00	umhos/cm @ 25.0 °C	1	07-Dec-2022 14:57

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-7S

Collection Date: 05-Oct-2022 15:20

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-03

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SN -2011	12540C	Method:	M2540C				Analyst: CWC
Total Dissolved Solids (Residue, Filterable)	1,350	Н	5.00	10.0	mg/L	1	06-Dec-2022 13:49
ALKALINITY BY SM 2320B-2011		Method:S	M2320B				Analyst: JAC
Alkalinity, Bicarbonate (As CaCO3)	326	Н	5.00	5.00	mg/L	1	19-Dec-2022 12:35
Alkalinity, Carbonate (As CaCO3)	U	Н	5.00	5.00	mg/L	1	19-Dec-2022 12:35
Alkalinity, Hydroxide (As CaCO3)	U	Н	5.00	5.00	mg/L	1	19-Dec-2022 12:35
Alkalinity, Total (As CaCO3)	326	Н	5.00	5.00	mg/L	1	19-Dec-2022 12:35
FERROUS IRON BY SM3500 FE B	N	Method:SN	//3500FED				Analyst: MZD
Ferrous Iron	0.127		0.0200	0.0500	mg/L	1	07-Oct-2022 14:25
FERROUS IRON BY SM3500 FE D	N	Method:SN disso)					Analyst: MZD
Ferrous Iron, Dissolved	0.117		0.0200	0.0500	mg/L	1	07-Oct-2022 14:21
SULFIDE BY SM4500 S2-F-2011	N	lethod:SN	14500 S2-F				Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	12-Oct-2022 16:00
PH BY SM4500H+ B-2011	N	lethod:SN	14500H+ B				Analyst: CD
рН	7.81	Н	0.100	0.100	pH Units	1	06-Dec-2022 14:53
Temp Deg C @pH	20.8	Н	0	0	°C	1	06-Dec-2022 14:53
SUBCONTRACT ANALYSIS - RADII 226	UM	Metho	d:NA				Analyst: SUB
Subcontract Analysis S	See Attached		0		NA	1	30-Nov-2022 09:14
SUBCONTRACT ANALYSIS - RADII	UM 228	Metho	d:NA				Analyst: SUB
Subcontract Analysis S	See Attached		0		NA	1	30-Nov-2022 09:14

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-13

Collection Date: 05-Oct-2022 18:12

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-04

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method	:SW6020A		Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	14-Oct-2022 21:04
Arsenic	0.000423	J	0.000400	0.00200	mg/L	1	14-Oct-2022 21:04
Barium	0.0100		0.00190	0.00400	mg/L	1	14-Oct-2022 21:04
Beryllium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:04
Boron	3.08		0.110	0.200	mg/L	10	17-Oct-2022 13:32
Cadmium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:04
Calcium	135		0.0340	0.500	mg/L	1	14-Oct-2022 21:04
Chromium	U		0.000400	0.00400	mg/L	1	14-Oct-2022 21:04
Cobalt	U		0.000200	0.00500	mg/L	1	14-Oct-2022 21:04
Lead	U		0.000600	0.00200	mg/L	1	14-Oct-2022 21:04
Lithium	0.131		0.00100	0.00500	mg/L	1	14-Oct-2022 21:04
Molybdenum	0.00101	J	0.000600	0.00500	mg/L	1	14-Oct-2022 21:04
Selenium	U		0.00110	0.00200	mg/L	1	14-Oct-2022 21:04
Thallium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:04
MERCURY BY SW7470A		Method	:SW7470A		Prep:SW7470A /	13-Oct-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Oct-2022 14:18
ANIONS BY E300.0, REV 2.1, 1	993	Meth	od:E300				Analyst: TH
Chloride	14.4		0.200	0.500	mg/L	1	07-Oct-2022 12:37
Fluoride	0.263		0.0500	0.100	mg/L	1	07-Oct-2022 12:37
Nitrogen, Nitrate (As N)	0.297		0.0300	0.100	mg/L	1	07-Oct-2022 12:37
Sulfate	1,380		4.00	10.0	mg/L	20	07-Oct-2022 13:46
CHEMICAL OXYGEN DEMAND E410.4, REV 2.0, 1993	BY	Metho	d:E410.4				Analyst: TH
Chemical Oxygen Demand	13.0	J	5.00	15.0	mg/L	1	14-Oct-2022 15:30
SPECIFIC CONDUCTANCE BY 2011		Method	d:M2510 B				Analyst: TH
Specific Conductivity	3,250		5.00	5.00	umhos/cm @ 25.0 °C	1	14-Oct-2022 14:00
TOTAL DISSOLVED SOLIDS B -2011	Y SM2540C	Metho	d:M2540C		<u> </u>		Analyst: CWG
Total Dissolved Solids (Residu Filterable)	ie, 2,460		5.00	10.0	mg/L	1	12-Oct-2022 18:14
PH BY SM4500H+ B-2011		Method:	SM4500H+ B				Analyst: MZD
pH	7.33	Н	0.100	0.100	pH Units	1	10-Oct-2022 15:15
Temp Deg C @pH	21.0	Н	0	0	°C	1	10-Oct-2022 15:15
SUBCONTRACT ANALYSIS - F 226		Met	nod:NA				Analyst: SUB
Subcontract Analysis	See Attached		0		NA	1	30-Nov-2022 09:14
SUBCONTRACT ANALYSIS - F		Met	nod:NA				Analyst: SUB
Subcontract Analysis	See Attached		0		NA	1	30-Nov-2022 09:14

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-19S

Collection Date: 06-Oct-2022 09:40

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-05

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION B' SM3500FED	Y N	/lethod:SN	13500FED				Analyst: JHD
Ferric Iron	U		0.0200	0.0500	mg/L	1	17-Oct-2022 16:11
FERRIC IRON (DISS)- BY CALCULAT BY SM3500FED	ION N	lethod:SN disso)	13500FED lived)				Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	17-Oct-2022 17:04
ICP-MS METALS BY SW6020A		Method:S	W6020A		Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	14-Oct-2022 20:42
Arsenic	0.00720		0.000400	0.00200	mg/L	1	14-Oct-2022 20:42
Barium	0.0164		0.00190	0.00400	mg/L	1	14-Oct-2022 20:42
Beryllium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 20:42
Boron	8.43		0.220	0.400	mg/L	20	17-Oct-2022 14:54
Cadmium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 20:42
Calcium	40.7		0.0340	0.500	mg/L	1	14-Oct-2022 20:42
Chromium	U		0.000400	0.00400	mg/L	1	14-Oct-2022 20:42
Cobalt	U		0.000200	0.00500	mg/L	1	14-Oct-2022 20:42
Iron	U		0.0120	0.200	mg/L	1	14-Oct-2022 20:42
Lead	U		0.000600	0.00200	mg/L	1	14-Oct-2022 20:42
Lithium	0.00111	J	0.00100	0.00500	mg/L	1	14-Oct-2022 20:42
Magnesium	0.0228	J	0.0100	0.200	mg/L	1	14-Oct-2022 20:42
Molybdenum	0.430		0.000600	0.00500	mg/L	1	14-Oct-2022 20:42
Potassium	37.7		0.0180	0.200	mg/L	1	14-Oct-2022 20:42
Selenium	0.00944		0.00110	0.00200	mg/L	1	14-Oct-2022 20:42
Sodium	752		0.280	4.00	mg/L	20	17-Oct-2022 14:54
Thallium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 20:42
DISSOLVED METALS BY SW6020A	Metho	od:SW602	0A (dissolved	1)	Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Iron	U		0.0120	0.200	mg/L	1	13-Oct-2022 23:37
Molybdenum	0.413		0.000600	0.00500	mg/L	1	13-Oct-2022 23:37
MERCURY BY SW7470A		Method:S	W7470A		Prep:SW7470A /	06-Dec-2022	
Mercury	U		0.0000300	0.000200	mg/L	1	07-Dec-2022 09:46
ANIONS BY E300.0, REV 2.1, 1993		Method	I:E300		, and the second		Analyst: TH
Chloride	13.3		0.200	0.500	mg/L	1	07-Oct-2022 12:11
Fluoride	1.59		0.0500	0.100	mg/L	1	07-Oct-2022 12:11
Nitrogen, Nitrate (As N)	U		0.0300	0.100	mg/L	1	07-Oct-2022 12:11
Sulfate	1,480		10.0	25.0	mg/L	50	07-Oct-2022 12:58
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Method	E410.4				Analyst: TH
Chemical Oxygen Demand	18.0		5.00	15.0	mg/L	1	14-Oct-2022 15:30
SPECIFIC CONDUCTANCE BY SM 25 2011		Method:I	M2510 B				Analyst: TH
Specific Conductivity	3,570		5.00	5.00	umhos/cm @ 25.0 °C	1	14-Oct-2022 14:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-19S

Collection Date: 06-Oct-2022 09:40

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-05

Matrix:Water

ANALYSES	RESULT (	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SN -2011	12540C	Method:	M2540C				Analyst: KAF
Total Dissolved Solids (Residue, Filterable)	2,210		5.00	10.0	mg/L	1	13-Oct-2022 17:25
ALKALINITY BY SM 2320B-2011	ľ	Method:S	M2320B				Analyst: JAC
Alkalinity, Bicarbonate (As CaCO3)	U		5.00	5.00	mg/L	1	12-Oct-2022 00:3
Alkalinity, Carbonate (As CaCO3)	61.0		5.00	5.00	mg/L	1	12-Oct-2022 00:31
Alkalinity, Hydroxide (As CaCO3)	68.7		5.00	5.00	mg/L	1	12-Oct-2022 00:31
Alkalinity, Total (As CaCO3)	130		5.00	5.00	mg/L	1	12-Oct-2022 00:31
FERROUS IRON BY SM3500 FE B	M	ethod:SN	//3500FED				Analyst: MZ[
Ferrous Iron	0.0230	J	0.0200	0.0500	mg/L	1	07-Oct-2022 14:25
FERROUS IRON BY SM3500 FE D	М	ethod:SM (disso	//3500FED Dived)				Analyst: MZI
Ferrous Iron, Dissolved	U		0.0200	0.0500	mg/L	1	07-Oct-2022 18:35
SULFIDE BY SM4500 S2-F-2011	Me	ethod:SN	14500 S2-F				Analyst: MZI
Sulfide	U		1.00	1.00	mg/L	1	13-Oct-2022 17:52
PH BY SM4500H+ B-2011	Me	ethod:SN	14500H+ B				Analyst: MZ[
рН	10.8	Н	0.100	0.100	pH Units	1	11-Oct-2022 13:04
Temp Deg C @pH	20.2	Н	0	0	°C	1	11-Oct-2022 13:04
SUBCONTRACT ANALYSIS - RADII 226	UM	Metho	d:NA				Analyst: SUE
Subcontract Analysis S	See Attached		0		NA	1	30-Nov-2022 09:14
SUBCONTRACT ANALYSIS - RADI	UM 228	Metho	d:NA				Analyst: SUE
Subcontract Analysis S	See Attached		0		NA	1	30-Nov-2022 09:14

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-20

Collection Date: 05-Oct-2022 16:48

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-06

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:	SW6020A		Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	14-Oct-2022 21:06
Arsenic	U		0.000400	0.00200	mg/L	1	14-Oct-2022 21:06
Barium	0.01000		0.00190	0.00400	mg/L	1	14-Oct-2022 21:06
Beryllium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:06
Boron	0.837		0.0110	0.0200	mg/L	1	14-Oct-2022 21:06
Cadmium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:06
Calcium	358		0.340	5.00	mg/L	10	17-Oct-2022 13:48
Chromium	U		0.000400	0.00400	mg/L	1	14-Oct-2022 21:06
Cobalt	U		0.000200	0.00500	mg/L	1	14-Oct-2022 21:06
Lead	U		0.000600	0.00200	mg/L	1	14-Oct-2022 21:06
Lithium	0.108		0.00100	0.00500	mg/L	1	14-Oct-2022 21:06
Molybdenum	U		0.000600	0.00500	mg/L	1	14-Oct-2022 21:06
Selenium	U		0.00110	0.00200	mg/L	1	14-Oct-2022 21:06
Thallium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:06
MERCURY BY SW7470A		Method:	SW7470A		Prep:SW7470A /	13-Oct-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Oct-2022 14:20
ANIONS BY E300.0, REV 2.1, 19	93	Metho	d:E300				Analyst: TH
Chloride	5.39		0.200	0.500	mg/L	1	07-Oct-2022 12:42
Fluoride	0.209		0.0500	0.100	mg/L	1	07-Oct-2022 12:42
Nitrogen, Nitrate (As N)	U		0.0300	0.100	mg/L	1	07-Oct-2022 12:42
Sulfate	950		10.0	25.0	mg/L	50	07-Oct-2022 13:51
CHEMICAL OXYGEN DEMAND E410.4, REV 2.0, 1993	ВҮ	Method	d:E410.4				Analyst: TH
Chemical Oxygen Demand	U		5.00	15.0	mg/L	1	14-Oct-2022 15:30
SPECIFIC CONDUCTANCE BY 2011		Method	:M2510 B				Analyst: TH
Specific Conductivity	2,270		5.00	5.00	umhos/cm @ 25.0 °C	1	14-Oct-2022 14:00
TOTAL DISSOLVED SOLIDS BY -2011	/ SM2540C	Method	:M2540C		<u>@ 2010</u>		Analyst: CWG
Total Dissolved Solids (Residue Filterable)	e, 1,760		5.00	10.0	mg/L	1	12-Oct-2022 18:14
PH BY SM4500H+ B-2011		Method:S	M4500H+ B				Analyst: MZD
pH	7.03	Н	0.100	0.100	pH Units	1	10-Oct-2022 15:15
Temp Deg C @pH	20.9	Н	0	0	°C	1	10-Oct-2022 15:15
SUBCONTRACT ANALYSIS - R 226		Meth	od:NA				Analyst: SUB
Subcontract Analysis	See Attached		0		NA	1	30-Nov-2022 09:14
SUBCONTRACT ANALYSIS - R		Meth	od:NA				Analyst: SUB
Subcontract Analysis	See Attached		0		NA	1	30-Nov-2022 09:14

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-21

Collection Date: 05-Oct-2022 15:40

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-07

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:	SW6020A		Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	14-Oct-2022 21:11
Arsenic	0.000569	J	0.000400	0.00200	mg/L	1	14-Oct-2022 21:11
Barium	0.00932		0.00190	0.00400	mg/L	1	14-Oct-2022 21:11
Beryllium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:11
Boron	2.36		0.110	0.200	mg/L	10	17-Oct-2022 13:50
Cadmium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:11
Calcium	140		0.0340	0.500	mg/L	1	14-Oct-2022 21:11
Chromium	U		0.000400	0.00400	mg/L	1	14-Oct-2022 21:11
Cobalt	U		0.000200	0.00500	mg/L	1	14-Oct-2022 21:11
Lead	U		0.000600	0.00200	mg/L	1	14-Oct-2022 21:11
Lithium	0.144		0.00100	0.00500	mg/L	1	14-Oct-2022 21:11
Molybdenum	U		0.000600	0.00500	mg/L	1	14-Oct-2022 21:11
Selenium	U		0.00110	0.00200	mg/L	1	14-Oct-2022 21:11
Thallium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:11
MERCURY BY SW7470A		Method:	SW7470A		Prep:SW7470A /	13-Oct-2022	Analyst: MSC
Mercury	U	(	0.0000300	0.000200	mg/L	1	13-Oct-2022 14:35
ANIONS BY E300.0, REV 2.1, 19	93	Metho	d:E300				Analyst: TH
Chloride	21.8		0.200	0.500	mg/L	1	07-Oct-2022 12:48
Fluoride	0.445		0.0500	0.100	mg/L	1	07-Oct-2022 12:48
Nitrogen, Nitrate (As N)	0.280		0.0300	0.100	mg/L	1	07-Oct-2022 12:48
Sulfate	1,440		10.0	25.0	mg/L	50	07-Oct-2022 13:56
CHEMICAL OXYGEN DEMAND   E410.4, REV 2.0, 1993	ВҮ	Method	:E410.4				Analyst: TH
Chemical Oxygen Demand	16.0		5.00	15.0	mg/L	1	14-Oct-2022 15:30
SPECIFIC CONDUCTANCE BY S 2011	SM 2510B-	Method:	M2510 B				Analyst: TH
Specific Conductivity	3,530		5.00	5.00	umhos/cm @ 25.0 °C	1	14-Oct-2022 14:00
TOTAL DISSOLVED SOLIDS BY -2011		Method:	M2540C				Analyst: CWG
Total Dissolved Solids (Residue Filterable)	2,440		5.00	10.0	mg/L	1	12-Oct-2022 18:14
PH BY SM4500H+ B-2011		Method:SN	И4500H+ В				Analyst: MZD
pH	7.42	Н	0.100	0.100	pH Units	1	10-Oct-2022 15:15
Temp Deg C @pH	21.1	Н	0	0	°C	1	10-Oct-2022 15:15
SUBCONTRACT ANALYSIS - RA 226		Metho	od:NA				Analyst: SUB
Subcontract Analysis	See Attached		0		NA	1	30-Nov-2022 09:14
SUBCONTRACT ANALYSIS - RA	ADIUM 228	Metho	od:NA				Analyst: SUB
Subcontract Analysis	See Attached		0		NA	1	30-Nov-2022 09:14

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-14A

Collection Date: 06-Oct-2022 14:51

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-08

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION B SM3500FED	Y I	Method:SI	M3500FED				Analyst: JHD
Ferric Iron	0.225		0.0200	0.0500	mg/L	1	17-Oct-2022 16:11
FERRIC IRON (DISS)- BY CALCULAT BY SM3500FED	TION I	Method:SI disso	M3500FED olved)				Analyst: JHD
Ferric Iron, Dissolved	U	·	0.0200	0.0500	mg/L	1	17-Oct-2022 17:04
ICP-MS METALS BY SW6020A		Method:	SW6020A		Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	14-Oct-2022 21:13
Arsenic	U		0.000400	0.00200	mg/L	1	14-Oct-2022 21:13
Barium	0.0103		0.00190	0.00400	mg/L	1	14-Oct-2022 21:13
Beryllium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:13
Boron	1.01		0.110	0.200	mg/L	10	17-Oct-2022 13:52
Cadmium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:13
Calcium	313		0.340	5.00	mg/L	10	17-Oct-2022 13:52
Chromium	0.000465	J	0.000400	0.00400	mg/L	1	14-Oct-2022 21:13
Cobalt	U		0.000200	0.00500	mg/L	1	14-Oct-2022 21:13
Iron	0.803		0.0120	0.200	mg/L	1	14-Oct-2022 21:13
Lead	U		0.000600	0.00200	mg/L	1	14-Oct-2022 21:13
Lithium	0.158		0.00100	0.00500	mg/L	1	14-Oct-2022 21:13
Magnesium	25.4		0.0100	0.200	mg/L	1	14-Oct-2022 21:13
Molybdenum	U		0.000600	0.00500	mg/L	1	14-Oct-2022 21:13
Potassium	7.80		0.0180	0.200	mg/L	1	14-Oct-2022 21:13
Selenium	U		0.00110	0.00200	mg/L	1	14-Oct-2022 21:13
Sodium	424		0.140	2.00	mg/L	10	17-Oct-2022 13:52
Thallium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:13
DISSOLVED METALS BY SW6020A	Meth	od:SW602	OA (dissolve	d)	Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Iron	0.475		0.0120	0.200	mg/L	1	13-Oct-2022 23:54
Molybdenum	U		0.000600	0.00500	mg/L	1	13-Oct-2022 23:54
MERCURY BY SW7470A		Method:	SW7470A		Prep:SW7470A /	06-Dec-2022	Analyst: MSC
Mercury	U	Н	0.0000300	0.000200	mg/L	1	07-Dec-2022 09:48
ANIONS BY E300.0, REV 2.1, 1993		Metho	d:E300		<u> </u>		Analyst: TH
Chloride	12.5		0.200	0.500	mg/L	1	07-Oct-2022 18:21
Fluoride	0.324		0.0500	0.100	mg/L	1	07-Oct-2022 18:21
Nitrogen, Nitrate (As N)	0.0777	J	0.0300	0.100	mg/L	1	07-Oct-2022 18:21
Sulfate	1,600		4.00	10.0	mg/L	20	07-Oct-2022 18:26
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Method	:E410.4				Analyst: TH
Chemical Oxygen Demand	12.0	J	5.00	15.0	mg/L	1	14-Oct-2022 15:30
SPECIFIC CONDUCTANCE BY SM 25 2011		Method:					Analyst: TH
Specific Conductivity	3,540		5.00	5.00	umhos/cm @ 25.0 °C	1	14-Oct-2022 14:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-14A

Collection Date: 06-Oct-2022 14:51

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-08

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SM -2011	12540C	Method:	M2540C				Analyst: KAH
Total Dissolved Solids (Residue, Filterable)	2,580		5.00	10.0	mg/L	1	13-Oct-2022 17:25
ALKALINITY BY SM 2320B-2011	ı	Method:S	SM2320B				Analyst: JAC
Alkalinity, Bicarbonate (As CaCO3)	321		5.00	5.00	mg/L	1	12-Oct-2022 03:39
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	12-Oct-2022 03:39
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	12-Oct-2022 03:39
Alkalinity, Total (As CaCO3)	321		5.00	5.00	mg/L	1	12-Oct-2022 03:39
FERROUS IRON BY SM3500 FE B	М	ethod:Si	M3500FED				Analyst: MZD
Ferrous Iron	0.578		0.0200	0.0500	mg/L	1	07-Oct-2022 14:25
FERROUS IRON BY SM3500 FE D	М	ethod:SI (disso	M3500FED olved)				Analyst: MZD
Ferrous Iron, Dissolved	0.489		0.0200	0.0500	mg/L	1	07-Oct-2022 18:35
SULFIDE BY SM4500 S2-F-2011	Me	ethod:SN	14500 S2-F				Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	13-Oct-2022 17:52
PH BY SM4500H+ B-2011	Me	ethod:SN	14500H+ B				Analyst: MZD
рН	7.06	Н	0.100	0.100	pH Units	1	10-Oct-2022 15:15
Temp Deg C @pH	20.8	Н	0	0	°C	1	10-Oct-2022 15:15
SUBCONTRACT ANALYSIS - RADI 226	UM	Metho	od:NA				Analyst: SUB
Subcontract Analysis S	See Attached		0		NA	1	30-Nov-2022 09:14
SUBCONTRACT ANALYSIS - RADI	UM 228	Metho	d:NA				Analyst: SUB
Subcontract Analysis	See Attached		0		NA	1	30-Nov-2022 09:14

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-15A

Collection Date: 06-Oct-2022 13:03

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-09

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION E SM3500FED	BY N	lethod:SN	//3500FED				Analyst: JHD
Ferric Iron	U		0.0200	0.0500	mg/L	1	17-Oct-2022 16:11
FERRIC IRON (DISS)- BY CALCULA' BY SM3500FED	TION N	ethod:SN disso)	//3500FED olved)				Analyst: JHD
Ferric Iron, Dissolved	U	•	0.0200	0.0500	mg/L	1	17-Oct-2022 17:04
ICP-MS METALS BY SW6020A		Method:S	W6020A		Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	14-Oct-2022 21:15
Arsenic	0.000790	J	0.000400	0.00200	mg/L	1	14-Oct-2022 21:15
Barium	0.0215		0.00190	0.00400	mg/L	1	14-Oct-2022 21:15
Beryllium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:15
Boron	3.11		0.110	0.200	mg/L	10	17-Oct-2022 13:54
Cadmium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:15
Calcium	113		0.0340	0.500	mg/L	1	14-Oct-2022 21:15
Chromium	U		0.000400	0.00400	mg/L	1	14-Oct-2022 21:15
Cobalt	U		0.000200	0.00500	mg/L	1	14-Oct-2022 21:15
Iron	0.208		0.0120	0.200	mg/L	1	14-Oct-2022 21:15
Lead	U		0.000600	0.00200	mg/L	1	14-Oct-2022 21:15
Lithium	0.0643		0.00100	0.00500	mg/L	1	14-Oct-2022 21:15
Magnesium	10.3		0.0100	0.200	mg/L	1	14-Oct-2022 21:15
Molybdenum	0.149		0.000600	0.00500	mg/L	1	14-Oct-2022 21:15
Potassium	4.96		0.0180	0.200	mg/L	1	14-Oct-2022 21:15
Selenium	U		0.00110	0.00200	mg/L	1	14-Oct-2022 21:15
Sodium	609		0.140	2.00	mg/L	10	17-Oct-2022 13:54
Thallium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:15
DISSOLVED METALS BY SW6020A	Metho	od:SW602	0A (dissolve	ed)	Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Iron	0.367		0.0120	0.200	mg/L	1	13-Oct-2022 23:56
Molybdenum	0.149		0.000600	0.00500	mg/L	1	13-Oct-2022 23:56
MERCURY BY SW7470A		Method:S	W7470A		Prep:SW7470A /	06-Dec-2022	Analyst: MSC
Mercury	0.0000390	JH (	0.0000300	0.000200	mg/L	1	07-Dec-2022 09:49
ANIONS BY E300.0, REV 2.1, 1993		Method	d:E300				Analyst: TH
Chloride	26.2		0.200	0.500	mg/L	1	07-Oct-2022 18:53
Fluoride	1.31		0.0500	0.100	mg/L	1	07-Oct-2022 18:53
Nitrogen, Nitrate (As N)	0.246		0.0300	0.100	mg/L	1	07-Oct-2022 18:53
Sulfate	1,510		4.00	10.0	mg/L	20	07-Oct-2022 18:58
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Method	:E410.4				Analyst: TH
Chemical Oxygen Demand	11.0	J	5.00	15.0	mg/L	1	14-Oct-2022 15:30
SPECIFIC CONDUCTANCE BY SM 2 2011		Method:I					Analyst: TH
Specific Conductivity	3,590		5.00	5.00	umhos/cm @ 25.0 °C	1	14-Oct-2022 14:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-15A

Collection Date: 06-Oct-2022 13:03

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-09

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SM -2011	M2540C	Method:	M2540C				Analyst: KAH
Total Dissolved Solids (Residue, Filterable)	2,370		5.00	10.0	mg/L	1	13-Oct-2022 17:25
ALKALINITY BY SM 2320B-2011	l l	Method:	SM2320B				Analyst: JAC
Alkalinity, Bicarbonate (As CaCO3)	189		5.00	5.00	mg/L	1	12-Oct-2022 03:46
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	12-Oct-2022 03:46
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	12-Oct-2022 03:46
Alkalinity, Total (As CaCO3)	189		5.00	5.00	mg/L	1	12-Oct-2022 03:46
FERROUS IRON BY SM3500 FE B	M	lethod:Si	M3500FED				Analyst: MZD
Ferrous Iron	0.0890		0.0200	0.0500	mg/L	1	07-Oct-2022 14:25
FERROUS IRON BY SM3500 FE D	M	lethod:SI disso)	M3500FED olved)				Analyst: MZD
Ferrous Iron, Dissolved	0.358		0.0200	0.0500	mg/L	1	07-Oct-2022 18:35
SULFIDE BY SM4500 S2-F-2011	M	ethod:SN	14500 S2-F				Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	13-Oct-2022 17:52
PH BY SM4500H+ B-2011	M	ethod:SN	14500H+ B				Analyst: MZD
рН	7.74	Н	0.100	0.100	pH Units	1	10-Oct-2022 15:15
Temp Deg C @pH	22.7	Н	0	0	°C	1	10-Oct-2022 15:15
SUBCONTRACT ANALYSIS - RADI 226	UM	Metho	od:NA				Analyst: SUB
Subcontract Analysis	See Attached		0		NA	1	30-Nov-2022 09:14
SUBCONTRACT ANALYSIS - RADI	UM 228	Metho	d:NA				Analyst: SUB
Subcontract Analysis	See Attached		0		NA	1	30-Nov-2022 09:14

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-17

Collection Date: 06-Oct-2022 15:33

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-10

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED	r N	/lethod:SM	3500FED				Analyst: JHD
Ferric Iron	U		0.0200	0.0500	mg/L	1	17-Oct-2022 16:11
FERRIC IRON (DISS)- BY CALCULAT BY SM3500FED	ION N	lethod:SM/ dissol)					Analyst: JHD
Ferric Iron, Dissolved	0.0581	•	0.0200	0.0500	mg/L	1	17-Oct-2022 17:04
ICP-MS METALS BY SW6020A		Method:S\	V6020A		Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Antimony	U	(	0.000400	0.00200	mg/L	1	14-Oct-2022 21:17
Arsenic	U	(	0.000400	0.00200	mg/L	1	14-Oct-2022 21:17
Barium	U		0.00190	0.00400	mg/L	1	14-Oct-2022 21:17
Beryllium	U	(	0.000200	0.00200	mg/L	1	14-Oct-2022 21:17
Boron	0.902		0.0110	0.0200	mg/L	1	14-Oct-2022 21:17
Cadmium	U	(	0.000200	0.00200	mg/L	1	14-Oct-2022 21:17
Calcium	541		0.340	5.00	mg/L	10	17-Oct-2022 13:56
Chromium	U	(	0.000400	0.00400	mg/L	1	14-Oct-2022 21:17
Cobalt	U	(	0.000200	0.00500	mg/L	1	14-Oct-2022 21:17
Iron	U		0.0120	0.200	mg/L	1	14-Oct-2022 21:17
Lead	U	(	0.000600	0.00200	mg/L	1	14-Oct-2022 21:17
Lithium	0.147		0.00100	0.00500	mg/L	1	14-Oct-2022 21:17
Magnesium	33.7		0.0100	0.200	mg/L	1	14-Oct-2022 21:17
Molybdenum	U	(	0.000600	0.00500	mg/L	1	14-Oct-2022 21:17
Potassium	4.99		0.0180	0.200	mg/L	1	14-Oct-2022 21:17
Selenium	U		0.00110	0.00200	mg/L	1	14-Oct-2022 21:17
Sodium	32.8		0.0140	0.200	mg/L	1	14-Oct-2022 21:17
Thallium	U	(	0.000200	0.00200	mg/L	1	14-Oct-2022 21:17
DISSOLVED METALS BY SW6020A	Metho	od:SW6020	A (dissolve	d)	Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Iron	0.0581	J	0.0120	0.200	mg/L	1	13-Oct-2022 23:58
Molybdenum	U	(	0.000600	0.00500	mg/L	1	13-Oct-2022 23:58
MERCURY BY SW7470A		Method:S\	N7470A		Prep:SW7470A /	06-Dec-2022	Analyst: MSC
Mercury	0.000151	JH <b>0</b> .	0000300	0.000200	mg/L	1	07-Dec-2022 09:56
ANIONS BY E300.0, REV 2.1, 1993		Method	E300				Analyst: TH
Chloride	4.25		0.200	0.500	mg/L	1	07-Oct-2022 19:03
Fluoride	0.340		0.0500	0.100	mg/L	1	07-Oct-2022 19:03
Nitrogen, Nitrate (As N)	0.0756	J	0.0300	0.100	mg/L	1	07-Oct-2022 19:03
Sulfate	1,320		4.00	10.0	mg/L	20	07-Oct-2022 19:09
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Method:	E410.4				Analyst: TH
Chemical Oxygen Demand	U		5.00	15.0	mg/L	1	14-Oct-2022 15:30
SPECIFIC CONDUCTANCE BY SM 25 2011		Method:M					Analyst: TH
Specific Conductivity	2,570		5.00	5.00	umhos/cm @ 25.0 °C	1	14-Oct-2022 14:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-17

Collection Date: 06-Oct-2022 15:33

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-10

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SI -2011	M2540C	Method:	M2540C				Analyst: KAH
Total Dissolved Solids (Residue, Filterable)	2,170		5.00	10.0	mg/L	1	13-Oct-2022 17:25
ALKALINITY BY SM 2320B-2011		Method:	SM2320B				Analyst: JAC
Alkalinity, Bicarbonate (As CaCO3)	276		5.00	5.00	mg/L	1	12-Oct-2022 03:53
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	12-Oct-2022 03:53
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	12-Oct-2022 03:53
Alkalinity, Total (As CaCO3)	276		5.00	5.00	mg/L	1	12-Oct-2022 03:53
FERROUS IRON BY SM3500 FE B	M	lethod:Si	M3500FED				Analyst: MZD
Ferrous Iron	U		0.0200	0.0500	mg/L	1	07-Oct-2022 14:25
FERROUS IRON BY SM3500 FE D	M	lethod:SI disso)	M3500FED olved)				Analyst: MZD
Ferrous Iron, Dissolved	U	·	0.0200	0.0500	mg/L	1	07-Oct-2022 18:35
SULFIDE BY SM4500 S2-F-2011	M	ethod:SN	14500 S2-F				Analyst: MZI
Sulfide	U		1.00	1.00	mg/L	1	13-Oct-2022 17:52
PH BY SM4500H+ B-2011	М	ethod:SN	14500H+ B				Analyst: MZD
рН	7.04	Н	0.100	0.100	pH Units	1	10-Oct-2022 15:15
Temp Deg C @pH	22.9	Н	0	0	°C	1	10-Oct-2022 15:15
SUBCONTRACT ANALYSIS - RADI 226	IUM	Metho	od:NA				Analyst: SUE
Subcontract Analysis	See Attached		0		NA	1	30-Nov-2022 09:14
SUBCONTRACT ANALYSIS - RADI	IUM 228	Metho	od:NA				Analyst: SUE
Subcontract Analysis	See Attached		0		NA	1	30-Nov-2022 09:14

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-18

Collection Date: 06-Oct-2022 14:05

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-11

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION B SM3500FED	Y I	Method:	SM3500FED				Analyst: JHD
Ferric Iron	U		0.0200	0.0500	mg/L	1	17-Oct-2022 16:11
FERRIC IRON (DISS)- BY CALCULAT BY SM3500FED	ΓΙΟΝ Ι		SM3500FED solved)				Analyst: JHD
Ferric Iron, Dissolved	U	•	0.0200	0.0500	mg/L	1	17-Oct-2022 17:04
ICP-MS METALS BY SW6020A		Method	:SW6020A		Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Antimony	0.000555	J	0.000400	0.00200	mg/L	1	14-Oct-2022 21:19
Arsenic	0.00315		0.000400	0.00200	mg/L	1	14-Oct-2022 21:19
Barium	0.00269	J	0.00190	0.00400	mg/L	1	14-Oct-2022 21:19
Beryllium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:19
Boron	5.20		0.110	0.200	mg/L	10	17-Oct-2022 14:06
Cadmium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:19
Calcium	17.7		0.0340	0.500	mg/L	1	14-Oct-2022 21:19
Chromium	U		0.000400	0.00400	mg/L	1	14-Oct-2022 21:19
Cobalt	U		0.000200	0.00500	mg/L	1	14-Oct-2022 21:19
Iron	U		0.0120	0.200	mg/L	1	14-Oct-2022 21:19
Lead	U		0.000600	0.00200	mg/L	1	14-Oct-2022 21:19
Lithium	0.00257	J	0.00100	0.00500	mg/L	1	14-Oct-2022 21:19
Magnesium	0.181	J	0.0100	0.200	mg/L	1	14-Oct-2022 21:19
Molybdenum	0.183		0.000600	0.00500	mg/L	1	14-Oct-2022 21:19
Potassium	14.5		0.0180	0.200	mg/L	1	14-Oct-2022 21:19
Selenium	0.00208		0.00110	0.00200	mg/L	1	14-Oct-2022 21:19
Sodium	381		0.140	2.00	mg/L	10	17-Oct-2022 14:06
Thallium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:19
DISSOLVED METALS BY SW6020A	Meth	od:SW60	020A (dissol	lved)	Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Iron	U		0.0120	0.200	mg/L	1	14-Oct-2022 00:00
Molybdenum	0.172		0.000600	0.00500	mg/L	1	14-Oct-2022 00:00
MERCURY BY SW7470A		Method	:SW7470A		Prep:SW7470A /	06-Dec-2022	Analyst: MSC
Mercury	U	Н	0.0000300	0.000200	mg/L	1	07-Dec-2022 09:58
ANIONS BY E300.0, REV 2.1, 1993		Meth	od:E300		,		Analyst: TH
Chloride	3.88		0.200	0.500	mg/L	1	07-Oct-2022 19:14
Fluoride	1.84		0.0500	0.100	mg/L	1	07-Oct-2022 19:14
Nitrogen, Nitrate (As N)	0.0851	J	0.0300	0.100	mg/L	1	07-Oct-2022 19:14
Sulfate	804		4.00	10.0	mg/L	20	07-Oct-2022 19:19
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Metho	d:E410.4				Analyst: TH
Chemical Oxygen Demand	6.00	J	5.00	15.0	mg/L	1	14-Oct-2022 15:30
SPECIFIC CONDUCTANCE BY SM 25 2011		Method	d:M2510 B				Analyst: TH
Specific Conductivity	2,090		5.00	5.00	umhos/cm @ 25.0 °C	1	14-Oct-2022 14:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-18

Collection Date: 06-Oct-2022 14:05

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-11

Matrix:Water

ANALYSES	RESULT (	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SN -2011	12540C	Method:	M2540C				Analyst: KAF
Total Dissolved Solids (Residue, Filterable)	1,250		5.00	10.0	mg/L	1	13-Oct-2022 17:25
ALKALINITY BY SM 2320B-2011	N	Method:S	M2320B				Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	U		5.00	5.00	mg/L	1	16-Oct-2022 19:10
Alkalinity, Carbonate (As CaCO3)	56.5		5.00	5.00	mg/L	1	16-Oct-2022 19:10
Alkalinity, Hydroxide (As CaCO3)	5.06		5.00	5.00	mg/L	1	16-Oct-2022 19:10
Alkalinity, Total (As CaCO3)	61.6		5.00	5.00	mg/L	1	16-Oct-2022 19:10
FERROUS IRON BY SM3500 FE B	Me	ethod:SN	13500FED				Analyst: MZI
Ferrous Iron	U		0.0200	0.0500	mg/L	1	07-Oct-2022 14:25
FERROUS IRON BY SM3500 FE D	Me	ethod:SN (disso	13500FED lived)				Analyst: MZI
Ferrous Iron, Dissolved	U		0.0200	0.0500	mg/L	1	07-Oct-2022 18:35
SULFIDE BY SM4500 S2-F-2011	Ме	ethod:SM	4500 S2-F				Analyst: MZI
Sulfide	U		1.00	1.00	mg/L	1	13-Oct-2022 17:52
PH BY SM4500H+ B-2011	Me	ethod:SM	14500H+ B				Analyst: MZI
рН	10.2	Н	0.100	0.100	pH Units	1	10-Oct-2022 15:15
Temp Deg C @pH	22.8	Н	0	0	°C	1	10-Oct-2022 15:15
SUBCONTRACT ANALYSIS - RADII 226	UM	Metho	d:NA				Analyst: SUE
Subcontract Analysis S	See Attached		0		NA	1	30-Nov-2022 09:14
SUBCONTRACT ANALYSIS - RADI	UM 228	Metho	d:NA				Analyst: SUE
Subcontract Analysis S	See Attached		0		NA	1	30-Nov-2022 09:14

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-16

Collection Date: 06-Oct-2022 17:30

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-12

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED	Y	Method:SI	M3500FED				Analyst: JHD
Ferric Iron	0.0547		0.0200	0.0500	mg/L	1	17-Oct-2022 16:11
FERRIC IRON (DISS)- BY CALCULAT BY SM3500FED	ION	Method:SI (disso					Analyst: JHD
Ferric Iron, Dissolved	0.0203	J	0.0200	0.0500	mg/L	1	17-Oct-2022 17:04
ICP-MS METALS BY SW6020A		Method:	SW6020A		Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	14-Oct-2022 21:21
Arsenic	U		0.000400	0.00200	mg/L	1	14-Oct-2022 21:21
Barium	0.0132		0.00190	0.00400	mg/L	1	14-Oct-2022 21:21
Beryllium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:21
Boron	2.54		0.110	0.200	mg/L	10	17-Oct-2022 14:08
Cadmium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:21
Calcium	132		0.0340	0.500	mg/L	1	14-Oct-2022 21:21
Chromium	U		0.000400	0.00400	mg/L	1	14-Oct-2022 21:21
Cobalt	U		0.000200	0.00500	mg/L	1	14-Oct-2022 21:21
Iron	0.0547	J	0.0120	0.200	mg/L	1	14-Oct-2022 21:21
Lead	U		0.000600	0.00200	mg/L	1	14-Oct-2022 21:21
Lithium	0.0534		0.00100	0.00500	mg/L	1	14-Oct-2022 21:21
Magnesium	7.24		0.0100	0.200	mg/L	1	14-Oct-2022 21:21
Molybdenum	0.113		0.000600	0.00500	mg/L	1	14-Oct-2022 21:21
Potassium	3.61		0.0180	0.200	mg/L	1	14-Oct-2022 21:21
Selenium	U		0.00110	0.00200	mg/L	1	14-Oct-2022 21:21
Sodium	415		0.140	2.00	mg/L	10	17-Oct-2022 14:08
Thallium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:21
DISSOLVED METALS BY SW6020A	Meth	od:SW602	OA (dissolve	d)	Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Iron	0.0203	J	0.0120	0.200	mg/L	1	14-Oct-2022 00:05
Molybdenum	0.112		0.000600	0.00500	mg/L	1	14-Oct-2022 00:05
MERCURY BY SW7470A		Method:S	SW7470A		Prep:SW7470A /	13-Oct-2022	Analyst: MSC
Mercury	U	(	0.0000300	0.000200	mg/L	1	13-Oct-2022 14:36
ANIONS BY E300.0, REV 2.1, 1993		Metho	d:E300		-		Analyst: TH
Chloride	25.8		0.200	0.500	mg/L	1	08-Oct-2022 12:05
Fluoride	1.25		0.0500	0.100	mg/L	1	08-Oct-2022 12:05
Nitrogen, Nitrate (As N)	0.127		0.0300	0.100	mg/L	1	08-Oct-2022 12:05
Sulfate	996		4.00	10.0	mg/L	20	08-Oct-2022 12:21
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Method	:E410.4				Analyst: TH
Chemical Oxygen Demand	6.00	J	5.00	15.0	mg/L	1	14-Oct-2022 15:30
SPECIFIC CONDUCTANCE BY SM 25 2011		Method:					Analyst: TH
Specific Conductivity	2,650		5.00	5.00	umhos/cm @ 25.0 °C	1	14-Oct-2022 14:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: MW-16

Collection Date: 06-Oct-2022 17:30

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-12

Matrix:Water

ANALYSES	RESULT QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SM -2011	12540C Meth	od:M2540C				Analyst: KAH
Total Dissolved Solids (Residue, Filterable)	1,690	5.00	10.0	mg/L	1	13-Oct-2022 17:25
ALKALINITY BY SM 2320B-2011	Metho	d:SM2320B				Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	277	5.00	5.00	mg/L	1	16-Oct-2022 19:17
Alkalinity, Carbonate (As CaCO3)	10.7	5.00	5.00	mg/L	1	16-Oct-2022 19:17
Alkalinity, Hydroxide (As CaCO3)	U	5.00	5.00	mg/L	1	16-Oct-2022 19:17
Alkalinity, Total (As CaCO3)	288	5.00	5.00	mg/L	1	16-Oct-2022 19:17
FERROUS IRON BY SM3500 FE B	Method	:SM3500FED				Analyst: TH
Ferrous Iron	U	0.0200	0.0500	mg/L	1	08-Oct-2022 11:00
FERROUS IRON BY SM3500 FE D		l:SM3500FED ssolved)				Analyst: TH
Ferrous Iron, Dissolved	U	0.0200	0.0500	mg/L	1	08-Oct-2022 10:30
SULFIDE BY SM4500 S2-F-2011	Method	:SM4500 S2-F				Analyst: MZI
Sulfide	U	1.00	1.00	mg/L	1	13-Oct-2022 17:52
PH BY SM4500H+ B-2011	Method	:SM4500H+ B				Analyst: MZI
рН	7.85 H	0.100	0.100	pH Units	1	11-Oct-2022 13:04
Temp Deg C @pH	<b>21.5</b> H	0	0	°C	1	11-Oct-2022 13:04
SUBCONTRACT ANALYSIS - RADIU 226	JM Me	thod:NA				Analyst: SUE
Subcontract Analysis S	ee Attached	0		NA	1	30-Nov-2022 09:14
SUBCONTRACT ANALYSIS - RADIU	JM 228 Me	thod:NA				Analyst: SUE
Subcontract Analysis S	ee Attached	0		NA	1	30-Nov-2022 09:14

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: DUP-3

Collection Date: 05-Oct-2022 15:20

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-13

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION B SM3500FED	Υ	Method:S	M3500FED				Analyst: JHD
Ferric Iron	0.0790		0.0200	0.0500	mg/L	1	17-Oct-2022 16:11
FERRIC IRON (DISS)- BY CALCULAT BY SM3500FED	TION		M3500FED olved)				Analyst: JHD
Ferric Iron, Dissolved	0.0883	,	0.0200	0.0500	mg/L	1	08-Nov-2022 15:14
ICP-MS METALS BY SW6020A		Method:	SW6020A		Prep:SW3010A /	13-Oct-2022	Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	14-Oct-2022 21:23
Arsenic	U		0.000400	0.00200	mg/L	1	14-Oct-2022 21:23
Barium	0.0167		0.00190	0.00400	mg/L	1	14-Oct-2022 21:23
Beryllium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:23
Boron	3.07		0.110	0.200	mg/L	10	17-Oct-2022 14:10
Cadmium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:23
Calcium	111		0.0340	0.500	mg/L	1	14-Oct-2022 21:23
Chromium	0.00143	J	0.000400	0.00400	mg/L	1	14-Oct-2022 21:23
Cobalt	0.000215	J	0.000200	0.00500	mg/L	1	14-Oct-2022 21:23
Iron	0.186	J	0.0120	0.200	mg/L	1	14-Oct-2022 21:23
Lead	U		0.000600	0.00200	mg/L	1	14-Oct-2022 21:23
Lithium	0.0778		0.00100	0.00500	mg/L	1	14-Oct-2022 21:23
Magnesium	13.8		0.0100	0.200	mg/L	1	14-Oct-2022 21:23
Molybdenum	0.00134	J	0.000600	0.00500	mg/L	1	14-Oct-2022 21:23
Potassium	6.00		0.0180	0.200	mg/L	1	14-Oct-2022 21:23
Selenium	U		0.00110	0.00200	mg/L	1	14-Oct-2022 21:23
Sodium	352		0.140	2.00	mg/L	10	17-Oct-2022 14:10
Thallium	U		0.000200	0.00200	mg/L	1	14-Oct-2022 21:23
DISSOLVED METALS BY SW6020A	Meth	nod:SW60	20A (dissolve	ed)	Prep:SW3010A / /	13-Oct-2022	Analyst: JHD
Iron	0.0883		0.0120	0.200	mg/L	1	14-Oct-2022 00:07
Molybdenum	0.00108	J	0.000600	0.00500	mg/L	1	14-Oct-2022 00:07
MERCURY BY SW7470A		Method:	SW7470A		Prep:SW7470A / /	13-Oct-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Oct-2022 14:38
ANIONS BY E300.0, REV 2.1, 1993		Metho	d:E300				Analyst: TH
Chloride	16.7		0.200	0.500	mg/L	1	07-Oct-2022 14:55
Fluoride	0.824		0.0500	0.100	mg/L	1	07-Oct-2022 14:55
Nitrogen, Nitrate (As N)	0.147		0.0300	0.100	mg/L	1	07-Oct-2022 14:55
Sulfate	687		4.00	10.0	mg/L	20	07-Oct-2022 19:24
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Method	i:E410.4				Analyst: TH
Chemical Oxygen Demand	16.0		5.00	15.0	mg/L	1	14-Oct-2022 15:30
SPECIFIC CONDUCTANCE BY SM 25 2011			:M2510 B				Analyst: TH
Specific Conductivity	2,050		5.00	5.00	umhos/cm @ 25.0 °C	1	14-Oct-2022 14:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira

Project: WFEC / CCR Landfill

Sample ID: DUP-3

Collection Date: 05-Oct-2022 15:20

**ANALYTICAL REPORT** 

WorkOrder:HS22100361 Lab ID:HS22100361-13

Matrix:Water

ANALYSES	RESULT Q	UAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SM -2011	12540C	Method:	M2540C				Analyst: CWC
Total Dissolved Solids (Residue, Filterable)	1,260	Н	5.00	10.0	mg/L	1	06-Dec-2022 13:49
ALKALINITY BY SM 2320B-2011	M	lethod:S	M2320B				Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	289		5.00	5.00	mg/L	1	16-Oct-2022 09:00
Alkalinity, Carbonate (As CaCO3)	7.48		5.00	5.00	mg/L	1	16-Oct-2022 09:00
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	16-Oct-2022 09:00
Alkalinity, Total (As CaCO3)	297		5.00	5.00	mg/L	1	16-Oct-2022 09:00
FERROUS IRON BY SM3500 FE B	Me	thod:SN	//3500FED				Analyst: MZD
Ferrous Iron	0.107		0.0200	0.0500	mg/L	1	07-Oct-2022 14:25
FERROUS IRON BY SM3500 FE D	Me	thod:SN disso)	//3500FED blved)				Analyst: MZD
Ferrous Iron, Dissolved	U		0.0200	0.0500	mg/L	1	07-Oct-2022 14:21
SULFIDE BY SM4500 S2-F-2011	Met	thod:SN	14500 S2-F				Analyst: MZI
Sulfide	U		1.00	1.00	mg/L	1	12-Oct-2022 16:00
PH BY SM4500H+ B-2011	Me	thod:SN	14500H+ B				Analyst: CD
рН	8.01	Н	0.100	0.100	pH Units	1	06-Dec-2022 14:53
Temp Deg C @pH	21.3	Н	0	0	°C	1	06-Dec-2022 14:53
SUBCONTRACT ANALYSIS - RADIU 226	JM	Metho	d:NA				Analyst: SUE
Subcontract Analysis S	ee Attached		0		NA	1	30-Nov-2022 09:14
SUBCONTRACT ANALYSIS - RADII	JM 228	Metho	d:NA				Analyst: SUE
Subcontract Analysis S	ee Attached		0		NA	1	30-Nov-2022 09:14

Weight / Prep Log

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

**Batch ID:** 184786 **Start Date:** 13 Oct 2022 09:00 **End Date:** 13 Oct 2022 12:00

Method: MERCURY PREP BY 7470A- WATER Prep Code: HG WPR

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22100361-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-12		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-13		10 (mL)	10 (mL)	1	120 plastic HNO3

Method: WATER - SW3010A Prep Code: 3010A

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22100361-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-12		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-13		10 (mL)	10 (mL)	1	120 plastic HNO3

**Batch ID:** 184803 **Start Date:** 13 Oct 2022 14:30 **End Date:** 13 Oct 2022 18:30

Method: DISS METALS PREP - WATER - SW3010A Prep Code: 3010A DISS

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22100361-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-12		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-13		10 (mL)	10 (mL)	1	120 plastic HNO3

Weight / Prep Log

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Method: MERCURY PREP BY 7470A- WATER Prep Code: HG\_WPR

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22100361-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22100361-11		10 (mL)	10 (mL)	1	120 plastic HNO3

Client: Altamira

Project: WFEC / CCR Landfill DATES REPORT

WorkOrder: HS22100361

Sample ID	Client Sam	pp ID Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 184786	6(0)	Test Name: MERCURY BY SW7470	)A		Matrix: Water	
HS22100361-01	MW-3	05 Oct 2022 18:16		13 Oct 2022 09:00	13 Oct 2022 14:13	1
HS22100361-02	MW-5S	06 Oct 2022 11:30		13 Oct 2022 09:00	13 Oct 2022 14:15	1
HS22100361-03	MW-7S	05 Oct 2022 15:20		13 Oct 2022 09:00	13 Oct 2022 14:16	1
HS22100361-04	MW-13	05 Oct 2022 18:12		13 Oct 2022 09:00	13 Oct 2022 14:18	1
HS22100361-06	MW-20	05 Oct 2022 16:48		13 Oct 2022 09:00	13 Oct 2022 14:20	1
HS22100361-07	MW-21	05 Oct 2022 15:40		13 Oct 2022 09:00	13 Oct 2022 14:35	1
HS22100361-12	MW-16	06 Oct 2022 17:30		13 Oct 2022 09:00	13 Oct 2022 14:36	1
HS22100361-13	DUP-3	05 Oct 2022 15:20		13 Oct 2022 09:00	13 Oct 2022 14:38	1
Batch ID: 184802	2(0)	Test Name: ICP-MS METALS BY S	W6020A		Matrix: Water	
HS22100361-01	MW-3	05 Oct 2022 18:16		13 Oct 2022 14:00	17 Oct 2022 13:26	10
HS22100361-01	MW-3	05 Oct 2022 18:16		13 Oct 2022 14:00	14 Oct 2022 20:58	1
HS22100361-02	MW-5S	06 Oct 2022 11:30		13 Oct 2022 14:00	17 Oct 2022 13:28	10
HS22100361-02	MW-5S	06 Oct 2022 11:30		13 Oct 2022 14:00	14 Oct 2022 21:00	1
HS22100361-03	MW-7S	05 Oct 2022 15:20		13 Oct 2022 14:00	17 Oct 2022 13:30	10
HS22100361-03	MW-7S	05 Oct 2022 15:20		13 Oct 2022 14:00	14 Oct 2022 21:02	1
HS22100361-04	MW-13	05 Oct 2022 18:12		13 Oct 2022 14:00	17 Oct 2022 13:32	10
HS22100361-04	MW-13	05 Oct 2022 18:12		13 Oct 2022 14:00	14 Oct 2022 21:04	1
HS22100361-05	MW-19S	06 Oct 2022 09:40		13 Oct 2022 14:00	17 Oct 2022 14:54	20
HS22100361-05	MW-19S	06 Oct 2022 09:40		13 Oct 2022 14:00	14 Oct 2022 20:42	1
HS22100361-06	MW-20	05 Oct 2022 16:48		13 Oct 2022 14:00	17 Oct 2022 13:48	10
HS22100361-06	MW-20	05 Oct 2022 16:48		13 Oct 2022 14:00	14 Oct 2022 21:06	1
HS22100361-07	MW-21	05 Oct 2022 15:40		13 Oct 2022 14:00	17 Oct 2022 13:50	10
HS22100361-07	MW-21	05 Oct 2022 15:40		13 Oct 2022 14:00	14 Oct 2022 21:11	1
HS22100361-08	MW-14A	06 Oct 2022 14:51		13 Oct 2022 14:00	17 Oct 2022 13:52	10
HS22100361-08	MW-14A	06 Oct 2022 14:51		13 Oct 2022 14:00	14 Oct 2022 21:13	1
HS22100361-09	MW-15A	06 Oct 2022 13:03		13 Oct 2022 14:00	17 Oct 2022 13:54	10
HS22100361-09	MW-15A	06 Oct 2022 13:03		13 Oct 2022 14:00	14 Oct 2022 21:15	1
HS22100361-10	MW-17	06 Oct 2022 15:33		13 Oct 2022 14:00	17 Oct 2022 13:56	10
HS22100361-10	MW-17	06 Oct 2022 15:33		13 Oct 2022 14:00	14 Oct 2022 21:17	1
HS22100361-11	MW-18	06 Oct 2022 14:05		13 Oct 2022 14:00	17 Oct 2022 14:06	10
HS22100361-11	MW-18	06 Oct 2022 14:05		13 Oct 2022 14:00	14 Oct 2022 21:19	1
HS22100361-12	MW-16	06 Oct 2022 17:30		13 Oct 2022 14:00	17 Oct 2022 14:08	10
HS22100361-12	MW-16	06 Oct 2022 17:30		13 Oct 2022 14:00	14 Oct 2022 21:21	1
HS22100361-13	DUP-3	05 Oct 2022 15:20		13 Oct 2022 14:00	17 Oct 2022 14:10	10
HS22100361-13	DUP-3	05 Oct 2022 15:20		13 Oct 2022 14:00	14 Oct 2022 21:23	1

Client: Altamira

Project: WFEC / CCR Landfill DATES REPORT

WorkOrder: HS22100361

Sample ID	Client San	np ID Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 184803	3 ( 0 )	Test Name: DISSOLVED METALS B	Y SW6020A		Matrix: Water	
HS22100361-02	MW-5S	06 Oct 2022 11:30		13 Oct 2022 14:30	13 Oct 2022 23:50	1
HS22100361-03	MW-7S	05 Oct 2022 15:20		13 Oct 2022 14:30	13 Oct 2022 23:52	1
HS22100361-05	MW-19S	06 Oct 2022 09:40		13 Oct 2022 14:30	13 Oct 2022 23:37	1
HS22100361-08	MW-14A	06 Oct 2022 14:51		13 Oct 2022 14:30	13 Oct 2022 23:54	1
HS22100361-09	MW-15A	06 Oct 2022 13:03		13 Oct 2022 14:30	13 Oct 2022 23:56	1
HS22100361-10	MW-17	06 Oct 2022 15:33		13 Oct 2022 14:30	13 Oct 2022 23:58	1
HS22100361-11	MW-18	06 Oct 2022 14:05		13 Oct 2022 14:30	14 Oct 2022 00:00	1
HS22100361-12	MW-16	06 Oct 2022 17:30		13 Oct 2022 14:30	14 Oct 2022 00:05	1
HS22100361-13	DUP-3	05 Oct 2022 15:20		13 Oct 2022 14:30	14 Oct 2022 00:07	1
Batch ID: 187029	9(0)	Test Name: MERCURY BY SW7470	A		Matrix: Water	
HS22100361-05	MW-19S	06 Oct 2022 09:40		06 Dec 2022 14:00	07 Dec 2022 09:46	1
HS22100361-08	MW-14A	06 Oct 2022 14:51		06 Dec 2022 14:00	07 Dec 2022 09:48	1
HS22100361-09	MW-15A	06 Oct 2022 13:03		06 Dec 2022 14:00	07 Dec 2022 09:49	1
HS22100361-10	MW-17	06 Oct 2022 15:33		06 Dec 2022 14:00	07 Dec 2022 09:56	1
HS22100361-11	MW-18	06 Oct 2022 14:05		06 Dec 2022 14:00	07 Dec 2022 09:58	1
Batch ID: R4188	82 ( 0 )	Test Name: FERROUS IRON BY SM	13500 FE B		Matrix: Water	
HS22100361-02	MW-5S	06 Oct 2022 11:30			07 Oct 2022 14:25	1
HS22100361-03	MW-7S	05 Oct 2022 15:20			07 Oct 2022 14:25	1
HS22100361-05	MW-19S	06 Oct 2022 09:40			07 Oct 2022 14:25	1
HS22100361-08	MW-14A	06 Oct 2022 14:51			07 Oct 2022 14:25	1
HS22100361-09	MW-15A	06 Oct 2022 13:03			07 Oct 2022 14:25	1
HS22100361-10	MW-17	06 Oct 2022 15:33			07 Oct 2022 14:25	1
HS22100361-11	MW-18	06 Oct 2022 14:05			07 Oct 2022 14:25	1
HS22100361-13	DUP-3	05 Oct 2022 15:20			07 Oct 2022 14:25	1
Batch ID: R4188	83 ( 0 )	Test Name: FERROUS IRON BY SM	13500 FE D		Matrix: Water	
HS22100361-02	MW-5S	06 Oct 2022 11:30			07 Oct 2022 18:35	1
HS22100361-03	MW-7S	05 Oct 2022 15:20			07 Oct 2022 14:21	1
HS22100361-05	MW-19S	06 Oct 2022 09:40			07 Oct 2022 18:35	1
HS22100361-08	MW-14A	06 Oct 2022 14:51			07 Oct 2022 18:35	1
HS22100361-09	MW-15A	06 Oct 2022 13:03			07 Oct 2022 18:35	1
HS22100361-10	MW-17	06 Oct 2022 15:33			07 Oct 2022 18:35	1
HS22100361-11	MW-18	06 Oct 2022 14:05			07 Oct 2022 18:35	1

Client: Altamira

Project: WFEC / CCR Landfill DATES REPORT

WorkOrder: HS22100361

Sample ID	Client San	np ID Collection Date L	eachate Date	Prep Date	Analysis Date	DF
Batch ID: R4188	90 ( 0 )	Test Name: ANIONS BY E300.0, REV	2.1, 1993		Matrix: Water	
HS22100361-01	MW-3	05 Oct 2022 18:16			07 Oct 2022 13:03	20
HS22100361-01	MW-3	05 Oct 2022 18:16			07 Oct 2022 12:26	1
HS22100361-02	MW-5S	06 Oct 2022 11:30			07 Oct 2022 13:41	20
HS22100361-02	MW-5S	06 Oct 2022 11:30			07 Oct 2022 12:32	1
HS22100361-03	MW-7S	05 Oct 2022 15:20			07 Oct 2022 19:30	20
HS22100361-03	MW-7S	05 Oct 2022 15:20			07 Oct 2022 15:00	1
HS22100361-04	MW-13	05 Oct 2022 18:12			07 Oct 2022 13:46	20
HS22100361-04	MW-13	05 Oct 2022 18:12			07 Oct 2022 12:37	1
HS22100361-05	MW-19S	06 Oct 2022 09:40			07 Oct 2022 12:58	50
HS22100361-05	MW-19S	06 Oct 2022 09:40			07 Oct 2022 12:11	1
HS22100361-06	MW-20	05 Oct 2022 16:48			07 Oct 2022 13:51	50
HS22100361-06	MW-20	05 Oct 2022 16:48			07 Oct 2022 12:42	1
HS22100361-07	MW-21	05 Oct 2022 15:40			07 Oct 2022 13:56	50
HS22100361-07	MW-21	05 Oct 2022 15:40			07 Oct 2022 12:48	1
HS22100361-13	DUP-3	05 Oct 2022 15:20			07 Oct 2022 19:24	20
HS22100361-13	DUP-3	05 Oct 2022 15:20			07 Oct 2022 14:55	1
Batch ID: R4188	93 ( 0 )	Test Name: ANIONS BY E300.0, REV	2.1, 1993		Matrix: Water	
HS22100361-08	MW-14A	06 Oct 2022 14:51			07 Oct 2022 18:26	20
HS22100361-08	MW-14A	06 Oct 2022 14:51			07 Oct 2022 18:21	1
HS22100361-09	MW-15A	06 Oct 2022 13:03			07 Oct 2022 18:58	20
HS22100361-09	MW-15A	06 Oct 2022 13:03			07 Oct 2022 18:53	1
HS22100361-10	MW-17	06 Oct 2022 15:33			07 Oct 2022 19:09	20
HS22100361-10	MW-17	06 Oct 2022 15:33			07 Oct 2022 19:03	1
HS22100361-11	MW-18	06 Oct 2022 14:05			07 Oct 2022 19:19	20
HS22100361-11	MW-18	06 Oct 2022 14:05			07 Oct 2022 19:14	1
Batch ID: R4189	14 ( 0 )	Test Name: ANIONS BY E300.0, REV	2.1, 1993		Matrix: Water	
HS22100361-12	MW-16	06 Oct 2022 17:30			08 Oct 2022 12:21	20
HS22100361-12	MW-16	06 Oct 2022 17:30			08 Oct 2022 12:05	1
Batch ID: R4189	23 ( 0 )	Test Name: FERROUS IRON BY SM3	500 FE B		Matrix: Water	
HS22100361-12	MW-16	06 Oct 2022 17:30			08 Oct 2022 11:00	1
Batch ID: R4189	24 ( 0 )	Test Name: FERROUS IRON BY SM3	500 FE D		Matrix: Water	
HS22100361-12	MW-16	06 Oct 2022 17:30			08 Oct 2022 10:30	1

Client: Altamira

Project: WFEC / CCR Landfill DATES REPORT

WorkOrder: HS22100361

Sample ID	Client Sam	np ID Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R4190	06 ( 0 )	Test Name: PH BY SM4500H+ B-20	11		Matrix: Water	
HS22100361-01	MW-3	05 Oct 2022 18:16			10 Oct 2022 15:15	1
HS22100361-04	MW-13	05 Oct 2022 18:12			10 Oct 2022 15:15	1
HS22100361-06	MW-20	05 Oct 2022 16:48			10 Oct 2022 15:15	1
HS22100361-07	MW-21	05 Oct 2022 15:40			10 Oct 2022 15:15	1
HS22100361-08	MW-14A	06 Oct 2022 14:51			10 Oct 2022 15:15	1
HS22100361-09	MW-15A	06 Oct 2022 13:03			10 Oct 2022 15:15	1
HS22100361-10	MW-17	06 Oct 2022 15:33			10 Oct 2022 15:15	1
HS22100361-11	MW-18	06 Oct 2022 14:05			10 Oct 2022 15:15	1
Batch ID: R41909	91 ( 0 )	Test Name: PH BY SM4500H+ B-20	11		Matrix: Water	
HS22100361-02	MW-5S	06 Oct 2022 11:30			11 Oct 2022 13:04	1
HS22100361-05	MW-19S	06 Oct 2022 09:40			11 Oct 2022 13:04	1
HS22100361-12	MW-16	06 Oct 2022 17:30			11 Oct 2022 13:04	1
Batch ID: R41919	95 ( 0 )	Test Name: ALKALINITY BY SM 232	20B-2011		Matrix: Water	
HS22100361-02	MW-5S	06 Oct 2022 11:30			12 Oct 2022 03:16	1
HS22100361-05	MW-19S	06 Oct 2022 09:40			12 Oct 2022 00:31	1
HS22100361-08	MW-14A	06 Oct 2022 14:51			12 Oct 2022 03:39	1
HS22100361-09	MW-15A	06 Oct 2022 13:03			12 Oct 2022 03:46	1
HS22100361-10	MW-17	06 Oct 2022 15:33			12 Oct 2022 03:53	1
Batch ID: R41930	64 ( 0 )	Test Name: SULFIDE BY SM4500 S	2-F-2011		Matrix: Water	
HS22100361-02	MW-5S	06 Oct 2022 11:30			13 Oct 2022 17:52	1
HS22100361-05	MW-19S	06 Oct 2022 09:40			13 Oct 2022 17:52	1
HS22100361-08	MW-14A	06 Oct 2022 14:51			13 Oct 2022 17:52	1
HS22100361-09	MW-15A	06 Oct 2022 13:03			13 Oct 2022 17:52	1
HS22100361-10	MW-17	06 Oct 2022 15:33			13 Oct 2022 17:52	1
HS22100361-11	MW-18	06 Oct 2022 14:05			13 Oct 2022 17:52	1
HS22100361-12	MW-16	06 Oct 2022 17:30			13 Oct 2022 17:52	1
Batch ID: R41936	66 ( 0 )	Test Name: TOTAL DISSOLVED SO	DLIDS BY SM2540C	-2011	Matrix: Water	
HS22100361-01	MW-3	05 Oct 2022 18:16			12 Oct 2022 18:14	1
HS22100361-04	MW-13	05 Oct 2022 18:12			12 Oct 2022 18:14	1
HS22100361-06	MW-20	05 Oct 2022 16:48			12 Oct 2022 18:14	1
HS22100361-07	MW-21	05 Oct 2022 15:40			12 Oct 2022 18:14	1

Client: Altamira

Project: WFEC / CCR Landfill DATES REPORT

WorkOrder: HS22100361

Sample ID	Client Sam	p ID Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R41944	17 (0)	Test Name : SPECIFIC CONDUCTA	NCE BY SM 2510B-2	011	Matrix: Water	
HS22100361-01	MW-3	05 Oct 2022 18:16			14 Oct 2022 14:00	1
HS22100361-02	MW-5S	06 Oct 2022 11:30			14 Oct 2022 14:00	1
HS22100361-04	MW-13	05 Oct 2022 18:12			14 Oct 2022 14:00	1
HS22100361-05	MW-19S	06 Oct 2022 09:40			14 Oct 2022 14:00	1
HS22100361-06	MW-20	05 Oct 2022 16:48			14 Oct 2022 14:00	1
HS22100361-07	MW-21	05 Oct 2022 15:40			14 Oct 2022 14:00	1
HS22100361-08	MW-14A	06 Oct 2022 14:51			14 Oct 2022 14:00	1
HS22100361-09	MW-15A	06 Oct 2022 13:03			14 Oct 2022 14:00	1
HS22100361-10	MW-17	06 Oct 2022 15:33			14 Oct 2022 14:00	1
HS22100361-11	MW-18	06 Oct 2022 14:05			14 Oct 2022 14:00	1
HS22100361-12	MW-16	06 Oct 2022 17:30			14 Oct 2022 14:00	1
HS22100361-13	DUP-3	05 Oct 2022 15:20			14 Oct 2022 14:00	1
Batch ID: R41945	54 ( 0 )	Test Name: TOTAL DISSOLVED SO	OLIDS BY SM2540C-2	2011	Matrix: Water	
HS22100361-02	MW-5S	06 Oct 2022 11:30			13 Oct 2022 17:25	1
HS22100361-05	MW-19S	06 Oct 2022 09:40			13 Oct 2022 17:25	1
HS22100361-08	MW-14A	06 Oct 2022 14:51			13 Oct 2022 17:25	1
HS22100361-09	MW-15A	06 Oct 2022 13:03			13 Oct 2022 17:25	1
HS22100361-10	MW-17	06 Oct 2022 15:33			13 Oct 2022 17:25	1
HS22100361-11	MW-18	06 Oct 2022 14:05			13 Oct 2022 17:25	1
HS22100361-12	MW-16	06 Oct 2022 17:30			13 Oct 2022 17:25	1
Batch ID: R41945	58 ( 0 )	Test Name: CHEMICAL OXYGEN D	DEMAND BY E410.4, F	REV 2.0, 1993	Matrix: Water	
HS22100361-01	MW-3	05 Oct 2022 18:16			14 Oct 2022 15:30	1
HS22100361-02	MW-5S	06 Oct 2022 11:30			14 Oct 2022 15:30	1
HS22100361-03	MW-7S	05 Oct 2022 15:20			14 Oct 2022 15:30	1
HS22100361-04	MW-13	05 Oct 2022 18:12			14 Oct 2022 15:30	1
HS22100361-05	MW-19S	06 Oct 2022 09:40			14 Oct 2022 15:30	1
HS22100361-06	MW-20	05 Oct 2022 16:48			14 Oct 2022 15:30	1
HS22100361-07	MW-21	05 Oct 2022 15:40			14 Oct 2022 15:30	1
HS22100361-08	MW-14A	06 Oct 2022 14:51			14 Oct 2022 15:30	1
HS22100361-09	MW-15A	06 Oct 2022 13:03			14 Oct 2022 15:30	1
HS22100361-10	MW-17	06 Oct 2022 15:33			14 Oct 2022 15:30	1
HS22100361-11	MW-18	06 Oct 2022 14:05			14 Oct 2022 15:30	1
HS22100361-12	MW-16	06 Oct 2022 17:30			14 Oct 2022 15:30	1
HS22100361-13	DUP-3	05 Oct 2022 15:20			14 Oct 2022 15:30	1
Batch ID: R41951	13 (0)	Test Name: ALKALINITY BY SM 23	20B-2011		Matrix: Water	
HS22100361-11	MW-18	06 Oct 2022 14:05			16 Oct 2022 19:10	1
HS22100361-12	MW-16	06 Oct 2022 17:30			16 Oct 2022 19:17	1
HS22100361-13	DUP-3	05 Oct 2022 15:20			16 Oct 2022 09:00	1

Client: Altamira

Project: WFEC / CCR Landfill DATES REPORT

WorkOrder: HS22100361

Sample ID	Client Sam	np ID Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R41952	23 ( 0 )	Test Name: SULFIDE BY SM4500 S	2-F-2011		Matrix: Water	
HS22100361-03	MW-7S	05 Oct 2022 15:20			12 Oct 2022 16:00	1
HS22100361-13	DUP-3	05 Oct 2022 15:20			12 Oct 2022 16:00	1
Batch ID: R41959	94 ( 0 )	Test Name: FERRIC IRON - BY CAL	CULATION BY SM3	3500FED	Matrix: Water	
HS22100361-02	MW-5S	06 Oct 2022 11:30			17 Oct 2022 16:11	1
HS22100361-03	MW-7S	05 Oct 2022 15:20			17 Oct 2022 16:11	1
HS22100361-05	MW-19S	06 Oct 2022 09:40			17 Oct 2022 16:11	1
HS22100361-08	MW-14A	06 Oct 2022 14:51			17 Oct 2022 16:11	1
HS22100361-09	MW-15A	06 Oct 2022 13:03			17 Oct 2022 16:11	1
HS22100361-10	MW-17	06 Oct 2022 15:33			17 Oct 2022 16:11	1
HS22100361-11	MW-18	06 Oct 2022 14:05			17 Oct 2022 16:11	1
HS22100361-12	MW-16	06 Oct 2022 17:30			17 Oct 2022 16:11	1
HS22100361-13	DUP-3	05 Oct 2022 15:20			17 Oct 2022 16:11	1
Batch ID: R41960	01 (0)	Test Name: FERRIC IRON (DISS)-	BY CALCULATION E	BY SM3500FED	Matrix: Water	
HS22100361-02	MW-5S	06 Oct 2022 11:30			17 Oct 2022 17:04	1
HS22100361-03	MW-7S	05 Oct 2022 15:20			17 Oct 2022 17:04	1
HS22100361-05	MW-19S	06 Oct 2022 09:40			17 Oct 2022 17:04	1
HS22100361-08	MW-14A	06 Oct 2022 14:51			17 Oct 2022 17:04	1
HS22100361-09	MW-15A	06 Oct 2022 13:03			17 Oct 2022 17:04	1
HS22100361-10	MW-17	06 Oct 2022 15:33			17 Oct 2022 17:04	1
HS22100361-11	MW-18	06 Oct 2022 14:05			17 Oct 2022 17:04	1
HS22100361-12	MW-16	06 Oct 2022 17:30			17 Oct 2022 17:04	1
Batch ID: R42136	61 (0)	Test Name: FERRIC IRON (DISS)-	BY CALCULATION E	BY SM3500FED	Matrix: Water	
HS22100361-13	DUP-3	05 Oct 2022 15:20			08 Nov 2022 15:14	1

Client: Altamira

Project: WFEC / CCR Landfill DATES REPORT

WorkOrder: HS22100361

Sample ID	Client Sam	p ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R42279	3 ( 0 )	Test Name :	SUBCONTRACT ANAL	YSIS - RADIUM 228		Matrix: Water	
HS22100361-01	MW-3		05 Oct 2022 18:16			30 Nov 2022 09:14	1
HS22100361-01	MW-3		05 Oct 2022 18:16			30 Nov 2022 09:14	1
HS22100361-02	MW-5S		06 Oct 2022 11:30			30 Nov 2022 09:14	1
HS22100361-02	MW-5S		06 Oct 2022 11:30			30 Nov 2022 09:14	1
HS22100361-03	MW-7S		05 Oct 2022 15:20			30 Nov 2022 09:14	1
HS22100361-03	MW-7S		05 Oct 2022 15:20			30 Nov 2022 09:14	1
HS22100361-04	MW-13		05 Oct 2022 18:12			30 Nov 2022 09:14	1
HS22100361-04	MW-13		05 Oct 2022 18:12			30 Nov 2022 09:14	1
HS22100361-05	MW-19S		06 Oct 2022 09:40			30 Nov 2022 09:14	1
HS22100361-05	MW-19S		06 Oct 2022 09:40			30 Nov 2022 09:14	1
HS22100361-06	MW-20		05 Oct 2022 16:48			30 Nov 2022 09:14	1
HS22100361-06	MW-20		05 Oct 2022 16:48			30 Nov 2022 09:14	1
HS22100361-07	MW-21		05 Oct 2022 15:40			30 Nov 2022 09:14	1
HS22100361-07	MW-21		05 Oct 2022 15:40			30 Nov 2022 09:14	1
HS22100361-08	MW-14A		06 Oct 2022 14:51			30 Nov 2022 09:14	1
HS22100361-08	MW-14A		06 Oct 2022 14:51			30 Nov 2022 09:14	1
HS22100361-09	MW-15A		06 Oct 2022 13:03			30 Nov 2022 09:14	1
HS22100361-09	MW-15A		06 Oct 2022 13:03			30 Nov 2022 09:14	1
HS22100361-10	MW-17		06 Oct 2022 15:33			30 Nov 2022 09:14	1
HS22100361-10	MW-17		06 Oct 2022 15:33			30 Nov 2022 09:14	1
HS22100361-11	MW-18		06 Oct 2022 14:05			30 Nov 2022 09:14	1
HS22100361-11	MW-18		06 Oct 2022 14:05			30 Nov 2022 09:14	1
HS22100361-12	MW-16		06 Oct 2022 17:30			30 Nov 2022 09:14	1
HS22100361-12	MW-16		06 Oct 2022 17:30			30 Nov 2022 09:14	1
HS22100361-13	DUP-3		05 Oct 2022 15:20			30 Nov 2022 09:14	1
HS22100361-13	DUP-3		05 Oct 2022 15:20			30 Nov 2022 09:14	1
Batch ID: R42330	1(0)	Test Name :	PH BY SM4500H+ B-20	011		Matrix: Water	
HS22100361-03	MW-7S		05 Oct 2022 15:20			06 Dec 2022 14:53	1
HS22100361-13	DUP-3		05 Oct 2022 15:20			06 Dec 2022 14:53	1
Batch ID: R42339	2(0)	Test Name :	TOTAL DISSOLVED SO	OLIDS BY SM2540C-20	011	Matrix: Water	
HS22100361-03	MW-7S		05 Oct 2022 15:20			06 Dec 2022 13:49	1
HS22100361-13	DUP-3		05 Oct 2022 15:20			06 Dec 2022 13:49	1
Batch ID: R42340	1(0)	Test Name :	SPECIFIC CONDUCTA	NCE BY SM 2510B-20	)11	Matrix: Water	
HS22100361-03	MW-7S		05 Oct 2022 15:20			07 Dec 2022 14:57	1
Batch ID: R42429	9(0)	Test Name :	ALKALINITY BY SM 23	20B-2011		Matrix: Water	
HS22100361-03	MW-7S		05 Oct 2022 15:20			19 Dec 2022 12:35	1

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID:	184786 ( 0 )	Ins	strument:	Н	IG03	M	lethod: N	MERCURY B	Y SW7470A	
MBLK	Sample ID:	MBLK-184786			Units:	mg/L	Ana	alysis Date:	13-Oct-2022	13:36
Client ID:			Run ID: I	1G03	_419328	SeqNo:	6918332	PrepDate:	13-Oct-2022	DF: <b>1</b>
Analyte		Result	Р	QL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Mercury		U	0.0002	200						
LCS	Sample ID:	LCS-184786			Units:	mg/L	Ana	alysis Date:	13-Oct-2022	13:42
Client ID:			Run ID: I	1G03	_419328	SeqNo:	6918333	PrepDate:	13-Oct-2022	DF: <b>1</b>
Analyte		Result	Р	QL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Mercury		0.00543	0.0002	200	0.005	0	109	80 - 120		
MS	Sample ID:	HS22100143-01	MS		Units:	mg/L	Ana	alysis Date:	13-Oct-2022	13:46
Client ID:			Run ID: I	1G03	_419328	SeqNo:	6918335	PrepDate:	13-Oct-2022	DF: <b>1</b>
Analyte		Result	Р	QL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Mercury		0.00544	0.0002	200	0.005	-0.00007	110	75 - 125		
MSD	Sample ID:	HS22100143-01	MSD		Units:	mg/L	Ana	alysis Date:	13-Oct-2022	13:47
Client ID:			Run ID: I	HG03	_419328	SeqNo:	6918336	PrepDate:	13-Oct-2022	DF: <b>1</b>
Analyte		Result	Р	QL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Mercury		0.00531	0.0002	200	0.005	-0.00007	108	75 - 125	0.00544	2.42 20
The followin	g samples were analyze		22100361-0 22100361-0		HS2210036 HS2210036		HS221003 HS221003		HS22100361 HS22100361	

**QC BATCH REPORT** 

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID: 184802 ( 0 ) Instrument: ICPMS07 Method: ICP-MS METALS BY SW6020A

Batch ID: 184	802 ( 0 )	Instr	ument:	ICPMS07	М	ethod: I	CP-MS MET	ALS BY SW	6020A
MBLK	Sample ID:	MBLKF1-184802		Units:	mg/L	Ana	alysis Date:	17-Oct-2022	13:41
Client ID:		Ru	n ID: ICPN	IS07_419578	SeqNo: 6	924323	PrepDate:	13-Oct-2022	DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Antimony		U	0.00200						
Arsenic		U	0.00200						
Barium		U	0.00400						
Beryllium		U	0.00200						
Boron		U	0.0200						
Cadmium		U	0.00200						
Calcium		U	0.500						
Chromium		U	0.00400						
Cobalt		U	0.00500						
Iron		U	0.200						
Lead		U	0.00200						
Lithium		U	0.00500						
Magnesium		0.01542	0.200						
Molybdenum		U	0.00500						
Potassium		U	0.200						
Selenium		U	0.00200						
Sodium		U	0.200						
Thallium		U	0.00200						

**QC BATCH REPORT** 

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID: 184	802 ( 0 )	In	strument:	ICPMS07	M	lethod: I	ICP-MS MET	ALS BY SW	6020A
MBLK	Sample ID:	MBLK-184802		Units:	mg/L	An	alysis Date:	14-Oct-2022	20:36
Client ID:			Run ID: IC	PMS07_419448	SeqNo: (	6921823	PrepDate:	13-Oct-2022	DF: <b>1</b>
Analyte		Result	PQ	L SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Antimony		U	0.0020	0					
Arsenic		U	0.0020	0					
Barium		U	0.0040	0					
Beryllium		U	0.0020	0					
Boron		U	0.020	0					
Cadmium		U	0.0020	0					
Calcium		U	0.50	0					
Chromium		U	0.0040	0					
Cobalt		U	0.0050	0					
Iron		U	0.20	0					
Lead		U	0.0020	0					
Lithium		U	0.0050	0					
Magnesium		0.01448	0.20	0					
Molybdenum		U	0.0050	0					
Potassium		U	0.20	0					
Selenium		U	0.0020	0					
Sodium		U	0.20	0					
Thallium		U	0.0020	0					

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

**QC BATCH REPORT** 

Batch ID: 1848	02 ( 0 )	Ins	trument:	ICPMS07	Me	ethod: I	CP-MS MET	ALS BY SW6	020A
LCS	Sample ID:	LCS-184802		Units:	mg/L	Ana	alysis Date:	14-Oct-2022	20:40
Client ID:		F	Run ID: ICPN	MS07_419448	SeqNo: 6	921825	PrepDate:	13-Oct-2022	DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Antimony		0.05231	0.00200	0.05	0	105	80 - 120		
Arsenic		0.05247	0.00200	0.05	0	105	80 - 120		-
Barium		0.05067	0.00400	0.05	0	101	80 - 120		
Beryllium		0.05385	0.00200	0.05	0	108	80 - 120		
Boron		0.5302	0.0200	0.5	0	106	80 - 120		
Cadmium		0.05214	0.00200	0.05	0	104	80 - 120		
Calcium		5.398	0.500	5	0	108	80 - 120		
Chromium		0.05043	0.00400	0.05	0	101	80 - 120		
Cobalt		0.05095	0.00500	0.05	0	102	80 - 120		
Iron		5.197	0.200	5	0	104	80 - 120		
Lead		0.04742	0.00200	0.05	0	94.8	80 - 120		
Magnesium		5.345	0.200	5	0	107	80 - 120		
Molybdenum		0.05185	0.00500	0.05	0	104	80 - 120		
Potassium		5.37	0.200	5	0	107	80 - 120		
Selenium		0.05352	0.00200	0.05	0	107	80 - 120		
Sodium		5.273	0.200	5	0	105	80 - 120		
Thallium		0.04509	0.00200	0.05	0	90.2	80 - 120		
LCS	Sample ID:	LCS-184802		Units:	mg/L	Ana	alysis Date:	17-Oct-2022	15:09
Client ID:		F	Run ID: ICPN	/IS07_419578	SeqNo: 6	924523	PrepDate:	13-Oct-2022	DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Lithium		0.1116	0.00500	0.1	0	112	80 - 120		

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID:	184802 ( 0 )	Insti	rument:	ICPMS07	Ме	ethod: I	CP-MS META	ALS BY SW6	020A
MS Client ID:	Sample ID:	<b>HS22100361-05MS</b>		Units: MS07_419448	mg/L SeqNo: 6		,	14-Oct-2022 13-Oct-2022	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Antimony		0.05428	0.00200	0.05	0.000108	108	80 - 120		
Arsenic		0.06231	0.00200	0.05	0.007204	110	80 - 120		
Barium		0.07144	0.00400	0.05	0.0164	110	80 - 120		
Beryllium		0.0537	0.00200	0.05	-0.000007	107	80 - 120		
Boron		9.689	0.0200	0.5	8.663	205	80 - 120		SEO
Cadmium		0.05198	0.00200	0.05	0.000179	104	80 - 120		
Calcium		48.08	0.500	5	40.69	148	80 - 120		so
Chromium		0.05237	0.00400	0.05	0.000082	105	80 - 120		
Cobalt		0.05213	0.00500	0.05	0.000074	104	80 - 120		
Iron		5.354	0.200	5	0.000805	107	80 - 120		
Lead		0.05056	0.00200	0.05	-0.000027	101	80 - 120		
Magnesium		5.346	0.200	5	0.02283	106	80 - 120		
Molybdenur	n	0.5123	0.00500	0.05	0.4296	165	80 - 120		so
Potassium		43.93	0.200	5	37.7	125	80 - 120		SO
Selenium		0.05641	0.00200	0.05	0.009441	93.9	80 - 120		
Sodium		698.6	0.200	5	672	531	80 - 120		SEO
Thallium		0.048	0.00200	0.05	0.000138	95.7	80 - 120		
MS	Sample ID:	HS22100361-05MS	3	Units:	mg/L	Ana	llysis Date:	17-Oct-2022	15:11
Client ID:	MW-19S	Ru	ın ID: ICPI	MS07_419578	SeqNo: 6	924524	PrepDate:	13-Oct-2022	DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Lithium		0.1158	0.00500	0.1	0.001111	115	80 - 120		

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID:	184802 ( 0 )	Ins	trument:	ICPMS07	M	ethod: I	CP-MS MET	ALS BY SW6	020A		
MSD	Sample ID:	HS22100361-05M	SD	Units:	mg/L	Ana	alysis Date:	14-Oct-2022	20:47		
Client ID:	MW-19S	F	Run ID: ICPI	/IS07_419448	SeqNo: 6	921829	PrepDate:	13-Oct-2022	DF: 1	l	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	R %RPD L	PD imit (	Qual
Antimony		0.054	0.00200	0.05	0.000108	108	80 - 120	0.05428	0.519	20	
Arsenic		0.06228	0.00200	0.05	0.007204	110	80 - 120	0.06231	0.053	20	
Barium		0.07065	0.00400	0.05	0.0164	108	80 - 120	0.07144	1.11	20	
Beryllium		0.05313	0.00200	0.05	-0.000007	106	80 - 120	0.0537	1.07	20	
Boron		9.824	0.0200	0.5	8.663	232	80 - 120	9.689	1.39	20	SEO
Cadmium		0.05203	0.00200	0.05	0.000179	104	80 - 120	0.05198	0.0961	20	
Calcium		47.37	0.500	5	40.69	134	80 - 120	48.08	1.48	20	so
Chromium		0.05201	0.00400	0.05	0.000082	104	80 - 120	0.05237	0.695	20	
Cobalt		0.05189	0.00500	0.05	0.000074	104	80 - 120	0.05213	0.458	20	
Iron		5.31	0.200	5	0.000805	106	80 - 120	5.354	0.82	20	
Lead		0.05001	0.00200	0.05	-0.000027	100	80 - 120	0.05056	1.11	20	
Magnesium	1	5.359	0.200	5	0.02283	107	80 - 120	5.346	0.244	20	
Molybdenu	m	0.5041	0.00500	0.05	0.4296	149	80 - 120	0.5123	1.62	20	so
Potassium		43.71	0.200	5	37.7	120	80 - 120	43.93	0.491	20	SO
Selenium		0.05682	0.00200	0.05	0.009441	94.8	80 - 120	0.05641	0.733	20	
Sodium		693.6	0.200	5	672	431	80 - 120	698.6	0.717	20	SEO
Thallium		0.04735	0.00200	0.05	0.000138	94.4	80 - 120	0.048	1.36	20	_
MSD	Sample ID:	HS22100361-05M	SD	Units:	mg/L	Ana	alysis Date:	17-Oct-2022	15:13		
Client ID:	MW-19S	F	Run ID: ICPN	MS07_419578	SeqNo: 6	924525	PrepDate:	13-Oct-2022	DF: 1	l	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	R %RPD L	PD imit (	Qual
Lithium		0.1064	0.00500	0.1	0.001111	105	80 - 120	0.1158	8.39	20	
PDS	Sample ID:	HS22100361-05P	DS	Units:	mg/L	Ana	alysis Date:	17-Oct-2022	13:46		
Client ID:	MW-19S	F	Run ID: ICPN	MS07_419578	SeqNo: 6	924326	PrepDate:	13-Oct-2022	DF: 2	20	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	R %RPD L	PD imit (	Qual
Boron		17.81	0.400	10	8.43	93.8	75 - 125	_			
Sodium		948.6	4.00	200	752.1	98.2	75 - 125				

ICPMS07

Instrument:

Client: Altamira

Batch ID: 184802 ( 0 )

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

**QC BATCH REPORT** 

Method: ICP-MS METALS BY SW6020A

	104002 ( 0 )									
PDS	Sample ID:	HS22100361-05PD	3	Units:	mg/L	Ana	alysis Date:	14-Oct-2022	20:49	
Client ID:	MW-19S	Rui	n ID: ICPI	MS07_419448	SeqNo: (	6921830	PrepDate:	13-Oct-2022	DF:	1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	F %RPD L	RPD _imit Qua
Calcium		51.95	0.500	10	40.69	113	75 - 125			
Molybdenum	n	0.5709	0.00500	0.1	0.4296	141	75 - 125			
Potassium		47.62	0.200	10	37.7	99.3	75 - 125			
SD	Sample ID:	HS22100361-05SD		Units:	mg/L	Ana	alysis Date:	14-Oct-2022	20:43	
Client ID:	MW-19S	Rui	n ID: ICPI	MS07_419448	SeqNo: (	6921827	PrepDate:	13-Oct-2022	DF:	5
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value		%D _imit Qua
Antimony		U	0.0100					0.000108	C	10
Arsenic		0.006729	0.0100					0.007204	C	10
Barium		0.01651	0.0200					0.0164	C	10
Beryllium		U	0.0100					-0.000007	C	10
Cadmium		U	0.0100					0.000179	C	10
Calcium		40.35	2.50					40.69	0.853	3 10
Chromium		U	0.0200					0.000082	C	10
Cobalt		U	0.0250					0.000074	C	10
Iron		U	1.00					0.000805	C	10
Lead		U	0.0100					-0.000027	C	10
Lithium		U	0.0250					0.001111	C	10
Magnesium		U	1.00					0.02283	C	10
Molybdenum	n	0.4164	0.0250					0.4296	3.08	3 10
Potassium		38.62	1.00					37.7	2.44	10
Selenium		0.006873	0.0100					0.009441	C	10
Thallium		U	0.0100					0.000138	C	10
SD	Sample ID:	HS22100361-05SD		Units:	mg/L	Ana	alysis Date:	17-Oct-2022	14:37	
Client ID:	MW-19S	Rui	n ID: ICPI	MS07_419578	SeqNo: (	6924516	PrepDate:	13-Oct-2022	DF:	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value		%D _imit Qua
Boron		8.805	2.00					8.43	4.44	10
Sodium		768.3	20.0					752.1	2.15	5 10
he following	samples were analyze	HS221	00361-01 00361-05 00361-09 00361-13	HS2210036 HS2210036 HS2210036	61-06	HS221003 HS221003 HS221003	61-07	HS22100361- HS22100361- HS22100361-	-08	

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID:	184803 ( 0 )	Ins	strument:	ICPMS07	Ме	unou.	DISSOLVED (DISSOLVED	METALS BY	SW6020A
MBLK	Sample ID:	MBLK-184803		Units:	mg/L	An	alysis Date:	13-Oct-2022	23:33
Client ID:		F	Run ID: ICPI	MS07_419402	SeqNo: 69	920050	PrepDate:	13-Oct-2022	DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Iron		U	0.200						
Molybdenur	m	U	0.00500						
LCS	Sample ID:	LCS-184803		Units:	mg/L	An	alysis Date:	13-Oct-2022	23:35
Client ID:		F	Run ID: ICPI	MS07_419402	SeqNo: 69	920051	PrepDate:	13-Oct-2022	DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Iron		4.995	0.200	5	0	99.9	80 - 120		
Molybdenur	m	0.04908	0.00500	0.05	0	98.2	80 - 120		
MS	Sample ID:	HS22100361-05N			mg/L	An	alysis Date:	13-Oct-2022	23:41
Client ID:	MW-19S	F	Run ID: ICPI	MS07_419402	SeqNo: 69	920054		13-Oct-2022	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Iron		5.091	0.200	5		400	75 405		
Molybdenur		3.031	0.200	O	-0.000909	102	75 - 125		
worybaenur	m	0.4829	0.00500	0.05	0.4135	139			SC
MSD			0.00500	0.05		139	75 - 125	13-Oct-2022	
•		0.4829 HS22100361-05N	0.00500	0.05	0.4135	139 An	75 - 125	13-Oct-2022 13-Oct-2022	
MSD	Sample ID:	0.4829 HS22100361-05N	0.00500	0.05 Units:	0.4135 <b>mg/L</b>	139 An	75 - 125  nalysis Date: PrepDate: Control	<b>13-Oct-2022</b> RPD Ref	23:43
MSD Client ID:	Sample ID:	0.4829 HS22100361-05N	0.00500 <b>ISD</b> Run ID: <b>ICP</b> I	0.05 Units: WS07_419402	0.4135  mg/L  SeqNo: 69  SPK Ref	139 An	75 - 125 nalysis Date: PrepDate: Control Limit	<b>13-Oct-2022</b> RPD Ref	23:43 DF: 1 RPD
MSD Client ID: Analyte	Sample ID:	0.4829 HS22100361-05N	0.00500  ISD  Run ID: ICPI  PQL	0.05 Units: <b>WS07_419402</b> SPK Val	0.4135  mg/L  SeqNo: 69  SPK Ref  Value	139 An <b>920055</b> %REC	75 - 125 halysis Date: PrepDate: Control Limit 75 - 125	13-Oct-2022 RPD Ref Value	23:43 DF: 1 RPD %RPD Limit Qual
MSD Client ID: Analyte Iron	Sample ID:  MW-19S	0.4829  HS22100361-05N  Result  4.96	0.00500  ISD  Run ID: ICPI  PQL  0.200  0.00500	0.05 Units: WS07_419402 SPK Val	0.4135 mg/L SeqNo: 69 SPK Ref Value -0.000909 0.4135	139 An 920055 %REC 99.2	75 - 125 nalysis Date: PrepDate: Control Limit 75 - 125 75 - 125	13-Oct-2022 RPD Ref Value 5.091	23:43  DF: 1  RPD  %RPD Limit Qual  2.61 20  4.8 20
MSD Client ID: Analyte Iron Molybdenur	Sample ID:  MW-19S	0.4829  HS22100361-05N  Result  4.96  0.4602  HS22100361-05P	0.00500  MSD  Run ID: ICPI  PQL  0.200  0.00500	0.05  Units: WS07_419402  SPK Val  5 0.05	0.4135 mg/L SeqNo: 69 SPK Ref Value -0.000909 0.4135	139 An 920055 %REC 99.2 93.5	75 - 125 halysis Date: PrepDate: Control Limit 75 - 125 75 - 125 halysis Date:	13-Oct-2022 RPD Ref Value 5.091 0.4829	23:43  DF: 1  RPD  %RPD Limit Qual  2.61 20  4.8 20
MSD Client ID: Analyte Iron Molybdenur PDS	Sample ID:  MW-19S  m  Sample ID:	0.4829  HS22100361-05N  Result  4.96  0.4602  HS22100361-05P	0.00500  MSD  Run ID: ICPI  PQL  0.200  0.00500	0.05  Units: WS07_419402  SPK Val  5 0.05  Units:	0.4135  mg/L  SeqNo: 69  SPK Ref  Value  -0.000909  0.4135  mg/L	139 An 920055 %REC 99.2 93.5	75 - 125  PrepDate: Control Limit  75 - 125  75 - 125  alysis Date: PrepDate: Control	13-Oct-2022  RPD Ref Value  5.091  0.4829  13-Oct-2022  RPD Ref	23:43  DF: 1  RPD  %RPD Limit Qual  2.61 20  4.8 20 (
MSD Client ID: Analyte Iron Molybdenur PDS Client ID:	Sample ID:  MW-19S  m  Sample ID:	0.4829  HS22100361-05N  Result  4.96  0.4602  HS22100361-05P	0.00500  #SD  Run ID: ICPI  0.200  0.00500  PDS  Run ID: ICPI	0.05  Units: MS07_419402  SPK Val  5 0.05  Units: MS07_419402	mg/L SeqNo: 69 SPK Ref Value  -0.000909 0.4135  mg/L SeqNo: 69 SPK Ref	139 An 920055 %REC 99.2 93.5 An	75 - 125  PrepDate: Control Limit  75 - 125  75 - 125  PrepDate: PrepDate: Control Limit	13-Oct-2022 RPD Ref Value 5.091 0.4829 13-Oct-2022 RPD Ref	23:43  DF: 1  RPD  %RPD Limit Qual  2.61 20  4.8 20 0  23:45  DF: 1  RPD

**QC BATCH REPORT** 

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID: 184803 ( 0 ) Instrument: ICPMS07 Method: DISSOLVED METALS BY SW6020A

(DISSOLVED)

 SD
 Sample ID:
 HS22100361-05SD
 Units:
 mg/L
 Analysis Date:
 13-Oct-2022 23:39

 Client ID:
 MW-19S
 Run ID:
 ICPMS07\_419402
 SeqNo: 6920053
 PrepDate:
 13-Oct-2022
 DF: 5

SPK Ref Control RPD Ref %D

Analyte Result PQL SPK Val Value %REC Limit Value %D Limit Qual

Iron U 1.00 -0.000909 0 10

Molybdenum 0.3824 0.0250 0.4135 7.52 10

 The following samples were analyzed in this batch:
 HS22100361-02
 HS22100361-03
 HS22100361-05
 HS22100361-08

 HS22100361-09
 HS22100361-10
 HS22100361-11
 HS22100361-12

HS22100361-13

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID:	187029 ( 0 )	Inst	trument:	HG04	Me	ethod: N	MERCURY B	SY SW7470A	
MBLK	Sample ID:	MBLK-187029		Units:	mg/L	Ana	alysis Date:	07-Dec-2022	9:37
Client ID:		R	tun ID: HG0	4_423348	SeqNo: 7	018227	PrepDate:	06-Dec-2022	. DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Mercury		U	0.000200						
LCS	Sample ID:	LCS-187029		Units:	mg/L	Ana	alysis Date:	07-Dec-2022	9:39
Client ID:		R	tun ID: HG0	4_423348	SeqNo: 7	018228	PrepDate:	06-Dec-2022	P. DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Mercury		0.00484	0.000200	0.005	0	96.8	80 - 120		
MS	Sample ID:	HS22111667-07M	s	Units:	mg/L	Ana	alysis Date:	07-Dec-2022	9:43
Client ID:		R	tun ID: HG0	4_423348	SeqNo: 7	018230	PrepDate:	06-Dec-2022	. DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Mercury		0.00517	0.000200	0.005	-0.000002	103	75 - 125		
MSD	Sample ID:	HS22111667-07M	SD	Units:	mg/L	Ana	alysis Date:	07-Dec-2022	9:44
Client ID:		R	tun ID: HG0	4_423348	SeqNo: 7	018231	PrepDate:	06-Dec-2022	DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Mercury		0.00524	0.000200	0.005	-0.000002	105	75 - 125	0.00517	1.34 20
The following	g samples were analyze	ed in this batch: HS22	2100361-05	HS2210036	61-08	HS221003	61-09	HS22100361-	-10

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID: F	R418882 ( 0 )	Ins	strument:	UV-	2450	М	ethod: F	ERROUS IF	ON BY SM3	500 FE B
MBLK	Sample ID:	MBLK-R418882			Units:	mg/L	Ana	alysis Date:	07-Oct-2022	14:25
Client ID:		1	Run ID: <b>(</b>	JV-2450	_418882	SeqNo: 6	912622	PrepDate:		DF: <b>1</b>
Analyte		Result	Р	QL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Iron		U	0.05	500				80 - 120		
LCS	Sample ID:	LCS-R418882			Units:	mg/L	Ana	alysis Date:	07-Oct-2022	14:25
Client ID:		1	Run ID: <b>(</b>	JV-2450	_418882	SeqNo: 6	912621	PrepDate:		DF: <b>1</b>
Analyte		Result	Р	QL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Iron		0.254	0.05	500	0.25	0	102	80 - 120		
MS	Sample ID:	HS22100361-05N	<b>MS</b>		Units:	mg/L	Ana	alysis Date:	07-Oct-2022	14:25
Client ID: N	MW-19S	1	Run ID: <b>(</b>	JV-2450	_418882	SeqNo: 6	912624	PrepDate:		DF: <b>1</b>
Analyte		Result	Р	QL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Iron		0.297	0.05	500	0.25	0.023	110	75 - 125		
MSD	Sample ID:	HS22100361-05N	MSD		Units:	mg/L	Ana	alysis Date:	07-Oct-2022	14:25
Client ID: N	MW-19S	1	Run ID: <b>(</b>	JV-2450	_418882	SeqNo: 6	912623	PrepDate:		DF: <b>1</b>
Analyte		Result	Р	QL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Iron		0.295	0.05	500	0.25	0.023	109	75 - 125	0.297	0.676 20
The following s	samples were analyze		22100361-0 22100361-0		HS2210036 HS2210036		HS221003 HS221003		HS22100361 HS22100361	

**QC BATCH REPORT** 

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID: R418883 ( 0 ) Instrument: UV-2450 Method: FERROUS IRON BY SM3500 FE D

(DISSOLVED)

MBLK Sample ID: MBLK-R418883 Units: mg/L Analysis Date: 07-Oct-2022 18:35

Client ID: Run ID: **UV-2450\_418883** SeqNo: **6912229** PrepDate: DF: **1** 

SPK Ref Control RPD Ref RPD

Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual

Ferrous Iron, Dissolved U 0.0500

LCS Sample ID: LCS-R418883 Units: mg/L Analysis Date: 07-Oct-2022 18:35

Client ID: Run ID: UV-2450\_418883 SeqNo: 6912228 PrepDate: DF: 1

SPK Ref Control RPD Ref RPD
Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual

Ferrous Iron, Dissolved 0.245 0.0500 0.25 0 98.0 80 - 120

MS Sample ID: HS22100361-05MS Units: mg/L Analysis Date: 07-Oct-2022 18:35

Client ID: MW-19S Run ID: UV-2450\_418883 SeqNo: 6912231 PrepDate: DF: 1

SPK Ref Control RPD Ref RPD

Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual

Ferrous Iron, Dissolved 0.242 0.0500 0.25 0.013 91.6 80 - 120

MSD Sample ID: HS22100361-05MSD Units: mg/L Analysis Date: 07-Oct-2022 18:35

 Client ID:
 MW-19S
 Run ID:
 UV-2450\_418883
 SeqNo: 6912230
 PrepDate:
 DF: 1

 SPK Ref
 Control
 RPD Ref
 RPD

Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual

Ferrous Iron, Dissolved 0.246 0.0500 0.25 0.013 93.2 80 - 120 0.242 1.64 20

The following samples were analyzed in this batch: HS22100361-02 HS22100361-03 HS22100361-05 HS22100361-08

HS22100361-09 HS22100361-10 HS22100361-11 HS22100361-13

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

**QC BATCH REPORT** 

Batch ID: R418890 ( 0 )		Inst	rument:	ICS-Integrion	Me	ethod: /	ANIONS BY I	E300.0, REV	2.1, 1993
MBLK Sample ID:	MBLK			Units: n	ng/L	An	alysis Date:	07-Oct-2022	09:07
Client ID:		R	un ID: ICS-I	ntegrion_418890	SeqNo: 6	907705	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Chloride		U	0.500						
Fluoride		U	0.100						
Nitrogen, Nitrate (As N)		U	0.100						
Nitrogen, Nitrite (As N)		U	0.100						
Sulfate		U	0.500						
LCS Sample ID:	LCS			Units: <b>n</b>	ng/L	An	alysis Date:	07-Oct-2022	09:12
Client ID:		R	un ID: ICS-I	ntegrion_418890	SeqNo: 6	907706	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Chloride		20.03	0.500	20	0	100	90 - 110		
Fluoride		4.344	0.100	4	0	109	90 - 110		
Nitrogen, Nitrate (As N)		4.029	0.100	4	0	101	90 - 110		
0 , , ,									
Nitrogen, Nitrite (As N)		4.016	0.100	4	0	100	90 - 110		
		4.016 20.02	0.100 0.500	4 20	0	100 100	90 - 110 90 - 110		
Nitrogen, Nitrite (As N)	LCSD			·	0	100		07-Oct-2022	15:10
Nitrogen, Nitrite (As N) Sulfate	LCSD	20.02	0.500	20	0 ng/L	100 An	90 - 110	07-Oct-2022	<b>15:10</b> DF: <b>1</b>
Nitrogen, Nitrite (As N) Sulfate  LCSD Sample ID:	LCSD	20.02	0.500	20 Units: n	0 ng/L	100 An	90 - 110 alysis Date:	<b>07-Oct-2022</b> RPD Ref Value	
Nitrogen, Nitrite (As N) Sulfate  LCSD Sample ID: Client ID:	LCSD	20.02 R	0.500 un ID: ICS-I	Units: n	0 ng/L SeqNo: 6 SPK Ref	100 An	90 - 110  alysis Date:  PrepDate:  Control	RPD Ref	DF: <b>1</b> RPD %RPD Limit Qual
Nitrogen, Nitrite (As N) Sulfate  LCSD Sample ID: Client ID: Analyte	LCSD	20.02	0.500 un ID: <b>ICS-</b> I	Units: n Integrion_418890 SPK Val	0  ng/L  SeqNo: 6  SPK Ref  Value	100 An 907743 %REC	90 - 110 alysis Date: PrepDate: Control Limit	RPD Ref Value	DF: 1  RPD  %RPD Limit Qual  0.269 20
Nitrogen, Nitrite (As N) Sulfate  LCSD Sample ID: Client ID: Analyte  Chloride	LCSD	20.02 Result	0.500 un ID: ICS-I PQL 0.500	Units: n Integrion_418890 SPK Val	0 ng/L SeqNo: 6 SPK Ref Value	100 An 907743 %REC	90 - 110  alysis Date: PrepDate: Control Limit  90 - 110	RPD Ref Value	DF: 1  RPD  %RPD Limit Qual  0.269 20  2.11 20
Nitrogen, Nitrite (As N) Sulfate  LCSD Sample ID: Client ID: Analyte  Chloride Fluoride	LCSD	20.02  Result  20.09 4.253	0.500 un ID: ICS-I PQL 0.500 0.100	Units: n Integrion_418890 SPK Val	0 ng/L SeqNo: 6 SPK Ref Value  0 0	100 An. 907743 %REC 100	90 - 110  alysis Date: PrepDate: Control Limit  90 - 110 90 - 110	RPD Ref Value 20.03 4.344	DF: 1  RPD  %RPD Limit Qual  0.269 20  2.11 20  0.39 20

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

**QC BATCH REPORT** 

Batch ID: R418890	(0)	Instrum	nent:	ICS-Integrion	Mo	ethod: A	ANIONS BY E	E300.0, REV	2.1, 1993		
MS S	ample ID:	HS22100361-05MS		Units: n	ոց/L	Ana	alysis Date:	07-Oct-2022	12:16		
Client ID: MW-19S		Run II	D: ICS-	-Integrion_418890	SeqNo: 6	907717	PrepDate:		DF: <b>1</b>	I	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	R %RPD Li	PD imit (	Qual
Chloride		23.33	0.500	10	13.31	100	80 - 120				
Fluoride		3.575	0.100	2	1.592	99.2	80 - 120				
Nitrogen, Nitrate (As N	<b>1</b> )	2.03	0.100	2	0	102	80 - 120				
Nitrogen, Nitrite (As N	1)	0.1892	0.100	2	0	9.46	80 - 120				S
Sulfate		1260	0.500	10	1299	-394	80 - 120				SEO
MS S	ample ID:	HS22100357-01MS		Units: <b>n</b>	ng/L	Ana	alysis Date:	07-Oct-2022	14:07		
Client ID:		Run II	D: ICS-	-Integrion_418890	SeqNo: 6	907733	PrepDate:		DF: <b>1</b>		
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	R %RPD Li	PD imit (	Qual
Chloride		95.93	0.500	10	87.97	79.6	80 - 120				SO
Fluoride		2.819	0.100	2	0.6009	111	80 - 120				
Nitrogen, Nitrate (As N	<b>1</b> )	2.765	0.100	2	0.7337	102	80 - 120				
Nitrogen, Nitrite (As N	1)	1.973	0.100	2	0.0234	97.5	80 - 120				
Sulfate		271.8	0.500	10	268.8	30.4	80 - 120				SEO
MSD S	ample ID:	HS22100361-05MSD		Units: n	ոց/L	Ana	alysis Date:	07-Oct-2022	12:21		
Client ID: MW-19S		Run II	D: ICS-	-Integrion_418890	SeqNo: 6	907718	PrepDate:		DF: <b>1</b>	I	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	R %RPD Li	PD imit (	Qual
Chloride		23.35	0.500	10	13.31	100	80 - 120	23.33	0.09	20	
Fluoride		3.553	0.100	2	1.592	98.1	80 - 120	3.575	0.609	20	
Nitrogen, Nitrate (As N	<b>1</b> )	2.038	0.100	2	0	102	80 - 120	2.03	0.408	20	
Nitrogen, Nitrite (As N	1)	0.1861	0.100	2	0	9.30	80 - 120	0.1892	1.65	20	S
Sulfate											

**QC BATCH REPORT** 

Client: Altamira

Sulfate

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID: R418890 (0) Instrument: **ICS-Integrion** Method: ANIONS BY E300.0, REV 2.1, 1993 MSD HS22100357-01MSD Units: mg/L Analysis Date: 07-Oct-2022 14:12 Client ID: Run ID: ICS-Integrion\_418890 SeqNo: 6907734 PrepDate: SPK Ref Control RPD Ref **RPD** Analyte Result **PQL** SPK Val Value %REC Limit Value %RPD Limit Qual Chloride 95.86 0.500 10 87.97 78.9 80 - 120 95.93 0.074 20 SO Fluoride 2.714 0.100 2 0.6009 106 80 - 120 2.819 3.79 20 Nitrogen, Nitrate (As N) 2.77 0.100 2 0.7337 102 80 - 120 2.765 0.188 20 2 Nitrogen, Nitrite (As N) 1.968 0.100 0.0234 97.2 1.973 0.274 20 80 - 120

10

268.8

22.4

80 - 120

271.8

0.295 20 SEO

 The following samples were analyzed in this batch:
 HS22100361-01
 HS22100361-02
 HS22100361-03
 HS22100361-04

 HS22100361-05
 HS22100361-06
 HS22100361-07
 HS22100361-13

0.500

271

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID:	R418893 ( 0 )		Instrument:	ICS-Integrion	М	lethod:	ANIONS BY	E300.0, REV	2.1, 1993	
MBLK	Sample ID:	MBLK		Units	mg/L	An	nalysis Date:	07-Oct-2022	17:49	
Client ID:			Run ID: ICS	S-Integrion_418	393 SeqNo: (	6907855	PrepDate:		DF: <b>1</b>	
Analyte		Resu	lt PQI	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit	
Chloride			U 0.500	)						
Fluoride			U 0.100	)						
Nitrogen, N	litrate (As N)		U 0.100	)						
Sulfate			U 0.500	)						
LCS	Sample ID:	LCS		Units	mg/L	An	nalysis Date:	07-Oct-2022	17:55	
Client ID:			Run ID: ICS	S-Integrion_418	393 SeqNo: (	6907856	PrepDate:		DF: <b>1</b>	
Analyte		Resu	lt PQI	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit	
Chloride		20.0	0.500	) 20	0	100	90 - 110			
Fluoride		4.33	39 0.100	) 4	0	108	90 - 110			
Nitrogen, N	litrate (As N)	4.0	0.100	) 4	0	101	90 - 110			
Sulfate		2	20 0.500	20	0	100.0	90 - 110			
MS	Sample ID:	HS22100190-	10MS	Units	: mg/L	An	nalysis Date:	07-Oct-2022	18:05	
Client ID:			Run ID: ICS	S-Integrion_4188	393 SeqNo: (	6907858	PrepDate:		DF: <b>1</b>	
Analyte		Resu	lt PQI	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit	
Chloride		12.6	31 0.500	) 10	2.487	101	80 - 120			
Fluoride		2.63	35 0.100	) 2	0.4622	109	80 - 120			
Nitrogen, N	litrate (As N)	2.20	0.100	) 2	0.1941	100	80 - 120			
Sulfate		888	.9 0.500	) 10	909.4	-205	80 - 120			SE
MSD	Sample ID:	HS22100190-	IOMSD	Units	: mg/L	An	nalysis Date:	07-Oct-2022	18:10	
Client ID:			Run ID: ICS	S-Integrion_418	393 SeqNo: 6	6907859	PrepDate:		DF: <b>1</b>	
Analyte		Resu	lt PQI	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit	
Chloride		12.6	65 0.500	) 10	2.487	102	80 - 120	12.61	0.293 20	)
Fluoride		2.48	32 0.100	) 2	0.4622	101	80 - 120	2.635	5.97 20	)
Nitrogen, N	litrate (As N)	2.2	15 0.100	) 2	0.1941	101	80 - 120	2.203	0.516 20	)
Sulfate		891	.7 0.500	) 10	909.4	-177	80 - 120	888.9	0.315 20	SE
Sullate										

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID:	R418914 ( 0 )	I	nstrument:	ICS-Integrion	M	ethod: A	ANIONS BY	E300.0, REV	2.1, 1993
MBLK	Sample ID:	MBLK		Units:	mg/L	Ana	alysis Date:	08-Oct-2022	11:54
Client ID:			Run ID: ICS	Integrion_41891	14 SeqNo: 6	908300	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Chloride		l	J 0.500						
Fluoride		l	J 0.100						
Nitrogen, N	Nitrate (As N)	ι	J 0.100						
Sulfate		l	0.500						
LCS	Sample ID:	LCS		Units:	mg/L	Ana	alysis Date:	08-Oct-2022	11:59
Client ID:			Run ID: ICS	Integrion_41891	14 SeqNo: 6	908301	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Chloride		20.0	1 0.500	20	0	100	90 - 110		
Fluoride		4.30	0.100	4	0	109	90 - 110		
Nitrogen, N	Nitrate (As N)	4.023	0.100	4	0	101	90 - 110		
Sulfate		20.09	0.500	20	0	100	90 - 110		
MS	Sample ID:	HS22100361-1	2MS	Units:	mg/L	Ana	alysis Date:	08-Oct-2022	12:10
Client ID:	MW-16		Run ID: ICS	Integrion_41891	14 SeqNo: 6	908303	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Chloride		35.5	3 0.500	10	25.84	96.9	80 - 120		
Fluoride		3.38	1 0.100	2	1.252	106	80 - 120		
Nitrogen, N	Nitrate (As N)	2.149	0.100	2	0.1274	101	80 - 120		
Sulfate		882.	7 0.500	10	905.9	-232	80 - 120		S
MSD	Sample ID:	HS22100361-1	2MSD	Units:	mg/L	Ana	alysis Date:	08-Oct-2022	12:15
Client ID:	MW-16		Run ID: ICS	Integrion_41891	14 SeqNo: 6	908304	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Chloride		35.59	9 0.500	10	25.84	97.5	80 - 120	35.53	0.169 20
		3.300		2	1.252	103	80 - 120	3.381	2.24 20
Fluoride						102	80 - 120	2.149	0.626 20
Fluoride Nitrogen, N	Nitrate (As N)	2.16	0.100	2	0.1274	102	00 - 120	2.143	0.020 20

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

**QC BATCH REPORT** 

Batch ID: R418923 ( 0 )	lı	nstrument:	UV-2450	М	ethod: F	ERROUS IF	RON BY SM3	500 FE B
MBLK Sample I	D: <b>MBLK-R41892</b> 3	3	Units:	mg/L	Ana	alysis Date:	08-Oct-2022	11:00
Client ID:		Run ID: UV	-2450_418923	SeqNo: 6	908550	PrepDate:		DF: <b>1</b>
Analyte	Result	PQI	_ SPK Val	SPK Ref Value	%REC	Control Limit		RPD %RPD Limit Qua
Ferrous Iron	l	J 0.0500	)			80 - 120		
LCS Sample I	D: <b>LCS-R418923</b>		Units:	mg/L	Ana	alysis Date:	08-Oct-2022	11:00
Client ID:		Run ID: UV	-2450_418923	SeqNo: 6	908549	PrepDate:		DF: <b>1</b>
Analyte	Result	PQI	_ SPK Val	SPK Ref Value	%REC	Control Limit		RPD %RPD Limit Qua
Ferrous Iron	0.25	5 0.0500	0.25	0	100	80 - 120		
MS Sample I	D: <b>HS22100361-1</b> 2	2MS	Units:	mg/L	Ana	alysis Date:	08-Oct-2022	11:00
Client ID: MW-16		Run ID: UV	-2450_418923	SeqNo: 6	908552	PrepDate:		DF: <b>1</b>
Analyte	Result	PQI	_ SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Ferrous Iron	0.255	5 0.0500	0.25	0.001	102	75 - 125		
MSD Sample I	D: <b>HS22100361-1</b> 2	2MSD	Units:	mg/L	Ana	alysis Date:	08-Oct-2022	11:00
Client ID: MW-16		Run ID: UV	-2450_418923	SeqNo: 6	908551	PrepDate:		DF: <b>1</b>
Analyte	Result	PQI	_ SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
		3 0.0500	0.25	0.001	103	75 - 125	0.255	1.17 20

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

QC BATCH REPORT

Batch ID: R418924 ( 0 ) Instrument: UV-2450 Method: FERROUS IRON BY SM3500 FE D (DISSOLVED)

MBLK Sample ID: MBLK-R418924 Units: mg/L Analysis Date: 08-Oct-2022 10:30

Client ID: Run ID: **UV-2450\_418924** SeqNo: **6908560** PrepDate: DF: **1** 

SPK Ref Control RPD Ref RPD

Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual

Ferrous Iron, Dissolved U 0.0500

LCS Sample ID: LCS-R418924 Units: mg/L Analysis Date: 08-Oct-2022 10:30

Client ID: Run ID: UV-2450\_418924 SeqNo: 6908559 PrepDate: DF: 1

SPK Ref Control RPD Ref RPD
Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual

Ferrous Iron, Dissolved 0.23 0.0500 0.25 0 92.0 80 - 120

 MS
 Sample ID:
 HS22100361-12MS
 Units:
 mg/L
 Analysis Date:
 08-Oct-2022 10:30

 Client ID:
 MW-16
 Run ID:
 UV-2450 418924
 SeqNo: 6908562
 PrepDate:
 DF: 1

SPK Ref Control RPD Ref RPD

Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual

Ferrous Iron, Dissolved 0.25 0.0500 0.25 0.009 96.4 80 - 120

MSD Sample ID: HS22100361-12MSD Units: mg/L Analysis Date: 08-Oct-2022 10:30

Client ID: MW-16 Run ID: UV-2450\_418924 SeqNo: 6908561 PrepDate: DF: 1

SPK Ref Control RPD Ref RPD

Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual

Ferrous Iron, Dissolved 0.248 0.0500 0.25 0.009 95.6 80 - 120 0.25 0.803 20

The following samples were analyzed in this batch: HS22100361-12

**QC BATCH REPORT** 

Client: Altamira

WFEC / CCR Landfill **Project:** 

WorkOrder: HS22100361

Batch ID: R419006 (0) WetChem\_HS Method: PH BY SM4500H+ B-2011 Instrument:

DUP Sample ID: HS22100366-04DUP Units: pH Units Analysis Date: 10-Oct-2022 15:15

Client ID: Run ID: WetChem\_HS\_419006 SeqNo: 6910336 PrepDate:

SPK Ref RPD Control RPD Ref Analyte Result **PQL** SPK Val Value %REC Limit Value %RPD Limit Qual

рΗ 8.42 0.100 8.4 0.238 10

Temp Deg C @pH 20.7 0 20.7 0 10

The following samples were analyzed in this batch: HS22100361-01 HS22100361-07 HS22100361-04 HS22100361-06 HS22100361-08 HS22100361-09 HS22100361-10 HS22100361-11

**QC BATCH REPORT** 

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID: R419091 (0) Instrument: WetChem\_HS Method: PH BY SM4500H+ B-2011

DUP Sample ID: HS22100361-05DUP Units: pH Units Analysis Date: 11-Oct-2022 13:04

Client ID: MW-19S Run ID: WetChem\_HS\_419091 SeqNo: 6912411 PrepDate: DF:1

SPK Ref Control RPD Ref RPD

Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual

 pH
 10.8
 0.100
 10.76
 0.371
 10

 Temp Deg C @pH
 20.3
 0
 20.2
 0.494
 10

The following samples were analyzed in this batch: HS22100361-02 HS22100361-05 HS22100361-12

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

**QC BATCH REPORT** 

Batch ID: R419195 ( 0 )	Instrumer	nt:	ManTech01	Me	ethod: A	LKALINITY	BY SM 2320	B-2011
MBLK Sample ID:	WBLKW2-091722		Units:	mg/L	Ana	llysis Date:	12-Oct-2022	00:23
Client ID:	Run ID:	Man	Tech01_419195	SeqNo: 6	915034	PrepDate:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Alkalinity, Bicarbonate (As CaCO3	3) U	5.00						
Alkalinity, Carbonate (As CaCO3)	U	5.00						
Alkalinity, Hydroxide (As CaCO3)	U	5.00						
Alkalinity, Total (As CaCO3)	U	5.00						
LCS Sample ID:	LCS1-101122		Units:	mg/L	Ana	ılysis Date:	11-Oct-2022	23:52
Client ID:	Run ID:	Man	Tech01_419195	SeqNo: 6	915030	PrepDate:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Alkalinity, Carbonate (As CaCO3)	966.9	5.00	1000	0	96.7	85 - 115		
Alkalinity, Total (As CaCO3)	977.9	5.00	1000	0	97.8	85 - 115		
LCSD Sample ID:	LCSD1-101122		Units:	mg/L	Ana	ılysis Date:	12-Oct-2022	00:01
Client ID:	Run ID:	Man	Tech01_419195	SeqNo: 6	915031	PrepDate:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Alkalinity, Carbonate (As CaCO3)	975.8	5.00	1000	0	97.6	85 - 115	966.9	0.911 20
Alkalinity, Total (As CaCO3)	982.8	5.00	1000	0	98.3	85 - 115	977.9	0.493 20
DUP Sample ID:	HS22100361-05DUP		Units:	mg/L	Ana	ılysis Date:	12-Oct-2022	00:39
Client ID: MW-19S	Run ID:	Man	Tech01_419195	SeqNo: 6	915036	PrepDate:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Alkalinity, Bicarbonate (As CaCO3	3) U	5.00					0	0 20
Alkalinity, Carbonate (As CaCO3)	60.78	5.00					61	0.361 20
Alkalinity, Hydroxide (As CaCO3)	65.65	5.00					68.69	4.53 20
Alkalinity, Total (As CaCO3)	126.4	5.00					129.7	2.55 20
The following samples were analyzed	d in this batch: HS2210036		HS2210036	-05	HS221003	61-08	HS22100361-	-09

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

**QC BATCH REPORT** 

Batch ID:	R419364 ( 0 )	Instrumer	nt:	WetChem_HS	M	ethod:	SULFIDE BY	SM4500 S2-	F-2011
MBLK Client ID:	Sample ID:	MBLK-R419364 Run ID:	Wet	Units: Chem_HS_4193	_		nalysis Date: PrepDate:	13-Oct-2022	17:52 DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Sulfide		U	1.00						
LCS Client ID:	Sample ID:	LCS-R419364 Run ID:	Wet	Units: Chem_HS_4193	•		nalysis Date: PrepDate:	13-Oct-2022	17:52 DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Sulfide		24	1.00	25	0	96.0	85 - 115		
LCSD Client ID:	Sample ID:	LCSD-R419364 Run ID:	Wet	Units: Chem_HS_4193	<b>64</b> SeqNo: <b>6</b>		nalysis Date: PrepDate: Control	<b>13-Oct-2022</b> RPD Ref	17:52 DF: 1 RPD
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC		Value	%RPD Limit Qual
Sulfide		24.2	1.00	25	0	96.8	85 - 115	24	0.83 20
MS Client ID:	Sample ID:	HS22100361-05MS Run ID:	Wet	Units: Chem_HS_4193	•		nalysis Date: PrepDate:	13-Oct-2022	<b>17:52</b> DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Sulfide		24.6	1.00	25	-0.8	102	80 - 120		
MS Client ID:	Sample ID:	HS22100190-10MS Run ID:	Wet	Units: Chem_HS_4193	Ū		nalysis Date: PrepDate:	13-Oct-2022	17:52 DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Sulfide		24.6	1.00	25	-3.4	112	80 - 120		
The followin	g samples were analyze	ed in this batch: HS2210036 HS2210036		HS2210036 HS2210036		HS22100 HS22100		HS22100361	-09

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

**QC BATCH REPORT** 

Batch ID: R419366 (	0)	In	strumen	it: I	Balance1	N	nemoa.	TOTAL DISS 2011	OLVED SOL	DS BY	SM2540C-
MBLK Sar	mple ID:	WBLK-101222			Units:	mg/L	An	alysis Date:	12-Oct-2022	18:14	
Client ID:			Run ID:	Balaı	nce1_419366	SeqNo:	6919038	PrepDate:		DF	:1
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit			RPD Limit Qua
Total Dissolved Solids (l Filterable)	Residue,	U		10.0							
LCS Sar	mple ID:	WLCS-101222			Units:	mg/L	An	alysis Date:	12-Oct-2022	18:14	
Client ID:			Run ID:	Balaı	nce1_419366	SeqNo:	6919039	PrepDate:		DF	:1
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value		RPD Limit Qua
Total Dissolved Solids (l Filterable)	Residue,	1064		10.0	1000	0	106	85 - 115			
<b>DUP</b> Sar	mple ID:	HS22100269-03	DUP		Units:	mg/L	An	alysis Date:	12-Oct-2022	18:14	
Client ID:			Run ID:	Balaı	nce1_419366	SeqNo:	6919025	PrepDate:		DF	: 1
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value		RPD Limit Qua
Total Dissolved Solids (l Filterable)	Residue,	1038		10.0					1060	2.	1 5
<b>DUP</b> Sar	mple ID:	HS22100268-01	DUP		Units:	mg/L	An	alysis Date:	12-Oct-2022	18:14	
Client ID:			Run ID:	Balaı	nce1_419366	SeqNo:	6919023	PrepDate:		DF	:1
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value		RPD Limit Qua
Total Dissolved Solids (l Filterable)	Residue,	880		10.0					882	0.22	7 5
he following samples we	re analyzed	l in this batch: HS	22100361	-01	HS2210036	1-04	HS221003	61-06	HS22100361	-07	

Client: Altamira

**Project:** WFEC / CCR Landfill

WorkOrder: HS22100361

SPECIFIC CONDUCTANCE BY SM 2510B-Batch ID: R419447 (0) Instrument: WetChem\_HS Method:

2011

umhos/cm@ **MBLK** Sample ID: MBLK-R419447 Units: Analysis Date: 14-Oct-2022 14:00

25.0 °C

Run ID: WetChem\_HS\_419447 SeqNo: 6920837 PrepDate:

**QC BATCH REPORT** 

Client ID: SPK Ref

Control RPD Ref **RPD PQL** SPK Val %REC %RPD Limit Qual Analyte Result Value Limit Value

Specific Conductivity U 5.00

Units: umhos/cm @ LCS Sample ID: LCS-R419447 Analysis Date: 14-Oct-2022 14:00

25.0 °C

Run ID: WetChem\_HS\_419447 SeqNo: 6920836 PrepDate: DF: 1

Client ID: RPD

SPK Ref Control RPD Ref Analyte Result **PQL** SPK Val Value %REC Limit Value %RPD Limit Qual

Specific Conductivity 1432 5.00 1413 0 101 80 - 120

umhos/cm @ DUP Sample ID: HS22100361-05DUP Analysis Date: 14-Oct-2022 14:00 Units:

25.0 °C

MW-19S Run ID: WetChem\_HS\_419447 SeqNo: 6920838 Client ID: PrepDate:

RPD Ref SPK Ref Control **RPD** %RPD Limit Qual Analyte Result **PQL** SPK Val Value %REC Limit Value

Specific Conductivity 3550 5.00 3570 0.562 20

The following samples were analyzed in this batch: HS22100361-01 HS22100361-02 HS22100361-05 HS22100361-04

HS22100361-06 HS22100361-07 HS22100361-08 HS22100361-09 HS22100361-12 HS22100361-10 HS22100361-13 HS22100361-11

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

**QC BATCH REPORT** 

Batch ID:	R419454 ( 0 )	In	strument	: 1	Balance1	N	iemoa.	TOTAL DISS 2011	OLVED SOL	IDS BY SI	M2540C-
MBLK	Sample ID:	WBLK-101322			Units:	mg/L	Ana	alysis Date:	13-Oct-2022	17:25	
Client ID:			Run ID:	Balar	nce1_419454	SeqNo:	6921052	PrepDate:		DF: 1	1
Analyte		Result	i	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	R %RPD L	RPD imit Qual
Total Dissol Filterable)	lved Solids (Residue,	U	,	10.0							
LCS	Sample ID:	WLCS-101322			Units:	mg/L	Ana	alysis Date:	13-Oct-2022	17:25	
Client ID:			Run ID:	Balar	nce1_419454	SeqNo:	6921053	PrepDate:		DF: 1	1
Analyte		Result	F	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	R %RPD L	RPD imit Qual
Total Dissol Filterable)	lved Solids (Residue,	1040		10.0	1000	0	104	85 - 115			
DUP	Sample ID:	HS22100559-03I	DUP		Units:	mg/L	Ana	alysis Date:	13-Oct-2022	17:25	
Client ID:			Run ID:	Balar	nce1_419454	SeqNo:	6921051	PrepDate:		DF: 1	1
Analyte		Result	F	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	R %RPD L	RPD imit Qual
Total Dissol Filterable)	lved Solids (Residue,	368		10.0					368	0	5
DUP	Sample ID:	HS22100361-05	DUP		Units:	mg/L	Ana	alysis Date:	13-Oct-2022	17:25	
Client ID:	MW-19S		Run ID:	Balar	nce1_419454	SeqNo:	6921034	PrepDate:		DF: 1	1
Analyte		Result	ſ	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	R %RPD L	RPD imit Qual
Total Dissol Filterable)	lved Solids (Residue,	2184		10.0					2212	1.27	5
The following	g samples were analyze		22100361- 22100361-		HS2210036 HS2210036		HS221003 HS221003		HS22100361	-09	

**QC BATCH REPORT** 

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Ratch ID: R419458 ( 0 ) Instrument: WetChem HS Method: CHEMICAL OXYGEN DEMAND BY E410.4,

Batch ID: R419458 ( 0 ) Instrument: WetChem\_HS Method: CHEMICAL OX REV 2.0, 1993

MBLK Sample ID: MBLK-R419458 Units: mg/L Analysis Date: 14-Oct-2022 15:30

Client ID: Run ID: WetChem\_HS\_419458 SeqNo: 6921182 PrepDate: DF: 1

SPK Ref Control RPD Ref RPD

Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual

Chemical Oxygen Demand U 15.0

LCS Sample ID: LCS-R419458 Units: mg/L Analysis Date: 14-Oct-2022 15:30

Client ID: Run ID: WetChem\_HS\_419458 SeqNo: 6921181 PrepDate: DF: 1

SPK Ref Control RPD Ref RPD
Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual

Chemical Oxygen Demand 99 15.0 100 0 99.0 85 - 115

MS Sample ID: **HS22100361-05MS** Units: **mg/L** Analysis Date: **14-Oct-2022 15:30** 

Client ID: MW-19S Run ID: WetChem\_HS\_419458 SeqNo: 6921184 PrepDate: DF: 1

SPK Ref Control RPD Ref RPD
Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual

Chemical Oxygen Demand 66 15.0 50 18 96.0 80 - 120

MSD Sample ID: HS22100361-05MSD Units: mg/L Analysis Date: 14-Oct-2022 15:30

Client ID: MW-19S Run ID: WetChem\_HS\_419458 SeqNo: 6921183 PrepDate: DF:1

Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual

Chemical Oxygen Demand 66 15.0 50 18 96.0 80 - 120 66 0 20

Chemical Oxygen Demand 66 15.0 50 18 96.0 80 - 120 66 0 20

The following samples were analyzed in this batch: [HS22100361-01 HS22100361-02 HS22100361-03 HS22100361-04]

HS22100361-05 HS22100361-06 HS22100361-07 HS22100361-08 HS22100361-09 HS22100361-10 HS22100361-11 HS22100361-12

HS22100361-13

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

**QC BATCH REPORT** 

MBLK	Sample ID:	WBLKW3-101622		Units:	mg/L	Ana	alysis Date:	16-Oct-2022	16:25
Client ID:		Run	ID: <b>ManT</b>	ech01_419513	SeqNo: 6	922834	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Q
Alkalinity, l	Bicarbonate (As CaCO3	3) U	5.00						
Alkalinity,	Carbonate (As CaCO3)	U	5.00						
Alkalinity, l	Hydroxide (As CaCO3)	U	5.00						
Alkalinity, <sup>-</sup>	Total (As CaCO3)	U	5.00						
LCS	Sample ID:	WLCS3-101622		Units:	mg/L	Ana	alysis Date:	16-Oct-2022	16:35
Client ID:		Run	ID: <b>Man1</b>	ech01_419513	SeqNo: 6	922835	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Q
Alkalinity,	Carbonate (As CaCO3)	1001	5.00	1000	0	100	85 - 115		
Alkalinity,	Total (As CaCO3)	1013	5.00	1000	0	101	85 - 115		
LCSD	Sample ID:	WLCSD3-101622		Units:	mg/L	Ana	alysis Date:	16-Oct-2022	16:44
Client ID:		Run	ID: <b>Man1</b>	ech01_419513	SeqNo: 6	922836	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Q
Alkalinity,	Carbonate (As CaCO3)	964.5	5.00	1000	0	96.4	85 - 115	1001	3.67 20
Alkalinity, <sup>•</sup>	Total (As CaCO3)	988.1	5.00	1000	0	98.8	85 - 115	1013	2.45 20
DUP	Sample ID:	HS22100500-01DUP		Units:	mg/L	Ana	alysis Date:	16-Oct-2022	16:58
Client ID:		Run	ID: <b>Man1</b>	ech01_419513	SeqNo: 6	922838	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Q
Alkalinity, l	Bicarbonate (As CaCO3	3) 245.5	5.00				_	247.9	0.953 20
Alkalinity,	Carbonate (As CaCO3)	U	5.00					0	0 20
Alkalinity, l	Hydroxide (As CaCO3)	U	5.00					0	0 20
	Total (As CaCO3)	245.5	5.00					247.9	0.953 20

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID:	R419523 ( 0 )	Instrume	ent:	WetChem_HS	М	ethod:	SULFIDE BY	SM4500 S2-	F-2011
MBLK	Sample ID:	MBLK-R419523		Units:	mg/L	An	alysis Date:	12-Oct-2022	16:00
Client ID:		Run ID	: Wet	tChem_HS_4195	23 SeqNo: 6	923136	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Sulfide		U	1.00						
LCS	Sample ID:	LCS-R419523		Units:	mg/L	An	alysis Date:	12-Oct-2022	16:00
Client ID:		Run ID	: Wet	tChem_HS_4195	23 SeqNo: 6	923135	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Sulfide		24	1.00	25	0	96.0	85 - 115		
LCSD	Sample ID:	LCSD-R419523		Units:	mg/L	An	alysis Date:	12-Oct-2022	16:00
Client ID:		Run ID	: Wet	tChem_HS_4195	23 SeqNo: 6	923134	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Sulfide		24.2	1.00	25	0	96.8	85 - 115	24	0.83 20
MS	Sample ID:	HS22100285-06MS		Units:	mg/L	An	alysis Date:	12-Oct-2022	16:00
Client ID:		Run ID	: Wet	tChem_HS_4195	23 SeqNo: 6	923137	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Sulfide		23.8	1.00	25	-0.2	96.0	80 - 120		
he following	g samples were analyze	ed in this batch: HS221003	61-03	HS2210036	1-13				

**QC BATCH REPORT** 

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

Batch ID: R423301 ( 0 ) Instrument: WetChem\_HS Method: PH BY SM4500H+ B-2011

DUP Sample ID: HS22120071-01DUP Units: pH Units Analysis Date: 06-Dec-2022 14:53

Client ID: Run ID: WetChem\_HS\_423301 SeqNo: 7016771 PrepDate: DF: 1

SPK Ref Control RPD Ref RPD
Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual

pH 8.05 0.100 8.03 0.249 10

Temp Deg C @pH 20.6 0 20.6 0 10

The following samples were analyzed in this batch: HS22100361-03 HS22100361-13

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

QC BATCH REPORT

Batch ID: R423392 ( 0 )	Instrume	nt: Balance1	welliou.	TOTAL DISSOLVED SOLIE 2011	OS BY SM2540C-
MBLK Sample ID:	WBLK-120622	Units:	mg/L Ana	alysis Date: 06-Dec-2022	13:49
Client ID:	Run ID:	Balance1_423392	SeqNo: <b>7018752</b>	PrepDate:	DF: <b>1</b>
Analyte	Result	PQL SPK Val	SPK Ref Value %REC	Control RPD Ref Limit Value <sup>c</sup>	RPD %RPD Limit Qual
Total Dissolved Solids (Residue, Filterable)	U	10.0			
LCS Sample ID:	WLCS-120622	Units:	mg/L Ana	alysis Date: 06-Dec-2022	13:49
Client ID:	Run ID:	Balance1_423392	SeqNo: <b>7018753</b>	PrepDate:	DF: <b>1</b>
Analyte	Result	PQL SPK Val	SPK Ref Value %REC	Control RPD Ref Limit Value <sup>o</sup>	RPD %RPD Limit Qual
Total Dissolved Solids (Residue, Filterable)	1066	10.0 1000	0 107	85 - 115	
DUP Sample ID:	HS22120022-01DUP	Units:	mg/L Ana	alysis Date: 06-Dec-2022	13:49
Client ID:	Run ID:	Balance1_423392	SeqNo: <b>7018746</b>	PrepDate:	DF: <b>1</b>
Analyte	Result	PQL SPK Val	SPK Ref Value %REC	Control RPD Ref Limit Value <sup>0</sup>	RPD %RPD Limit Qual
Total Dissolved Solids (Residue, Filterable)	800	10.0		808	0.995 5
DUP Sample ID:	HS22120012-03DUP	Units:	mg/L Ana	alysis Date: 06-Dec-2022	13:49
Client ID:	Run ID:	Balance1_423392	SeqNo: <b>7018734</b>	PrepDate:	DF: <b>1</b>
Analyte	Result	PQL SPK Val	SPK Ref Value %REC	Control RPD Ref Limit Value	RPD %RPD Limit Qual
Total Dissolved Solids (Residue, Filterable)	342	10.0		342	0 5
The following samples were analyz	ed in this batch: HS2210036	1-03 HS2210036	51-13		

Client: Altamira

Client ID:

Client ID:

**Project:** WFEC / CCR Landfill

WorkOrder: HS22100361

SPECIFIC CONDUCTANCE BY SM 2510B-Batch ID: R423401 (0) Instrument: WetChem\_HS Method:

2011

umhos/cm@ **MBLK** Analysis Date: 07-Dec-2022 14:57 Sample ID: MBLK-R423401 Units:

25.0 °C

Run ID: WetChem\_HS\_423401 SeqNo: 7018871 PrepDate:

SPK Ref **RPD** Control RPD Ref

SPK Val **PQL** %REC %RPD Limit Qual Analyte Result Value Limit Value

Specific Conductivity U 5.00

Units: umhos/cm @ LCS Sample ID: LCS-R423401 Analysis Date: 07-Dec-2022 14:57

25.0 °C

Run ID: WetChem\_HS\_423401 SeqNo: 7018870 PrepDate: DF: 1

SPK Ref Control RPD Ref **RPD** Analyte Result **PQL** SPK Val Value %REC Limit Value %RPD Limit Qual

Specific Conductivity 1420 5.00 1413 0 100 80 - 120

umhos/cm@ DUP Sample ID: **HS22120031-01DUP** Analysis Date: 07-Dec-2022 14:57 Units:

25.0 °C

Client ID: Run ID: WetChem\_HS\_423401 SeqNo: 7018872 PrepDate:

SPK Ref Control

RPD Ref **RPD** 

**QC BATCH REPORT** 

%REC Analyte Result **PQL** SPK Val Value Limit Value %RPD Limit Qual

Specific Conductivity 1130 5.00 1129 0.0885 20

The following samples were analyzed in this batch: HS22100361-03

Client: Altamira

Project: WFEC / CCR Landfill

WorkOrder: HS22100361

**QC BATCH REPORT** 

Batch ID: R424299 ( 0 )	Instrumer	ıt:	ManTech01	Me	ethod: 1	ALKALINITY	BY SM 2320	B-2011
MBLK Sample ID:	WBLKW1-221219		Units:	mg/L	An	alysis Date:	19-Dec-2022	12:10
Client ID:	Run ID:	Man	Tech01_424299	SeqNo: 7	039327	PrepDate:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Alkalinity, Bicarbonate (As CaCO3	) U	5.00						
Alkalinity, Carbonate (As CaCO3)	U	5.00						
Alkalinity, Hydroxide (As CaCO3)	U	5.00						
Alkalinity, Total (As CaCO3)	U	5.00						
LCS Sample ID:	LCS1-221219		Units:	mg/L	An	alysis Date:	19-Dec-2022	12:19
Client ID:	Run ID:	Man	Tech01_424299	SeqNo: 7	039328	PrepDate:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Alkalinity, Carbonate (As CaCO3)	1004	5.00	1000	0	100	85 - 115		
Alkalinity, Total (As CaCO3)	1032	5.00	1000	0	103	85 - 115		
LCSD Sample ID:	LCSD1-221219		Units:	mg/L	An	alysis Date:	19-Dec-2022	12:27
Client ID:	Run ID:	Man	Tech01_424299	SeqNo: 7	039329	PrepDate:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Alkalinity, Carbonate (As CaCO3)	993.6	5.00	1000	0	99.4	85 - 115	1004	1.08 20
Alkalinity, Total (As CaCO3)	1025	5.00	1000	0	102	85 - 115	1032	0.759 20
<b>DUP</b> Sample ID:	HS22100361-03DUP		Units:	mg/L	An	alysis Date:	19-Dec-2022	12:41
Client ID: MW-7S	Run ID:	Man	Tech01_424299	SeqNo: 7	039331	PrepDate:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Alkalinity, Bicarbonate (As CaCO3	) 304.2	5.00					325.7	6.83 20
Alkalinity, Carbonate (As CaCO3)	U	5.00					0	0 20
Alkalinity, Hydroxide (As CaCO3)	U	5.00					0	0 20
Alkalinity, Total (As CaCO3)	304.2	5.00					325.7	6.83 20
The following samples were analyzed	in this batch: HS22100361	-03						

Client: Altamira QUALIFIERS,

Project: WFEC / CCR Landfill ACRONYMS, UNITS

WorkOrder: HS22100361

Qualifier	Description
*	Value exceeds Regulatory Limit
а	Not accredited
В	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
Н	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
0	Sample amount is > 4 times amount spiked
Р	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL
Acronym	Description
DCS	Detectability Check Study

DUP Method Duplicate

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MBLK Method Blank

MDL Method Detection Limit
MQL Method Quantitation Limit

MS Matrix Spike

MSD Matrix Spike Duplicate

PDS Post Digestion Spike

PQL Practical Quantitaion Limit

SD Serial Dilution

SDL Sample Detection Limit

TRRP Texas Risk Reduction Program

## **CERTIFICATIONS, ACCREDITATIONS & LICENSES**

Agency	Number	Expire Date
Arkansas	22-041-0	27-Mar-2023
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352; 2022-2023	31-Jul-2023
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2023	31-Dec-2023
North Dakota	R-193 2022-2023	30-Apr-2023
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932022-13	31-Jul-2023

Sample Receipt Checklist

Nork Order ID: Client Name:	HS22100361 Enviro Clean Services-Tulsa			te/Time Received: ceived by:	<u>07-Oct-2022 09:00</u> Paresh M. Giga
Completed By:	/S/ Corey Grandits	07-Oct-2022 12:23	Reviewed by: /	S/ Anna Kinchen	10-Oct-2022 09:50
	eSignature	Date/Time		eSignature	Date/Time
Matrices:	<u>w</u>		Carrier name	e: <u>FedEx</u>	
Custody seals in Custody seals in VOA/TX1005/TX Chain of custod Chain of custod Samplers name Chain of custod Samples in prop Sample contained	y signed when relinquished and re present on COC? y agrees with sample labels? per container/bottle?	d vials?	Yes V	No	Not Present Not Present Not Present Not Present V 1 Page(s)
All samples rece Container/Temp	e volume for indicated test:  eived within holding time?  Blank temperature in compliance'  /Thermometer(s):	?		No No Uc/3.4c , 1.8uc/1.6	c , 1.5uc/1.3c ,   R31
Water - VOA via	ole(s) sent to storage: als have zero headspace? eptable upon receipt?		2.2uc/2.0c , 3.3 47641 , 47803 , 10/7/2022 Yes Yes Yes	49643 , Lg Red , 4	No VOA vials submitted  N/A N/A
pH adjusted by:					
Login Notes: Client Contacted Contacted By:	d:	Date Contacted:		Person Cor	ntacted:
Corrective Actio	n:				

# Sample Receipt Checklist

Vork Order ID: H	S22100361 nviro Clean Services-Tulsa			Time Received: ved by:	<u>07-Oct-2022 09:00</u> <u>Paresh M. Giga</u>
Completed By: /	S/ Corey Grandits	08-Oct-2022 09:50	Reviewed by: /S/	Anna Kinchen	10-Oct-2022 09:50
_	eSignature	Date/Time		eSignature	Date/Time
Matrices:	<u>w</u>		Carrier name:	<u>FedEx</u>	
Shipping containe	er/cooler in good condition?		Yes 🗹	No 🗌	Not Present
Custody seals inta	act on shipping container/cod	oler?	Yes 🔽	No 🔲	Not Present
Custody seals inta	act on sample bottles?		Yes	No 🗌	Not Present
VOA/TX1005/TX1	006 Solids in hermetically se	ealed vials?	Yes 🗌	No 🗌	Not Present
Chain of custody	present?		Yes 🔽	No 🗌	1 Page(s)
Chain of custody	signed when relinquished an	d received?	Yes 🔽	No 🗌	
Samplers name p	resent on COC?		Yes 🗹	No 🗌	
Chain of custody	agrees with sample labels?		Yes 🗹	No 🔲	
Samples in prope	r container/bottle?		Yes 🔽	No 🔲	
Sample container	s intact?		Yes 🔽	No	
Sufficient sample	volume for indicated test?		Yes 🔽	No	
All samples receive	ved within holding time?		Yes 🔽	No	
Container/Temp E	Blank temperature in complia	nce?	Yes 🔽	No	
Temperature(s)/T	hermometer(s):		1.9uc/1.7c		IR31
Cooler(s)/Kit(s):			48367		
Date/Time sample	e(s) sent to storage:		10/8/2022		
Water - VOA vials	have zero headspace?		Yes	No 🔲	No VOA vials submitted
Water - pH accept	table upon receipt?		Yes 🔽	No 🔲	N/A
pH adjusted?			Yes	No 🔽	N/A
pH adjusted by:					
Login Notes: Li	mited volume for MW-16, Su	lfide only 50ml and unpre	served volume only 10	00ml received.	
Client Contacted:		Date Contacted:		Person Cor	ntacted:
Contacted By:		Regarding:			
Comments:					
Corrective Action:					

	PROJECT NUMBER:			COSTODY RE	PROJ	ECT NA					GREENHAMINE THE TAXAB					-2	energia de la como	
	WFEE 1600	22/8	FOOG	•	W	FE	clo	u	Z	M	JIDE	711		C	OC :	<u></u> o	ıf	<u> </u>
ALTAMIRA formerly known as Enviro Clean Cardinal	CLIENT CONTACT:				CLIEN	TEMA	Win-	TIFT	-7/h	1).		CI	JENT P	HONE:	***************************************	***************************************		
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LABORATORY / LAB PM:	CLIENT ADDRESS:	1 PARI	L DR 1	‡525	TAT:	5	IND	racional construction and					winting and down to province or the			110960000000000000000000000000000000000	energenergeren	
AG/ANNA KINGHEN	OKC, O	K 731	05					-/1	$\cong$		PARA	METER	Processing Shanes and	3	T	I		-
LAB ADDRESS:	SPECIAL INSTRUCTIONS:			***************************************					Part Part		erioripación	K	OB.	§],	-	Castlet Recovered	TYDZ-OXIII	
10420 51/104177		010			NERS	S/			里或			15	是多		5		Ĕ	
LAB ADDRESS: 10450 STANCLIFFRD. #210 HOUSTON, TX 7769	47641	100			CONTAINERS	YES	术	术	m		91	S S S	73	5 -	17			
SHIPMENT METHOD: TRACKING:	18693 1803	1.80	****	***************************************	F.C0	RED	1	0	*		2000	58	可定	2/1/2	15	77	8,7	
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1 MN-3	10/5/22	1816	W	2,3,9	6	YIN	X	X	×	X	$\times$							
2 MW-55	10/6/22	1130	1	1,2,3,4,9	10		×	X	Χ	X	X	X	X/	C X	X	X	X	
3 MW-75	10/5/22	1520		4	10		X	X	X	X	account from the same of the s		3	⟨ ×	1	- Annie Contraction	X	
4 NW-13	10/5/20	***************************************		2,3,9	6		X	X	X	X	X							where the same of
5 MW-14		**************************************		1,2,3,4,9	to		X	X	-X	X	X	X .	X	$\langle \chi \rangle$	<b>X</b>	X	~X	Appendix of the second
6 NW-15A	TAIL WAS A STORE A STORE WAS THE WAS A STORE OF THE STORE WAS A STORE WAS	and a spire of 2 mg and a deposit which appears a terral described in	A STERROLD COMPANY OF THE PROPERTY OF THE PROP		and the same		$\times$	X	$\times$	X	$\times$	X :	$\leftarrow$	$\langle - \rangle$	X		V	
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10 MW-195	10/6/22	940		V	A		Z.	X	X	X	X	XX	< x	X	. ×	X	X	britanistaturi, reteretaturi
11 MW-20	10/5/22	1648	V	2,3,9	6		V	X	X	X	X			***************************************	T			
12 MW-2	10/5/22	1540	Ÿ	2,39	6	$\mathbb{V}$	V	X.	$\frac{7}{X}$	X	<del>\</del>							***************************************
13 MW-195 MS	10/6/22			12,3,4,9	*********		$\times$	Ż		X	绀	abla	X X		15	X	X	***************************************
14 MW-195 MSD	10/6/22	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	W.	12,3,99	1	₩	X	R	Ż	$ \sqrt{} $	$\langle x \rangle$	ŻĽ	Zİ\$		TX	8	Ż	***************************************
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SAMPLER(S) NAME: Buad VauCleage	DATE: 10/6/	22	Total # of	Containers:		SAMP	LER(S)	SIGNA	TURE:	-					DATE:	announce and an ince	6/22	1000000 1000000
Control and the control of the contr	RECEIVED BY:	<i>60</i> -		DATE: 15. 7	122	L	LOGGE	BY:	nonument forme	erenterina menerala	ndisables stransmin ned	DA	TE:	2.5044401410-40140000000000000000000000000	TIME:		(Q) R TEMP:	почки жене
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PRESERVATION KEY: 1-HCL 2-HNO3 POINT OF ORIGIN: Norman	3-H2SO4 4-NaOH Oklahoma City	5-Na2S2C	)3 6-Na	noU4 /-4	Degr	:es C	8-91	J55						R Lan	atıll IIII IIII			
	entre and the second series of the second		HS2	221003	61													
				74 of 81													2000 2000 2000 2000 2000 2000 2000 200	Posterior

	PROJECT NUMBER:		COSTODT RE	PROJ	ECT NA								RECONSTRUC	CHENNICANGRADAS	remanusari J	- /	
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ALTAMIRA formerly known as Enviro Clean Cardinal	CLIENT CONTACT:	- Control of the Cont		CLIEN	TEMA	影工	Creas b	DAT	+	2 &	CLIENT	r PHOI	NE:			_ 8	
	HEATHER TI	FANY		ne (	AB	BA	A	2/11/2 2-14	5. a	) ) )	40	96.	61	8.	202	21	
LABORATORY / LAB PM:	CLIENT ADDRESS: 525 CENTRAL OKC, OK  SPECIAL INSTRUCTIONS: ***: PROJECT SEE PROJECT	PARKIDE	#500	TAT:	<b>4</b> 7	ND				novineesium vassiaalaus	**************		SINGRADINA		*************	State-designation (SSS)	
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HUASTON, TX 77899 SHIPMENT METHOD: TRACKING:				CONTAINERS	HELD FILTERED ( YES / NO )	*	*	4	28	Z	<u>88</u>	公司	w	1	<i>y</i>	003, TYDPQ<176 **	
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2 AMY-55			1,2,3,4,01	40-		$\rightarrow$				jb	X	***************************************	X	<u> </u>	×		
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12 MM-21		V	2,3,9	Ĭa.	and the second second					Name of the last o				**************************************			
13 MW-18	10/6/22 140	5 W	1,2349	70	У	$\sqrt{}$	关门	ĈŹ	X	<u>V</u>	V		$\nabla$	X	7	400	***************************************
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LAB ADDRESS: 10450 STANCUFF RD 10450 STANCUFF RD 14210 14210 1540 TX 1709 1540 SHIPMENT METHOD: TRACKING:	SPECIAL INSTRUCT	YONS:	SPECIF	ic UST.	S	6		/	5		-		3768	Ż	2	William Control	\$	
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HOUSTON, TX FROGY					CONTAINERS	(YES	*	の米	受		S S	37	3位3	3/3	1-7		1.00	
SHIPMENT METHOD: TRACKING:						RED	X		扁		3	10 B	5公元	112,5	122	29	82	
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5 - MW-14A				1,2,3,4,9	ΠO		X	メ	X	X	X	X	$\times \mid \times \mid$	土	X	1	之	0400/445n/comm
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11 MW-20				2,3,9	6	The same and	~	X	V		XI.			T	ĺ			Market Carly Colons
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SAMPLER(S) NAME:	DATE:	olton	Total 4 - f	Cantal	<u> </u>	SAMP	LER(S)	SJGNA	L ATURE:						DATE:	40/	7/22	
8 9/1 1 0 0 0	TIME:	7030	10tal # 01	Containers:	an registera compansor	BRU	My	Var	:W			0150 km/s 00000 km/s 00000000			TIME:		7/3 <i>C</i>	シー
BANGER SELECTION DATE: 10	17/27 RECEIVE	D-BY:			3(25		LOGGED	Bv.					<sub>лтғ</sub> . ltamira			COOLER	TEMP:	
PRESERVATION KEY: 1-HCL 2-HNO3	3-H2SO4 4-N		Charles Charles place and a behalf charles from province a constitution	HSO4 7-7	4 Degre	es C	8-90	13			W		CCRL					one production.
POINT OF ORIGIN: Norman	Oklahoma Cit	y 🔲 Tuls	PPASAULISTS SEDERALIST	Yukon	and the second	Πм	idland	garring.									ACCEPTANT OF THE PERSON OF THE	Section
			ALTA	MIRA-US, LLC	-													
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Page 76 of 81

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ALTAMIRA formerly known as Enviro Clean Cardinal	CLIENT CONT.			<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>		CLIEN	TEMA	JL: -7.		<u> </u>	4MIR,		CLIEN	Т РНО	NE:			<u>mary is an incident polymorphism and a</u>	
ionneny known as enviro Clean Caldinal	HEATT	HER-	TIFFA	M		HEP	MBC	76 111 21/TA	7/M)	3/14 )-11	tmir, S coi	ŭ l	40	<b>5</b> . (	018	. 20	2		
LABORATORY / LAB PM:	CLIENT ADDR	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	·····		ica	TAT:	5	TND	, –										
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LAR ADDRESS:	SPECIAL INST	RUCTIONS:	<u> </u>	10-5					<u>-</u>	20					13		-	रेन्द्र	>
118 STANCULFERD	* A A	t. Bga	a, CI, F	, pH, 50	4,TOS	VERS	NO/		-	3			S S	30	unic			cala	
210 N,TX 77099			·	•		CONTAINERS	FIELD FILTERED ( YES / NO )	*	*	(Swort)		mestar-2m	Fe, Fewous & Femi	Sus A	Fe, Mo, funic	Np	(0)	型	
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PRESERVATION KEY: 1-HCL 2-HNO3 POINT OF ORIGIN: Norman	3-H2SO4 A Oklaho	4-NáOH oma City	5-Na2S20 Tuls		HSO4 7-7 ∐Yukon	4 Degr	armaning strain to the company	8-9 Aidland	CALIFORNIA CONTRACTOR AND ADDRESS OF THE PARTY OF THE PAR	Other	: Other :					444			

ALTAMIRA-US, LLC

Cars.

ALS

10450 Stancliff Rd., Suite 210 48367 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887

**CUSTODY SEAL** Date: 10 7 /22

TIME: LE SETH BROWNER ALTANIKA Company:

Seal Broken By: IM 1010812

48767

22 0 0 LO

OCT 0 8 2022



ALS

10450 Staneliff Rd., Suite 210 Houston, Texas 77099 48367 Tel. +1 281 530 5656 Fax. +1 281 530 5887

**CUSTODY SEAL** 17/22 Time: 1638 SETH BROWDER ALTAMIRH Complany:

Seal Broken By: 8Mg (0/0812



ORIGIN ID:SGRA (918) 794-7828 HEATHER TIFFANY ALTAMIRA 2570 TRENTON RD

SHIP DATE: 22SEP22 ACTWGT: 1.00 LB MAN CAD: 0221247/CAFE3616 DIMS: 26x14x14 IN

48367

NORMAN, OK 73069 UNITED STATES US

TO SHIPPING DEPT ALS LABORATORY GROUP 10450 STANCLIFF RD **SUITE 210 HOUSTON TX 77099** 

REF: WFEC - CCR - IMPOUND - BO 87943 - AK



FedEx

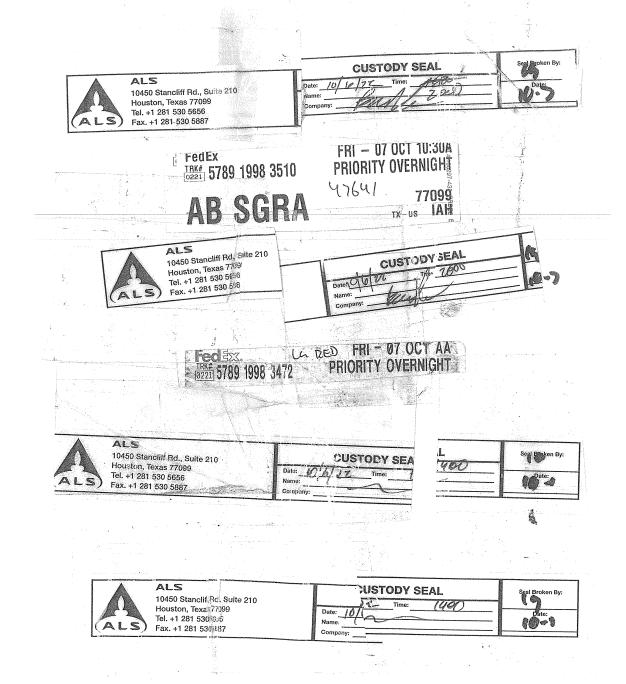
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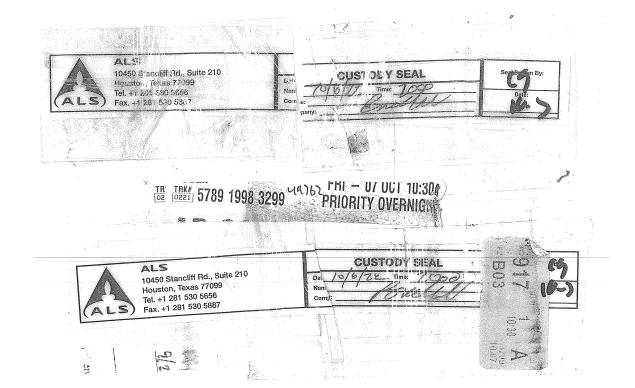
SATURDAY 12:00P PRIORITY OVERNIGH

XO SGRA

77099 IAH TX-US









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## **ATTACHMENT B**

# DATA SUMMARY TABLES (LANDFILL CCR UNIT)

	MCL or	Established Background	Established GWPS	Sample ID:	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	DUP 2	MW-3	MW-3	MW-3 (Shallow)	MW-3 (Deep)
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	25-May-16	27-Jul-16	28-Sep-16	1-Dec-16	31-Jan-17	5-Apr-17	6-Jun-17	6-Jun-17	8-Aug-17	17-May-18	1-Aug-18	9-Aug-18
						BACKGROUND 2		BACKGROUND 4	BACKGROUND 5	BACKGROUND 6	BACKG	ROUND 7	BACKGROUND 8	DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Detection Monitoring Parameters		-		Units												
Boron	None	1.896	Not Applicable	mg/L	1.09	1.17	1.1	1.7	1.28 J*	0.88	1.15	1.2	1.06	1.23	1.12	1.25
Calcium	None	670.30	Not Applicable	mg/L	255	296	242	405	227	357	315	309	371	227	205	255
Chloride	250	18.51	Not Applicable	mg/L	13.6	12.4	13.8	13.7	14.2 J*	14.9	13.7	13.3 J*	13.2	13.4	14.3	13.4
Fluoride	4	0.6359	Not Applicable	mg/L	0.211	0.442	0.407	0.392	0.399	0.3	0.384	0.354 J*	0.331	0.324	0.338	0.291
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	7.25	7.86	7.6	7.4	7.2	7.1	7.1	7	7	7.3	7.4	7.3
Sulfate	250	1,396	Not Applicable	mg/L	1350	1230	1230	1220	1140	1250	1230	1250	1070	1170	1190	1170
Total Dissolved Solids	500	2,191	Not Applicable	mg/L	2030	2060	1960	1990	2080	2090	2150	2200	2090	2180	2150	2160
Assessment Monitoring Parameter						1										1
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.000500	<0.000500	<0.000800	<0.00400	<0.000800	<0.000800	<0.000800	<0.00400	<0.000800			
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.00196 J	0.00117 J	0.00103 J	<0.00200	0.000602 J	0.00136 J	<0.000400	<0.00400	0.00172 J			
Barium	2	Not Applicable	2 (MCL)	mg/L	0.0122	0.0118	0.0114	0.0207	0.0115	0.0116	0.0114	0.0134	0.118			
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.00100	<0.00100	<0.000100	<0.000500	<0.000100	<0.000100	<0.000100	<0.000500	<0.00100			
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.000400	<0.000400	<0.000100	<0.000500	<0.000100	<0.000100	<0.000100	<0.00100	<0.00100			
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	<0.000500	<0.000500	<0.000500	<0.00250	<0.000500	<0.000500	<0.000500	<0.00500	<0.000500			
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	<0.000500	<0.000500	0.000239 J	<0.000500	0.000168 J	0.000138 J	<0.000100	<0.00100	0.000153 J			
Fluoride	4	Not Applicable	4 (MCL)	mg/L	0.211	0.442	0.407	0.392	0.399	0.3	0.384	0.354 J*	0.331	0.324	0.338	0.291
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.000200	<0.000200	<0.000100	<0.000500	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100			
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.158	0.138	0.141	0.247 J	0.148	0.137	0.14	0.151 J	0.165		0.125	0.129
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150			
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	<0.000500	<0.000500	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.0100	<0.00100		<0.00100	<0.00100
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.000600	<0.000600	<0.000300	<0.00150	0.000345 J	<0.000300	0.00353	<0.00300	<0.000300			
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000500	<0.000500	<0.000800	<0.00400	<0.000800	<0.000800	<0.000800	<0.00400	<0.000800			
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	1.07 +/- 0.292	0.868 +/- 0.271	1.05 +/- 0.330	1.67 +/- 0.473	1.09 +/- 0.303	0.899 +/- 0.276	2.03 +/- 0.371	0.843 +/- 0.246	0.967 +/- 0.277			
Other Parameters															<u> </u>	
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L												
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L												
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									<5.00			
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									299			
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L									<5.00			
Iron, Total	None	Not Applicable	Not Applicable	mg/L												
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Magnesium	None	Not Applicable	Not Applicable	mg/L									23.1			
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Nitrate as N	10	Not Applicable	Not Applicable	mg/L												
Potassium	None	Not Applicable	Not Applicable	mg/L									8.45			
Sodium	None	Not Applicable	Not Applicable	mg/L									697			
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm												
Sulfide	None	Not Applicable	Not Applicable	mg/L												
Field Parameters																
Temperature	None	Not Applicable	Not Applicable	°C	21.87	24.83	22.37	18.81	20.98	17.2	23.35		22.32	23.87	26.5	21.31
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.12	7.05	7.06	7.04	7.04	6.27	6.98		6.96	7.14	6.7	6.75
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	2342	2807	2804	2810	2804	2805	2767		2762	2758	2880	2864
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.49	0.26	0.09	0.2	0.3	0.59	0.36		0.09	0.7	2.1	3.76
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-27.5	-74.7	-92.1	-245.4	-171.1	241.7	-45		46.8	-46.3	-11.5	25
IOXIDATION-REQUENON FOIERINAL																

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L : milligrams per liter.
- 3. pCi/L: picoCuries per liter.
- 4. S.U.: Standard Units.
- 5. °C: degrees Celsius. 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).
- 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL. 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics. U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
  - UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
  - J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

    R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017. 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



Parameters           Detection Monitoring Parameters           Boron         None           Calcium         None           Chloride         250           Fluoride         4           pH (laboratory)         6.5 - 8           Sulfate         250           Total Dissolved Solids         500           Assessment Monitoring Parameters           Antimony         0.006           Arsenic         0.010           Barium         2           Beryllium         0.004           Cadmium         0.005           Chromium         0.1           Cobalt         None           Fluoride         4           Lead         0.015           Lithium         None	e 1.896 e 670.30 18.51 0.6359 8.5 6.485 - 8.0 1,396 2,191 6 Not Applic	Not Applicable 2 (MCL) Able 0.004 (MCL) Able 0.004 (MCL) Able 0.005 (MCL)	Sample ID: Sample Date:  Units  mg/L  mg/L  mg/L  s.U.  mg/L   4-Oct-18  INITIAL ASSESSMENT MON.  1.06 # 206 # 13.8 # 0.318 # 7.7 # 1270 # 2130 #  <0.0008 # <0.0004 #	INITIAL ASSE	### STATES	24-Apr-19 FIRST 2019 ASSESSMENT MON.  1.39 225 13 0.396 J 7.64 1150 2100	2-Oct-19  SECOND 2019 ASSESSMENT MON.  1.06 213 13.7 0.319 7.07 1210 2110	17-Jun-20 FIRST 2020 ASSESSMENT MON.  1.16 214 13.7 0.203 6.9 1240	0.903 183 13.8 0.328 7.36	Ct-20 ND 2020 SMENT ON.  0.946 181 13.8 0.337 7.5	31-Mar-21 FIRST 2021 ASSESSMENT MON.  1.01 207 14 0.376 7.24	13-Oct-21  SECOND 2021 ASSESSMENT MON.  0.939 155 12.7 0.258 5.99	30-Mar-22 FIRST 2022 ASSESSMENT MON.  1.06 210 13^ 2.12^ 1.61^	6-Jun-22 FIRST 2022 ASSESSMENT MON. (RESAMPLE) 12.1 0.36 7.51	5-Oct-22  SECOND 2022 ASSESSMENT MON.  1.09 184 12.5 0.238	
Detection Monitoring Parameters           Boron         None           Calcium         None           Chloride         250           Fluoride         4           pH (laboratory)         6.5 - 8           Sulfate         250           Total Dissolved Solids         500           Assessment Monitoring Parameters           Antimony         0.006           Arsenic         0.010           Barium         2           Beryllium         0.004           Cadmium         0.005           Chromium         0.1           Cobalt         None           Fluoride         4           Lead         0.015           Lithium         None	e 1.896 e 670.30 18.51 0.6359 8.5 6.485 - 8.1 1,396 2,191 6 Not Applic	Not Applicable O.006 (MCL) Able 2 (MCL) Able 0.004 (MCL) Able 0.005 (MCL)	Units  mg/L mg/L mg/L s.U. mg/L mg/L mg/L mg/L mg/L mg/L	INITIAL ASSESSMENT MON.  1.06 # 206 # 13.8 # 0.318 # 7.7 # 1270 # 2130 #  <0.0008 # <0.004 #	1.05 198 13.4 0.373 7.19 1220 2110	1 225 16.3 0.52 1450 2060	FIRST 2019 ASSESSMENT MON.  1.39 225 13 0.396 J 7.64 1150	SECOND 2019 ASSESSMENT MON.  1.06 213 13.7 0.319 7.07 1210	FIRST 2020 ASSESSMENT MON.  1.16 214 13.7 0.203 6.9 1240	0.903 183 13.8 0.328 7.36	0.946 181 13.8 0.337	FIRST 2021 ASSESSMENT MON.  1.01 207 14 0.376	SECOND 2021 ASSESSMENT MON. 0.939 155 12.7 0.258	FIRST 2022 ASSESSMENT MON. 1.06 210 13^ 2.12^	FIRST 2022 ASSESSMENT MON. (RESAMPLE) 12.1 0.36	SECOND 2022 ASSESSMENT MON.  1.09 184 12.5
Boron         None           Calcium         None           Chloride         250           Fluoride         4           pH (laboratory)         6.5 - 8           Sulfate         250           Total Dissolved Solids         500           Assessment Monitoring Parameters           Antimony         0.006           Arsenic         0.010           Barium         2           Beryllium         0.004           Cadmium         0.005           Chromium         0.1           Cobalt         None           Fluoride         4           Lead         0.015           Lithium         None	e 670.30 18.51 0.6359 8.5 6.485 - 8.0 1,396 2,191 6 Not Applic Not Applic Not Applic Vot Applic Not Applic	Not Applicable 2 (MCL) Able 0.004 (MCL) Able 0.005 (MCL)	mg/L mg/L mg/L mg/L S.U. mg/L mg/L mg/L mg/L	1.06 # 206 # 13.8 # 0.318 # 7.7 # 1270 # 2130 #  <0.0008 # <0.004 #	1.05 198 13.4 0.373 7.19 1220 2110	1 225 16.3 0.52  1450 2060	1.39 225 13 0.396 J 7.64 1150	1.06 213 13.7 0.319 7.07 1210	1.16 214 13.7 0.203 6.9 1240	0.903 183 13.8 0.328 7.36	0.946 181 13.8 0.337	1.01 207 14 0.376	0.939 155 12.7 0.258	1.06 210 13^ 2.12^	  12.1 0.36	1.09 184 12.5
Calcium         None           Chloride         250           Fluoride         4           pH (laboratory)         6.5 - 8           Sulfate         250           Total Dissolved Solids         500           Assessment Monitoring Parameters           Antimony         0.006           Arsenic         0.010           Barium         2           Beryllium         0.004           Cadmium         0.005           Chromium         0.1           Cobalt         None           Fluoride         4           Lead         0.015           Lithium         None	e 670.30 18.51 0.6359 8.5 6.485 - 8.0 1,396 2,191 6 Not Applic Not Applic Not Applic Vot Applic Not Applic	Not Applicable 2 (MCL) Able 0.004 (MCL) Able 0.005 (MCL)	mg/L mg/L s.U. mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	206 # 13.8 # 0.318 # 7.7 # 1270 # 2130 # <0.0008 # <0.004 #	198 13.4 0.373 7.19 1220 2110	16.3 0.52  1450 2060	225 13 0.396 J 7.64 1150	213 13.7 0.319 7.07 1210	214 13.7 0.203 6.9 1240	183 13.8 0.328 7.36	181 13.8 0.337	207 14 0.376	155 12.7 0.258	210 13^ 2.12^	12.1 0.36	184 12.5
Chloride         250           Fluoride         4           pH (laboratory)         6.5 - 8           Sulfate         250           Total Dissolved Solids         500           Assessment Monitoring Parameters           Antimony         0.006           Arsenic         0.010           Barium         2           Beryllium         0.004           Cadmium         0.005           Chromium         0.1           Cobalt         None           Fluoride         4           Lead         0.015           Lithium         None	18.51 0.6359 8.5 6.485 - 8.0 1,396 2,191 6 Not Applic Not Applic Not Applic Vot Applic Not Applic Not Applic Not Applic Not Applic Not Applic Not Applic	Not Applicable 2 (MCL) Able 0.004 (MCL) Able 0.004 (MCL) Able 0.005 (MCL)	mg/L mg/L S.U. mg/L mg/L mg/L mg/L mg/L mg/L	13.8 # 0.318 # 7.7 # 1270 # 2130 #  <0.0008 # <0.004 #	13.4 0.373 7.19 1220 2110	16.3 0.52  1450 2060	13 0.396 J 7.64 1150	13.7 0.319 7.07 1210	13.7 0.203 6.9 1240	13.8 0.328 7.36	13.8 0.337	14 0.376	12.7 0.258	13^ 2.12^	12.1 0.36	12.5
Fluoride         4           pH (laboratory)         6.5 - 8.           Sulfate         250           Total Dissolved Solids         500           Assessment Monitoring Parameters           Antimony         0.006           Arsenic         0.010           Barium         2           Beryllium         0.004           Cadmium         0.005           Chromium         0.1           Cobalt         None           Fluoride         4           Lead         0.015           Lithium         None	0.6359 3.5 6.485 - 8.1 1,396 2,191 6 Not Applic Not Applic Not Applic 4 Not Applic 5 Not Applic Not Applic Not Applic	Not Applicable Able 0.006 (MCL) Able 0.01 (MCL) Able 0.004 (MCL) Able 0.005 (MCL)	mg/L S.U. mg/L mg/L mg/L mg/L mg/L	0.318 # 7.7 # 1270 # 2130 # <0.0008 # <0.004 #	0.373 7.19 1220 2110 <0.000400	0.52  1450 2060	0.396 J 7.64 1150	0.319 7.07 1210	0.203 6.9 1240	0.328 7.36	0.337	0.376	0.258	2.12^	0.36	
pH (laboratory)         6.5 - 8           Sulfate         250           Total Dissolved Solids         500           Assessment Monitoring Parameters           Antimony         0.006           Arsenic         0.010           Barium         2           Beryllium         0.004           Cadmium         0.005           Chromium         0.1           Cobalt         None           Fluoride         4           Lead         0.015           Lithium         None	6.485 - 8.0 1,396 2,191  Not Applic	Not Applicable Not Applicable Not Applicable Not Applicable  able 0.006 (MCL) able 2 (MCL) able 0.004 (MCL) able 0.005 (MCL)	S.U. mg/L mg/L mg/L mg/L mg/L	7.7 # 1270 # 2130 # <0.0008 # <0.004 #	7.19 1220 2110 <0.000400	1450 2060	7.64 1150	7.07 1210	6.9 1240	7.36						0.238
Sulfate         250           Total Dissolved Solids         500           Assessment Monitoring Parameters           Antimony         0.006           Arsenic         0.010           Barium         2           Beryllium         0.004           Cadmium         0.005           Chromium         0.1           Cobalt         None           Fluoride         4           Lead         0.015           Lithium         None	1,396 2,191 6 Not Applic 0 Not Applic Not Applic 4 Not Applic 5 Not Applic Not Applic Not Applic Not Applic	Not Applicable Not Applicable  able 0.006 (MCL) able 0.01 (MCL) able 2 (MCL) able 0.004 (MCL) able 0.005 (MCL)	mg/L mg/L mg/L mg/L mg/L	1270 # 2130 # <0.0008 # <0.004 #	1220 2110 <0.000400	1450 2060	1150	1210	1240		7.5	7.24	5.99	1.61^	7 51	4
Total Dissolved Solids         500           Assessment Monitoring Parameters           Antimony         0.006           Arsenic         0.010           Barium         2           Beryllium         0.004           Cadmium         0.005           Chromium         0.1           Cobalt         None           Fluoride         4           Lead         0.015           Lithium         None	2,191  Not Applic	Not Applicable  able 0.006 (MCL) able 0.01 (MCL) able 2 (MCL) able 0.004 (MCL) able 0.005 (MCL)	mg/L mg/L mg/L mg/L	2130 # <0.0008 # <0.004 #	2110 <0.000400	2060										7.33
Assessment Monitoring Parameters           Antimony         0.006           Arsenic         0.010           Barium         2           Beryllium         0.004           Cadmium         0.005           Chromium         0.1           Cobalt         None           Fluoride         4           Lead         0.015           Lithium         None	6 Not Applic 0 Not Applic Not Applic 4 Not Applic 5 Not Applic Not Applic Not Applic	able 0.006 (MCL) able 0.01 (MCL) able 2 (MCL) able 0.004 (MCL) able 0.005 (MCL)	mg/L mg/L mg/L	<0.0008 # <0.004 #	<0.000400		2100	∥ 2110		1320	1290	1260	1,200	1790^	1090	1,050
Antimony         0.006           Arsenic         0.010           Barium         2           Beryllium         0.004           Cadmium         0.005           Chromium         0.1           Cobalt         None           Fluoride         4           Lead         0.015           Lithium         None	Not Applic	able 0.01 (MCL) able 2 (MCL) able 0.004 (MCL) able 0.005 (MCL)	mg/L mg/L	<0.004 #		<0.000400			2150	2020	2010	2030	1,970	2700^	1860	1,900
Arsenic         0.010           Barium         2           Beryllium         0.004           Cadmium         0.005           Chromium         0.1           Cobalt         None           Fluoride         4           Lead         0.015           Lithium         None	Not Applic	able 0.01 (MCL) able 2 (MCL) able 0.004 (MCL) able 0.005 (MCL)	mg/L mg/L	<0.004 #		<0.000400	1					1				
Barium         2           Beryllium         0.004           Cadmium         0.005           Chromium         0.1           Cobalt         None           Fluoride         4           Lead         0.015           Lithium         None	Not Applic  Not Applic  Not Applic  Not Applic  Not Applic  Not Applic	able 2 (MCL) able 0.004 (MCL) able 0.005 (MCL)	mg/L		<() NNN4NN		<0.000400	0.000410 J	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		<0.000400
Beryllium         0.004           Cadmium         0.005           Chromium         0.1           Cobalt         None           Fluoride         4           Lead         0.015           Lithium         None	4 Not Applic 5 Not Applic Not Applic 9 Not Applic	able 0.004 (MCL) able 0.005 (MCL)				<0.000400	<0.000400	<0.000400	<0.000400	0.000474 J	0.000464 J	0.000471 J	0.000422 J	0.000576 J		<0.000400
Cadmium         0.005           Chromium         0.1           Cobalt         None           Fluoride         4           Lead         0.015           Lithium         None	5 Not Applic Not Applic Not Applic	able 0.005 (MCL)	⊢ ma/l	0.00954 J #	0.0101	0.011	0.0128	0.0112	0.013	0.0159	0.0158	0.0141	0.0136	0.0133		0.0108
Chromium0.1CobaltNoneFluoride4Lead0.015LithiumNone	Not Applic  Not Applic	· · · · · · · · · · · · · · · · · · ·		<0.001#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
CobaltNoneFluoride4Lead0.015LithiumNone	e Not Applic	able   0.1 (MCL)	mg/L	<0.0001#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Fluoride 4 Lead 0.015 Lithium None			mg/L	<0.005 #	<0.000400	<0.000400	<0.000400	0.00142 J	<0.000400	<0.000400	<0.000400	<0.000400	0.000467 J	<0.000400		<0.000400
Lead 0.015 Lithium None	NOT ADDITE		mg/L	0.000162 J #	<0.000200	0.000208 J	0.000232 J	0.000259 J	0.000289 J	<0.000200	<0.000200	<0.000200	<0.000200	0.000765 J		<0.000200
Lithium None			mg/L	0.318#	0.373	0.52	0.396 J	0.319	0.203	0.328	0.337	0.376	0.258	2.12^	0.360	0.238
			mg/L	<0.0001#	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600		<0.000600
III/loroury			mg/L	0.147 J #	0.152	0.148	0.148	0.136	0.145	0.118	0.122	0.138	0.137	0.142		0.13
Mercury 0.002		` ,	mg/L	<0.0001#	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.0000760 J	0.0000610 J	<0.0000300		<0.0000300
Molybdenum None			mg/L	<0.001#	0.000613 J	0.000622 J	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	0.000629 J	<0.000600		<0.000600
Selenium 0.05		\ /	mg/L	<0.0003#	<0.00110	<0.0011	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110		<0.00110
Thallium 0.002			mg/L	<0.0008#	0.000560 J	0.000499 J	<0.000200	0.000466 J	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Ra-226 + Ra-228 (combined) 5	Not Applic	able 5 (MCL)	pCi/L	1.45 +/- 0.444 #	<0.67		<0.69	<0.79	1.02	1.65	1.7	1.43	<0.96	<0.81		3.46
Other Parameters																
Chemical Oxygen Demand (COD) None	Not Applic		mg/L	<5#	<5		<5.00	<5.00		<5.00	<5.00	<5.00	12.0 J	5.0 J	15.0	12.0 J
Total Alkalinity as CaCO3 None	Not Applic	ble Not Applicable	mg/L													
Carbonate Alkalinity as CaCO3 None			mg/L		<5											
Bicarbonate Alkalinity as CaCO3 None	e Not Applic	able Not Applicable	mg/L		318											
Hydroxide Alkalinity None			mg/L		<5											
Iron, Total None	e Not Applic	able Not Applicable	mg/L													
Iron, Dissolved None	e Not Applic	able Not Applicable	mg/L													
Iron, Ferrous None	e Not Applic	able Not Applicable	mg/L													
Iron, Ferrous, Dissolved None	e Not Applic	able Not Applicable	mg/L													
Iron, Ferric None	e Not Applic	able Not Applicable	mg/L													
Iron, Ferric, Dissolved None	e Not Applic	able Not Applicable	mg/L													
Magnesium None	e Not Applic	able Not Applicable	mg/L		23.7	25.3										
Molybdenum, Dissolved None	e Not Applic	able Not Applicable	mg/L													
Nitrate as N 10	Not Applic	ble Not Applicable	mg/L	<0.05 #	0.47	0.488	1.57	0.2	<0.0300	<0.0300	<0.0300	<0.0600	<0.0600	670	0.137	0.0481 J
Potassium None	e Not Applic	able Not Applicable	mg/L		8.17	8.4										
Sodium None	e Not Applic		mg/L		388	429										
Specific Conductance (laboratory) None	e Not Applic		umhos/cm	2520 #	2730					2980	2970	2630	2680	20,900	3,030	2660
Sulfide None			mg/L													
Field Parameters							*									
Temperature None	e Not Applic	able Not Applicable	°C	23.1	13.1		18.31	24.37	23.62	23.8		15.9	20.4	16.4	25	22.9
pH 6.5 - 8.			S.U.	6.95	6.93		7.31	7.18	7.15	7.22		7.04	7.11	7.29	7.24	7.04
Specific Conductance None			μmhos/cm	2814	2699		2778	2797	2576	2670		2666	2,676	2,098	2,496	2,485
Dissolved Oxygen None			mg/L	0.59	0.7		1.26	6.86	3.85	0.35		0.57	0.54	0.32	0.82	0.38
Oxidation-Reduction Potential None			mV	-37	-12		-54.6	-34.4	-24.6	-102.6		-15.4	-47.3	-115.9	30.4	-78.5
Turbidity None			NTU	4.23	1.8	1.04	0.57	1.14	3.36	1.3		3.11	2.50	0.33	3.10	2.65

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L: milligrams per liter.
- 3. pCi/L: picoCuries per liter.
- 4. S.U.: Standard Units.
- 5. °C: degrees Celsius. 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).
- 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.
- 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics. U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
  - UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

  - J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

    R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL or	Established Background	Established GWPS	Sample ID:	MW-5S	DUP 3	MW-5S	MW-5S	MW-5S	MW-5S	MW-5S	MW-5S	MW-5S	MW-5S	MW-5S (Shallow)	MW-5S (Deep)
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	13-Dec-16	13-Dec-16	25-Jan-17	3-Feb-17	29-Mar-17	7-Apr-17	1-Jun-17	9-Jun-17	14-Aug-17	22-May-18	1-Aug-18	10-Aug-18
					BACKG	ROUND 1	BACKGROUND 2	BACKGROUND 3	BACKGROUND 4	BACKGROUND 5	BACKGROUND 6	BACKGROUND 7	BACKGROUND 8	DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Detection Monitoring Parameter	'S			Units												
Boron	None	1.896	Not Applicable	mg/L	3.56	4.37	3.02	3.2	3.87	2.34	1.32	1.86	1.29	1.05	1.06	3.09
Calcium	None	670.30	Not Applicable	mg/L	32.9	28.1	27.8	29.9	30.8	37.9	54.7	58.2	46.6	74.7	59.1	24.9 J
Chloride	250	18.51	Not Applicable	mg/L	33.2	30.5	33.2	11.3	28.2	29.8	22.3	13.3	18.7	25	18.7	26.1
Fluoride	4	0.6359	Not Applicable	mg/L	1.84 J*	1.91	1.6	1.59	1.32	1.39	1.06	1.07	1.17	1.38	1.02	1.5
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	8.2	8.3	7.9	7.8	7.8	7.9	7.4	7.5	7.5	7.6	7.7	8
Sulfate	250	626	Not Applicable	mg/L	527	540	504	501	415	469	326	321	301	369	294	384
Total Dissolved Solids	500	1,334	Not Applicable	mg/L	1230	1180	1200	1210	1070	1060	948	1010	980	950	880	1150
Assessment Monitoring Parame	eters															
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.00400	<0.000800	<0.000800	<0.000800	<0.00800	<0.00800	<0.00800	<0.00400	<0.000800			
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.00202 J	0.00132 J	0.00187 J	0.00209	0.00147 J	0.00117 J	0.00115 J	<0.00200	0.00564 J			
Barium	2	Not Applicable	2 (MCL)	mg/L	0.0267	0.0165	0.0212	0.0192	0.0144	0.0177	0.0183	0.023	0.0186			
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.000500	<0.000100	<0.000100	<0.000100	<0.00250	0.000419 U	<0.000100	<0.000500	<0.000100			
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.000500	<0.000100	<0.000100	<0.000100	0.000111 J	<0.000100	<0.000100	<0.000500	<0.000100			
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	<0.00250	0.000839 J	<0.000500	<0.00500	U (0.000520)	0.000761 J	<0.000500	<0.00250	U (0.00143)			
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.000833 J	<0.000100	0.000214 J	<0.00100	0.00109 J	0.000123 J	<0.000100	0.00122 J	0.000338 J			
Fluoride	4	Not Applicable	4 (MCL)	mg/L	1.84 J*	1.91	1.6	1.59	1.32	1.39	1.06	1.07	1.17	1.38	1.02	1.5
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.000500	<0.000100	0.000126 J	0.000238 J	0.000218 J	0.000177 J	0.000142 J	<0.000500	0.000110 J			
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.0598 J	0.0582	0.0562	0.0617	0.0511	0.0523	0.0469 J	0.0588 J	0.0518		0.05	0.0486
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150			
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	0.00880 J	0.00781	0.00745	0.00606	0.0118 J*	0.00722	0.00828	0.00980 J	0.00737		0.00497	0.00387
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.00150	<0.00150	<0.000300	0.000938 J	0.00234 J	<0.000300	0.000449 J	<0.00150	<0.000300			
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.00400	<0.000800	<0.000800	<0.000800	<0.00800	<0.000800	<0.000800	<0.00400	<0.000800			
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pČi/L	1.25 +/- 0.479	0.738 +/- 0.354	1.55 +/- 0.466	0.863 +/- 0.332	1.06 +/- 0.305	0.597 +/- 0.264	1.71 +/- 0.392	0.684 +/- 0.239	0.827 +/- 0.274			
Other Parameters	<u> </u>	<u> </u>	<u> </u>					<u> </u>		<u>'</u>	<u> </u>	'		<u> </u>		
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L												
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L												
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									<5.00			
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									418			<del></del>
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L									<5.00			
Iron, Total	None	Not Applicable	Not Applicable	mg/L												
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L			<del></del>									
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L				-		-						
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable									l				
Magnesium	None	Not Applicable  Not Applicable	Not Applicable	mg/L									5.19			
				mg/L												
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L			<del></del>									
Nitrate as N	10	Not Applicable	Not Applicable	mg/L									4.14			
Potassium	None	Not Applicable	Not Applicable	mg/L						- <del></del>			4.14			
Sodium	None	Not Applicable	Not Applicable	mg/L									307			
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm												
Sulfide	None	Not Applicable	Not Applicable	mg/L												
Field Parameters	l Ni	NI_4 A !! !!	NI=4 A P. 1.1	00	47.04		40.45	44.05	20.07	40.47	00.47	04.50	00.40	00.04	05.07	00.50
Temperature	None	Not Applicable	Not Applicable	°C	17.94		16.45	14.65	20.07	19.17	20.47	21.58	22.46	20.24	25.07	23.59
PH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.9		7.84	7.79	7.72	7.76	7.51	7.73	7.79	7.85	7.19	7.62
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	1899		1919	1905	1734	1764	1615	1718	1760	1516	1483	1843
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.94		0.39	0.33	0.37	0.27	0.07	0.07	0.05	0.13	5.05	1.37
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-110.4		-157	-82.1	-61.6	-33.2	-79.7	27.3	21.5	-104.7	142.8	-40.1
Turbidity	None	Not Applicable	Not Applicable	NTU	37		4.09	2.45	0.83	1.98	1.52	1.01	1.14	0.41	0.02	1.12
Notes:																

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L: milligrams per liter. 3. pCi/L : picoCuries per liter.
- 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).
- 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.

  12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
  - U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit. UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
  - J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



Parameters  Detection Monitoring Parameters  Boron Calcium Chloride Fluoride	None None 250	(Det. Mon.)	(Ass. Mon.)	Sample ID: Sample Date:	2-Oct-18	10-Jar	1-19									
Boron Calcium Chloride Fluoride	None None	1.896						23-Apr-19	2-Oct-19	18-Jun-20	8-Oct-20	1-Apr-21	14-Oct-21	31-Mar-22	7-Jun-22	6-Oct-22
Boron Calcium Chloride Fluoride	None None	1.896			INITIAL ASSESSMENT MON.	INITIAL ASSESS (RESAN UNFILTERED	IPLE)	FIRST 2019 ASSESSMENT MON.	SECOND 2019 ASSESSMENT MON.	FIRST 2020 ASSESSMENT MON.	SECOND 2020 ASSESSMENT MON.	FIRST 2021 ASSESSMENT MON.	SECOND 2021 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	SECOND 2022 ASSESSMENT MON.
Calcium Chloride Fluoride	None	1.896		Units											(RESAMPLE)	
Chloride Fluoride			Not Applicable	mg/L	2.82 #	2.73	1.82	1.87	2.49	0.811	2.57	2.04	1.82	1.64		2.94
Fluoride	250	670.30	Not Applicable	mg/L	25 #	27.7	27.8	57	22.5	68.2	19.6	33.4	21.0	53.8		24.1
		18.51	Not Applicable	mg/L	28.3 #	30.5	29.9	21.8	25.1	19.5	25.6	23.9	26.4	23^	24.1	25.6
	4	0.6359	Not Applicable	mg/L	1.54 #	1.54	1.5	1.11	1.54	0.824	1.51	1.24	1.57	3.24^	1.41	1.4
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	8.7 #	7.65		8.11	7.55	7.65	8.21	7.9	8.16	1.68^	8.19	7.89
Sulfate	250	626	Not Applicable	mg/L	447 #	457	472	394	434	408	485	477	499	1540^	503	482
Total Dissolved Solids	500	1,334	Not Applicable	mg/L	1140 #	1120	1210	1090	1180	904	1080	1140	1140	1540^	1170	1100
Assessment Monitoring Parameter	ters															
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.0008#	0.00122 J	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		<0.000400
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.661#	0.000737 J	0.000765 J	0.000523 J	0.000736 J	<0.000400	0.000453 J	<0.000400	<0.000400	0.000423 J		0.000433 J
Barium	2	Not Applicable	2 (MCL)	mg/L	0.012#	0.012	0.0116	0.0141	0.00928	0.021	0.00787	0.00867	0.00732	0.0113		0.00653
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.0005#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.0001 #	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	0.832 #	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		<0.000400
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	<0.0001#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.000237 J		<0.000200
Fluoride	4	Not Applicable	4 (MCL)	mg/L	1.54 #	1.54	1.5	1.11	1.54	0.824	1.51	1.24	1.57	3.24^	1.41	1.4
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.0001#	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600		<0.000600
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.0691 J#	0.0644	0.0642	0.0604	0.0536	0.049	0.0546	0.0496	0.0532	0.0654		0.0572
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0001 #	<0.000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.0000870 J	<0.000300	<0.0000300		<0.0000300
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	<0.005 #	0.00512	0.00335 J	0.00485 J	0.00315 J	0.00361 J	0.00244 J	0.00234 J	0.00387 J	0.00257 J		0.00210 J
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.0003#	<0.0011	<0.0011	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110		<0.00110
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0008 #	<0.000200	<0.000200	<0.000200	<0.00010	<0.000200	<0.00010	<0.000110	<0.000200	<0.00010		<0.00010
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	0.611 +/- 0.249 #	<0.79		<0.64	1.44	1.25	1.15	0.95	1.28	<0.79		1.69
Other Parameters			J ( J _)	F = " =				10.04	1.77	1.20						
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	ma/l	<5.00 #	<5.00		<5.00	<5.00		<5.00	<5.00	6.00 J	<5.00^	17.0	7.00 J
, ,				mg/L		1				412	444	405	470	<5^	419	
Total Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		10.6					20.5					430
	None	Not Applicable	Not Applicable	mg/L		12.6				15		<5	9.52	<5^	<5	<5
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		427				397	424	405	460	<5^	419	430
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5.00	<5^	<5	<5
Iron, Total	None	Not Applicable	Not Applicable	mg/L						<0.0120	<0.0120	0.0170 J	0.0270 J	0.0435 J^	0.0311 J	<0.0120
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L						<0.0120	<0.0120	<0.0120	<0.0120	<0.0120^	0.0138 J	<0.0120
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L						0.029(J)	<0.0200	<0.020	<0.0200	<0.02^	<0.02	<0.02
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L								<0.020	<0.020 H	<0.02^	<0.02	<0.02
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L								<0.020	0.0270 J	0.0435 J^	0.0311 J	<0.02
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L								<0.020	<0.020	<0.02^	<0.02	<0.02
Magnesium	None	Not Applicable	Not Applicable	mg/L		5.73	5.58			5.16	4.38	4.53	4.60	5.79		4.79
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L						0.00308(J)	0.00244 J	0.00287 J	0.00296 J	0.00248 J		0.00232 J
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.089 J #	0.964	0.916	0.665	0.212	<0.0300	<0.0300	00287 J	0.0984 J	705^	0.0996 J,H	0.243
Potassium	None	Not Applicable	Not Applicable	mg/L		4.49	4.27			3.48	3.94	3.25	3.96	3.74		4.17
Sodium	None	Not Applicable	Not Applicable	mg/L		405	257			277	335	312	243	341		387
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	1730 #	1870					1960	1770	1820	15600^	2,280	1990
Sulfide	None	Not Applicable	Not Applicable	mg/L						<1	1.97	<1	<1.00	<1^	<1	<1
Field Parameters																
Temperature	None	Not Applicable	Not Applicable	°C	25.3	13.4		18.78	25.18	24.37	21.5	14.7	23.7	16.4	19.8	24.9
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.61	7.56		7.95	7.91	7.9	7.83	7.74	7.85	7.77	7.9	7.73
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	1871	1791		1669	1826	1665	1794	1745	1,863	1372	1,820	1,884
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.21	0.63		0.85	0.45	1.89	0.32	0.81	0.36	0.31	2.7	0.44
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-125.1	-30.9		19.7	-54.1	-48.2	168.1	283.3	-59.9	46.2	20.5	-33.9
Turbidity	None	Not Applicable	Not Applicable	NTU	3.3	4.51	1.27	1.16	0.94	2.88	1.97	2.85	2.16	1.61	1.72	2.71

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L: milligrams per liter.
- 3. pCi/L : picoCuries per liter. 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV: millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).
- 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.

  12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
  - U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
  - UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
  - J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample. 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL or	Established Background	Established GWPS	Sample ID:	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	DUP 1	MW-7S	MW-7S	MW-7S	MW-7S (Shallow)	DUP1 (Shallow)	MW-7S (Deep)
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	13-Dec-16	25-Jan-17	3-Feb-17	29-Mar-17	7-Apr-17	31-May-17	31-May-17	9-Jun-17	10-Aug-17	17-May-18	3-Aug-18	3-Aug-18	10-Aug-18
					BACKGROUND 1			BACKGROUND 4			GROUND 6		BACKGROUND 8	DETECTION MON. #1		ON SAMPLE	VERIFICATION SAMPLE
Detection Monitoring Parameter	s			Units													4
Boron	None	1.896	Not Applicable	mg/L	3.8	0.891	0.557	<0.875	0.382	1.7	1.92	1.84	2.21	1.25	0.283	0.279	3.31
Calcium	None	670.30	Not Applicable	mg/L	53.8	349	267	411	415	71	168	175	80.6	178	90.3	88.8	142
Chloride	250	18.51	Not Applicable	mg/L	17.7	23.8	19.8	17.5	21.8	14.9	15.5	16.3	16.2	17.6	16.4	16.5	17
Fluoride	4	0.6359	Not Applicable	mg/L	1.02 J*	0.569	0.497	0.368	0.425	0.607	0.58	0.579	0.744	0.509	0.771	0.733	0.664
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	8.4	7.3	7.3	7.2	7.5	7.5	7.4	7.3	7.4	7.6	7.6	7.8	7.7
Sulfate	250	1,281	Not Applicable	mg/L	465	907	893	893	1120	587	606	619	450	860	545	545	623
Total Dissolved Solids	500	1,863	Not Applicable	mg/L	1070	1570	1570	1530	1610	1220	1230	1300	1120	1600	1210	1180	1330
Assessment Monitoring Parame	eters																
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	0.00634 J	<0.00800	<0.000800	<0.008000	<0.000800	<0.000800	<0.00800	<0.00400	<0.000800				
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.00201 J	0.000728 J	0.000766 J	0.00176 J	0.00176 J	0.00137 J	0.00128 J	0.00310 J	0.00150 J				
Barium	2	Not Applicable	2 (MCL)	mg/L	0.0411	0.0462	0.0427	0.036	0.0335	0.0292	0.0346	0.0446	0.0308				
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.000500	<0.000100	<0.000100	<0.00250	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100				
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.000500	<0.000100	<0.000100	0.000115 J	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100				
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	U (0.00333)	0.000680 J	<0.00500	<0.000500	<0.000500	0.000731 J	<0.000500	<0.00250	U (0.000637)				
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.00120 J	0.000648 J	<0.00100	0.000735 J	0.000439 J	0.000349 J	0.000333 J	0.00208 J	0.000696 J				
Fluoride	4	Not Applicable	4 (MCL)	mg/L	1.02 J*	0.569	0.497	0.368	0.425	0.607	0.58	0.579	0.744	0.509	0.771	0.733	0.664
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.000500	0.000333 J	<0.000100	0.000157 J	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100				
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.0697 J	0.0462 J	0.0499 J	0.0395 J	0.0400 J	0.0637	0.07	0.0766 J	0.0609		0.0667	0.0656	0.0613
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000100	<0.000150	<0.000150	<0.000150	<0.000150				
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	<0.00500	0.00174 J	0.00160 J	<0.00500	0.00153 J	0.00186 J	0.00179 J	<0.00500	0.00171 J		0.00127 J	0.00128 J	<0.00100
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	U (0.00158)	<0.000300	0.00103 J	<0.00150	<0.000300	<0.000300	<0.000300	<0.00150	<0.000300				
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	< 0.00400	<0.00800	<0.000800	<0.000800	<0.00800	<0.000800	<0.00800	<0.00400	<0.000800				
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	1.13 +/- 1.07 U	1.51 +/- 0.445	1.15 +/- 0.362	0.649 +/- 0.257	0.808 +/- 0.292	0.531 +/- 0.268	0.559 +/- 0.233	0.952 +/- 0.279	0.891 +/- 0.247				
Other Parameters		·	·													·	
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L								1	I I				
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L													
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									<5.00				
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									311				
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L									<5.00				
Iron, Total	None	Not Applicable	Not Applicable	mg/L													
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L													
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L													
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L													
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L													
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L													
Magnesium	None	Not Applicable	Not Applicable	mg/L									10.7				
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L													
Nitrate as N	10	Not Applicable	Not Applicable	mg/L													
Potassium	None	Not Applicable	Not Applicable	mg/L									4.95				
Sodium	None	Not Applicable	Not Applicable	mg/L									273				
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm													
Sulfide	None	Not Applicable	Not Applicable	mg/L	<b></b>												
Field Parameters											·						
Temperature	None	Not Applicable	Not Applicable	°C	16.83	14.77	15.53	18.89	16.83	21.67		19.85	24.46	19.6	29.34		25.21
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.88	7.17	7.2	7.18	7.22	7.27		7.19	7.22	7.4	6.92		7.22
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	1614	2010	2029	2216	2205	1925		1929	1680	2101	1822		1932
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.47	0.43	0.19	0.27	0.25	0.09		0.05	0.08	0.22	1.61		2.95
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-165.8	-141	-164.4	-68	-104	-196		107.4	57.6	-58.8	-20.8		-30.7
Turbidity	None	Not Applicable	Not Applicable	NTU	81.8	33.7	3.34	1.12	8.31	1.82		1.12	3.45	2.29	3.37		1.76
Notes:	-				-1	41-	11-	-			•	1					

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- mg/L : milligrams per liter.
   pCi/L : picoCuries per liter.
- 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).
- 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value. 11. Cells shaded in blue indicate results that are above the laboratory MDL.
- 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
  - U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

    UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

  - J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

  15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL	Established Background	Established GWPS	Sample ID:	MW-7S	MW	<i>I-</i> 78	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	DUP 2	MW-7S	MW	<i>I-</i> 78	MW-7S	DUP 3
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	4-Oct-18	10-J	an-19	23-Apr-19	1-Oct-19	17-Jun-20	9-Oct-20	30-M	ar-21	15-Oct-21	31-Mar-22	Jun-22	5-0	 ct-22
					INITIAL ASSESSMENT MON.	INITIAL ASSES (RESA UNFILTERED	SSMENT MON. MPLE)	FIRST 2019 ASSESSMENT MON.	SECOND 2019 ASSESSMENT MON.	FIRST 2020 ASSESSMENT MON.	SECOND 2020 ASSESSMENT MON.	FIRST ASSES		SECOND 2021 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	SECON ASSES	ND 2022
Detection Monitoring Parameter	S			Units												(RESAMPLE)		
Boron	None	1.896	Not Applicable	mg/L	2.7 #	0.839	1.12	0.848	1.99	1.33	2.29	0.677	0.681	2.18	0.646		2.7	3.07
Calcium	None	670.30	Not Applicable	mg/L	76 #	277	293	271	81.1	160	90.2	254	219	97.1	302		100	111
Chloride	250	18.51	Not Applicable	mg/L	16.1 #	18.7	19.7	19.7	16.3	18	16.9	20.5	19.4	16.8	19.9		16.9	16.7
Fluoride	4	0.6359	Not Applicable	mg/L	0.764 #	0.422	0.35	0.376	0.729	0.479	0.713	0.444	0.415	0.746	0.515		0.711	0.824
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	8 #	7.34		7.82	7.39	7.55	7.79	7.32	7.53	7.84	7.88		7.81	8.01
Sulfate	250	1,281	Not Applicable	mg/L	1600 #	1200	1110	1040	633	970	759	1200	1190	690	1190		687	687
Total Dissolved Solids	500	1,863	Not Applicable	mg/L	1230 #	1670	1890	1890	1270	1680	1340	2060	2000	1290	1920		1350	1260
Assessment Monitoring Parame	eters																	
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.0008#	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		<0.000400	<0.000400
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	<0.004 #	0.000413 J	<0.000400	0.00116 J	0.000412 J	0.000650 J	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		<0.000400	<0.000400
Barium	2	Not Applicable	2 (MCL)	mg/L	0.021#	0.0371	0.0387	0.0372	0.0139	0.0244	0.0142	0.0295	0.0302	0.0154	0.0336		0.0148	0.0167
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.001#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200	<0.000200
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.0001#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200	<0.000200
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	<0.005#	<0.000400	<0.000400	<0.000400	0.000994 J	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	0.000494 J		0.000669 J	0.00143 J
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.000222 J #	0.000270 J	0.000304 J	0.00153 J	<0.000200	0.000838 J	<0.000200	<0.000200	<0.000200	0.000259 J	0.00110 J		<0.000200	0.000215 J
Fluoride	4	Not Applicable	4 (MCL)	mg/L	0.764 #	0.422	0.35	0.376	0.729	0.479	0.713	0.444	0.415	0.746	0.515		0.711	0.824
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.0001#	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600		<0.000600	<0.000600
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.0714 J #	0.0558	0.0606	0.0593	0.0608	0.0681	0.065	0.0472	0.0468	0.0645	0.0533		0.0685	0.0778
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0001#	<0.000300	<0.000300	<0.000300	<0.000300	0.0000350 J	<0.000300	0.000104 J	0.0000320 J	<0.000300	<0.000300		<0.000300	<0.0000300
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	<0.01 #	0.00105 J	0.00107 J	0.000952 J	0.000798 J	0.00105 J	0.00106 J	0.000755 J	0.000763 J	0.00115 J	0.000973 J		0.00103 J	0.00134 J
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.0003#	<0.00100	<0.0011	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110		<0.00100	<0.00104 0
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0008 #	<0.00011	<0.00011	<0.00010	<0.00010	<0.000110	<0.00110	<0.00110	<0.00010	<0.000110	<0.000110		<0.000110	<0.000110
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	2.07 +/- 0.453 #	1.34		0.9	<0.71	1.05	1.2	1.73	1.92	1.95	1.11		1.38	2.72
Other Parameters		110t / tppilodbic	O (WIGE)	POI/L	2.01 17 0.400 11	1.04		0.0	-0.7 1	1.00	1.2	1.70	1.02	1.00	1.11		1.00	2.12
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	<5 #	5.0 J		<5.00	<5.00		8.00 J	<5.00	<5.00	7.00 J	<5.00		<5.00	16
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L						264	315	180	177	343	205		32.6	297
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5	<5.00	<5		<5.00	7.48
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		222				264	315	180	177	343	205		32.6	289
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5	<5.00	<5		<5.00	<5.00
Iron, Total	None	Not Applicable	Not Applicable	mg/L				<del></del>		0.278	0.111 J	0.0145 J	0.0156 J	0.310	<0.0120		0.158 J	0.186 J
Iron, Dissolved	None							1		0.034(J)	0.235	0.0154 J	0.0130 J	0.134 J	<0.0120		0.138 J	0.0883 J
Iron, Ferrous	None	Not Applicable Not Applicable	Not Applicable Not Applicable	mg/L mg/L						0.034(3)	0.235	<0.02	<0.02	0.134 J	<0.0120		0.1133	0.0883 3
Iron, Ferrous Dissolved	None		Not Applicable									<0.02	<0.02	<0.0200 H	<0.02		0.127	
Iron, Ferrous, Dissolved	None	Not Applicable	11	mg/L			<del></del>	<del></del>				<0.02	<0.02	0.0200 H	<0.02		0.114 0.0310 J	<0.0200
Iron, Ferric, Dissolved		Not Applicable	Not Applicable	mg/L			<del></del>					<0.02						0.079
	None	Not Applicable	Not Applicable	mg/L		10	10.7			17.1	12		0.0234 J	0.134	<0.02		<0.02	0.0883
Magnesium Malyhdanum Diagalyad	None	Not Applicable	Not Applicable	mg/L		19	18.7			17.1	12	16.9	17.4	12.2	20		12.2	13.8
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L	0.110#	 0 557	0.644		 <0.0200	0.000987(J)	0.00103 J	0.000846 J	0.000941 J	0.00121 J	0.000830 J		0.00112 J	0.00108 J
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.118#	0.557	0.644	<0.0300	<0.0300	<0.0300	<0.0300	<0.0600	<0.0600	0.0940 J	0.0613 J		0.155	0.147
Potassium	None	Not Applicable	Not Applicable	mg/L		4.67	4.79			5.33	5.1	4.06	4.18	5.14	4.56		5.34	6
Sodium	None	Not Applicable	Not Applicable	mg/L		274	294			313	272	230	197	261	272		313	352
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	1610 #	2240					2110	2380	2380	1860	2,530		2,000	2050
Sulfide	None	Not Applicable	Not Applicable	mg/L						<1	1.48	<1	<1	<1.00	<1		<1	<1
Field Parameters						1												
Temperature	None	Not Applicable	Not Applicable	°C	25	12.8		17.92	25.27	21.95	23.1	16.8		22.5	14.2		26.8	
рН	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.35	7.08		7.42	7.53	7.37	7.52	7.24		7.47	7.32		7.37	
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	1887	2180		2326	1944	2097	1945	2377		1,973	2,385		2,015	
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.45	0.23		0.84	0.51	0.49	0.33	0.31		0.30	0.38		0.39	
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-129.1	-6.3		-61.6	-133.8	-67.6	-90.1	83.3		-107.8	-30.3		-179.9	
Turbidity	None	Not Applicable	Not Applicable	NTU	8.01	0.67	0.64	0.71	0.88	2.49	0.85	5.81		3.15	2.42		2.91	

- MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
- mg/L : milligrams per liter.
   pCi/L : picoCuries per liter.
- 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).
- 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.
- 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis. 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
  - U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

    UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

  15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL or	Established Background	Established GWPS	Sample ID:	MW-13	DUP-2	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13 (Shallow)	MW-13 (Deep)
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	25-May-16	25-May-16	26-Jul-16	27-Sep-16	29-Nov-16	30-Jan-17	30-Mar-17	6-Jun-17	4-Aug-17	21-May-18	1-Aug-18	9-Aug-18
					BACKG	ROUND 1	BACKGROUND 2	BACKGROUND 3	BACKGROUND 4	BACKGROUND 5	BACKGROUND 6	BACKGROUND 7	BACKGROUND 8	DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Detection Monitoring Parameters	s			Units			_		-			_			J ==	J
Boron	None		Not Applicable	mg/L	1.38	1.4	1.1	1.36	1.41	1.43	2	1.34	1.24	1.3	1.41	3.86
Calcium	None	1	Not Applicable	mg/L	341	362	440	302	306	485	343	421	313	251	249	284
Chloride	250	De alconocinal Mall	Not Applicable	mg/L	13.7	13.5	13.1	14.0 J	12.5	12.6	12.2	13	12.1 J*	13.4	13.6	33.2
Fluoride	4	Background Well	Not Applicable	mg/L	0.192	0.183	0.389	0.674	0.324	0.395	0.181	0.329	0.248 J*	0.281	0.364	0.743
pH (laboratory)	6.5 - 8.5	(Not Applicable)	Not Applicable	S.U.	7.16	7.28	7.84	7.7	7.3	7.1	7	6.9	6.9	7	7.5	7.7
Sulfate	250	1	Not Applicable	mg/L	1570	1,680 J*	1450	1360	1340	1320	1360	1320	1,350 J*	1320	1250	1440
Total Dissolved Solids	500		Not Applicable	mg/L	2220	2190	2340	2,380 J	2230	2230	2250	2410	2370	2400	2130	2560
Assessment Monitoring Parame	ters															
Antimony	0.006	Not Applicable		mg/L	<0.000500	<0.000500	<0.000500	<0.000800	<0.000800	<0.000800	<0.00400	<0.000800	<0.000800			
Arsenic	0.010	Not Applicable	1	mg/L	0.00394	0.00377	0.00244	0.00177 J	0.00180 J	0.00170 J	<0.00200	<0.000400	0.0057			
Barium	2	Not Applicable	1	mg/L	0.0267	0.0263	0.0259	0.0198	0.0184	0.0182	0.033	0.0168	0.0177			
Beryllium	0.004	Not Applicable	]	mg/L	<0.00100	<0.00100	<0.00100	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100	<0.000100			
Cadmium	0.005	Not Applicable	]	mg/L	<0.000400	<0.000400	<0.000400	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100	<0.000100			
Chromium	0.1	Not Applicable	1	mg/L	<0.000500	0.000637 J	<0.000500	<0.000500	0.00109 J	<0.000500	<0.00250	<0.000500	<0.000500			
Cobalt	None	Not Applicable	Background Well	mg/L	<0.000500	0.000507 J	<0.000500	0.000376 J	0.000366 J	0.000329 J	<0.000500	0.000519 J	0.000275 J			
Fluoride	4	Not Applicable	(Not Applicable)	mg/L	0.192	0.183	0.389	0.674	0.324	0.395	0.181	0.329	0.248 J*	0.281	0.364	0.743
Lead	0.015	Not Applicable	(Not Applicable)	mg/L	<0.000200	<0.000200	<0.000200	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100	<0.000100			
Lithium	None	Not Applicable		mg/L	0.176	0.179	0.184	0.156	0.156	0.173	0.0449 J	0.157	0.164		0.14	0.115
Mercury	0.002	Not Applicable		mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150			
Molybdenum	None	Not Applicable		mg/L	0.0097	0.0092	0.00557	0.029	0.00444	0.00393	0.00345	0.00316	0.00286		0.00211	0.0022
Selenium	0.05	Not Applicable		mg/L	<0.000600	<0.000600	<0.000600	<0.000300	0.000512 J	<0.000300	<0.00150	0.00402	U (0.00192)			
Thallium	0.002	Not Applicable		mg/L	<0.000500	<0.000500	<0.000500	<0.000800	<0.000800	<0.00800	<0.00400	<0.000800	<0.000800			
Ra-226 + Ra-228 (combined)	5	Not Applicable		pCi/L	1.96 +/- 0.373	1.57 +/- 0.321	1.50 +/- 0.327	1.43 +/- 0.352	1.75 +/- 0.486	1.41 +/- 0.357	1.73 +/- 0.350	1.75 +/- 0.389	1.51 +/- 0.320			
Other Parameters																
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L												
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L												
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									<5.00			
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									307			
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L									<5.00			
Iron, Total	None	Not Applicable	Not Applicable	mg/L												
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Magnesium	None	Not Applicable	Not Applicable	mg/L									26.4			
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Nitrate as N	10	Not Applicable	Not Applicable	mg/L									0.22			
Potassium	None	Not Applicable	Not Applicable	mg/L									8.32			
Sodium	None	Not Applicable	Not Applicable	mg/L									349			
Specific Conductance (laboratory) Sulfide	None	Not Applicable	Not Applicable	umhos/cm												
Field Parameters	None	Not Applicable	Not Applicable	mg/L												
	Naw-	Not Applied	Not Applicable	00	04.60		04.0	04.2	20.20	20.40	40.00	00.70	20.75	04.07	27.00	25.52
Temperature	None	Not Applicable	Not Applicable	°C	21.68		21.6	21.3	20.26	20.49	19.38	22.73	22.75	21.37	27.06	25.52
PD Specific Conductors	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.08		7.23	7.02	6.99	6.96	7.05	6.97	6.94	7.07	6.72	6.49
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	2507		2939	2622	3002	2967	3006	2990	2920	2887	3010	3213
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.41		0.28	0.09	0.35	0.33	0.3	0.18	0.09	1.25	2.22	1.37
Oxidation-Reduction Potential Turbidity	None None	Not Applicable	Not Applicable	mV NTU	0.6 4.12		-103.3 1.91	-136.8 0.26	-178.8 1.14	-179.1 0.5	-93.3 1.38	-10.6 1.93	-68.7 0.87	-48.9 0.28	49.1 0.02	187.6 0.02
Notes:	110116	Not Applicable	Not Applicable	1410	4.12		1.91	0.20	1.14	0.5	1.36	1.93	U.0 <i>1</i>	U.Z0	0.02	0.02

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L: milligrams per liter.
- 3. pCi/L: picoCuries per liter. 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL). 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.
- 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.

  - U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

    UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
  - J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL or	Established Background	Established GWPS	Sample ID:	MW-13	MW	-13	DU	IP 2	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MV	<i>I</i> -13	MW-13
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	4-Oct-18		11-Ja	an-19		25-Apr-19	3-Oct-19	17-Jun-20	14-Oct-20	31-Mar-21	15-Oct-21	1-Apr-22	Jun-22	Oct-22
				Unite	INITIAL ASSESSMENT MON.	UNFILTERED	INITIAL ASSES (RESA FILTERED	SSMENT MON. MPLE) FILTERED	UNFILTERED	FIRST 2019 ASSESSMENT MON.	SECOND 2019 ASSESSMENT MON.	FIRST 2020 ASSESSMENT MON.	SECOND 2020 ASSESSMENT MON.	FIRST 2021 ASSESSMENT MON.	SECOND 2021 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	SECOND 2022 ASSESSMENT MON.
Detection Monitoring Parameters		I .	<b>.</b>	Units	0.04.//	0.44	4.07	1.70	4.70	0.07	0.04	4.00	4.40	4.00	1.40	0.00	(RESAMPLE)	2.00
Boron	None		Not Applicable	mg/L	2.01#	2.14	1.67	1.76	1.72	3.07	2.01	1.39	1.48	1.66	1.43	3.00		3.08
Calcium	None		Not Applicable	mg/L	299#	270	360	334	348	130	182	243	242	284	237	116		135
Chloride	250	Background Well	Not Applicable	mg/L	12.8#	15.1	13.7	13.8	13.1	28.2	17.3	13.8	13.9	13.8	14.8	30.0		14.4
Fluoride	4	(Not Applicable)	Not Applicable	mg/L	0.285#	0.342	0.99	0.31	0.444	0.652	0.422	0.231	0.257	0.344	0.294	0.453 J		0.263
pH (laboratory)	6.5 - 8.5	, , ,	Not Applicable	S.U.	7.6#	7.16		7.35		7.95	6.75	6.71	7.55	7.32	7.57	7.91		7.33
Sulfate	250		Not Applicable	mg/L	1400 #	1450	1420	1450	1440	1450	1380	1390	1480	1470	1570	1,510		1380
Total Dissolved Solids	500		Not Applicable	mg/L	2350 #	2350	2220	2270	2260	2590	2350	2450	2360	2320	2360	2,520		2460
Assessment Monitoring Parameter	ters																	
Antimony	0.006	Not Applicable		mg/L	<00008#	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		<0.000400
Arsenic	0.010	Not Applicable		mg/L	<0.004 #	<0.000400	<0.000400	<0.000400	0.000412 J	0.000979 J	0.000401 J	<0.000400	<0.000400	<0.000400	<0.000400	0.000569 J		0.000423 J
Barium	2	Not Applicable		mg/L	0.0196 J#	0.014	0.0164	0.0152	0.015	0.0146	0.0114	0.0116	0.0107	0.0114	0.0112	0.0104		0.01
Beryllium	0.004	Not Applicable		mg/L	<0.001#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Cadmium	0.005	Not Applicable		mg/L	<0.0001#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Chromium	0.1	Not Applicable		mg/L	<0.005 #	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		<0.000400
Cobalt	None	Not Applicable	Background Well	mg/L	<0.0001#	<0.000200	0.000229 J	<0.000200	<0.000200	0.000265 J	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.000435 J		<0.000200
Fluoride	4	Not Applicable		mg/L	0.285#	0.342	0.99	0.31	0.444	0.652	0.422	0.231	0.257	0.344	0.294	0.453 J		0.263
Lead	0.015	Not Applicable	(Not Applicable)	mg/L	<0.0001#	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600		<0.000600
Lithium	None	Not Applicable		mg/L	0.174 J #	0.17	0.194	0.181	0.176	0.131	0.139	0.156	0.146	0.166	0.163	0.120		0.131
Mercury	0.002	Not Applicable		mg/L	<0.00015#	<0.000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.0000990 J	0.0000490 J	<0.0000300		<0.0000300
Molybdenum	None	Not Applicable		mg/L	<0.01#	0.00155 J	0.00178 J	0.00149 J	0.00176 J	0.00276 J	0.00210 J	0.000934 J	0.000865 J	0.000959 J	0.000917 J	0.00117 J		0.00101 J
Selenium	0.05	Not Applicable		mg/L	0.000429 J#	<0.0011	<0.0011	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110		<0.00110
Thallium	0.002	Not Applicable		mg/L	<0.0008 #	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Ra-226 + Ra-228 (combined)	5	Not Applicable		pCi/L	1.46 +/- 0.346 #	2.12		1.14		1.65	1.81	2.09	2.67	2.47	1.75	1.46		3.01
Other Parameters				·				·	-								-	
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	<5#	<5		<5		<5.00	6.00 J		<5.00	<5.00	5.00 J	<5.00		13.0 J
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L														
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		<5		<5										
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		354		343										
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L		<5		<5										
Iron, Total	None	Not Applicable	Not Applicable	mg/L														
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L														
Iron, Ferrous	None	Not Applicable	Not Applicable							1								1
Iron, Ferrous Dissolved	None	Not Applicable	Not Applicable	mg/L														
Iron, Ferric	None	• • • • • • • • • • • • • • • • • • • •	Not Applicable	mg/L						1								
Iron, Ferric, Dissolved		Not Applicable		mg/L														
	None	Not Applicable	Not Applicable	mg/L		27	20.7	20.4	20.6									
Magnesium Malybdanum Dissalyad	None	Not Applicable	Not Applicable	mg/L		27	30.7	30.4	29.6								<b></b>	
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L	0.064.1#	 <0.02	 <0.03	 <0.02	 <0.03	 <0.150	0.404	 <0.0200			0.0642.1	0.204 1		0.207
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.061 J#	<0.03	<0.03	<0.03	<0.03	<0.150	0.191	<0.0300	<0.0600	<0.0600	0.0613 J	0.304 J		0.297
Potassium	None	Not Applicable	Not Applicable	mg/L		8.43	8.61	8.43	8.64									
Sodium	None	Not Applicable	Not Applicable	mg/L	0570 //	557	416	447	418									
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	2570 #	3090		2960					3280	2940	3050	3,840		3250
Sulfide	None	Not Applicable	Not Applicable	mg/L														
Field Parameters		I						T.	T.	1	1				1	.= -		215
Temperature	None	Not Applicable	Not Applicable	°C	25.7	12.4				20.41	27	21.69	21.8	16.9	21.4	17.3		24.8
рН	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.41	7.39				7.8	7.63	7.48	7.54	7.49	7.56	7.55		7.49
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	3728	3569				3688	3751	3474	3576	3616	3,688	3,658		3616
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.41	0.66				1.68	2.61	1.18	0.39	0.49	0.44	0.33		0.8
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	30.1	-8.8				-119.2	-95.1	-41.6	156.8	76.4	-435.2	22.4		-126.4
Turbidity	None	Not Applicable	Not Applicable	NTU	5.63	2.27	0.76			4.66	1.28	4.95	3.21	3.76	8.30	3.27		2.42

### Notes:

- MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L: milligrams per liter.
- pCi/L: picoCuries per liter.
   S.U.: Standard Units.
- S.U.: Standard Units.
   C: degrees Celsius.
- 6. μmhos/cm : micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).</li>
  10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.
- 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.

  13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
  - U (): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

    UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
  - J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL	Established	Established		MW-14A	MW-14A	MW-14A	MW-14A	MW-14A	DUP-2	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A	DUP1
Parameters	or SMCL	Background (Det. Mon.)	GWPS (Ass. Mon.)	Sample ID: Sample Date:	25-May-16	23-Aug-16	28-Sep-16	30-Nov-16	31-Jan-17	31-Jan-17	30-Mar-17	2-Jun-17	9-Aug-17	17-May-18	(Shallow) 1-Aug-18	(Deep) 9-Aug-18	(Deep) 9-Aug-18
raiameters	OINICE	(Bet. Mon.)	(ASS. WOIL)	Sample Date.	25-Way-16	23-Aug-16	20-3ep-10	30-1404-16	31-Jaii-17	31-Jaii-17	30-IVIAI - 17	Z-5u11-17	9-Aug-17	17-iviay-10	1-Aug-10	9-Aug-10	9-Aug-10
					BACKGROUND 1	BACKGROUND 2	BACKGROUND 3	BACKGROUND 4	BACKG	ROUND	BACKGROUND 6	BACKGROUND 7	BACKGROUND 8	DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATI	ION SAMPLE
Detection Monitoring Parameters	s			Units													
Boron	None		Not Applicable	mg/L	0.92	0.92	0.894	1.02	0.984	1.04	1.01	1.03	0.764	1.14	0.925	1.8	1.53
Calcium	None	İ	Not Applicable	mg/L	500	380	327	328	544	503	451	530	672	313	341	746	358
Chloride	250	Background Well	Not Applicable	mg/L	17.7	17.1	15.5	15.2	15.7	15.8	16.3	14.8	13.8	15.3	15	16	14.7
Fluoride	4	(Not Applicable)	Not Applicable	mg/L	0.17	0.472	0.402	0.384	0.372	0.385	0.228	0.232	0.312	0.292	0.333	0.296	0.253
pH (laboratory)	6.5 - 8.5	(Not Applicable)	Not Applicable	S.U.	7.12	7.7	7.6	7.6	7.1	7.1	7.1	7	6.9	7.4	7.3	7.1	7.2
Sulfate	250		Not Applicable	mg/L	2020	1670	1730	1600	1590	1610	1710	1440	1420	1790	1580	1600	1510
Total Dissolved Solids	500		Not Applicable	mg/L	2680	2650	2530	2670	2540	2570	2650	2630	2680	2700	2700	2730	2700
Assessment Monitoring Parame	ters																
Antimony	0.006	Not Applicable		mg/L	<0.000500	<0.000800	<0.000800	<0.00800	<0.000800	<0.00800	<0.00400	<0.00800	<0.00800				
Arsenic	0.010	Not Applicable	.  [	mg/L	0.00363	0.000714 J	0.00171 J	<0.00400	0.00153 J	0.00173 J	<0.00200	0.00150 J	0.00306				
Barium	2	Not Applicable		mg/L	0.0239	0.018	0.019	0.0156 J	0.0177	0.0179	0.0329	0.0179	0.182				
Beryllium	0.004	Not Applicable	1	mg/L	<0.00100	<0.000100	<0.000100	<0.00100	<0.000100	<0.000100	<0.000500	<0.000100	<0.00100				
Cadmium	0.005	Not Applicable	4	mg/L	<0.000400	<0.000100	<0.000100	<0.00100	<0.000100	<0.000100	<0.000500	<0.000100	<0.00100				
Chromium	0.1	Not Applicable	-	mg/L	<0.000500	<0.000500	<0.000500	<0.00500	<0.000500	<0.000500	<0.00250	<0.000500	<0.000500				
Cobalt Fluoride	None	Not Applicable Not Applicable	Background Well	mg/L	0.000730 J 0.17	0.000258 J 0.472	0.000708 J 0.402	<0.00100 0.384	0.000334 J 0.372	0.000342 J 0.385	<0.000500 0.228	<0.000100 0.232	0.000350 J 0.312	0.292	0.333	0.296	0.253
Lead	0.015	Not Applicable	(Not Applicable)	mg/L mg/L	<0.000200	<0.000100	<0.00100	<0.00100	<0.000100	<0.000100	<0.00500	<0.000100	<0.000100	0.292	0.333	0.290	
Lithium	None	Not Applicable	-	mg/L	0.167	0.147	0.147	0.175 J	0.16	0.164	0.235 J	0.147	0.16		0.149	0.328 J	0.134
Mercury	0.002	Not Applicable	+	mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150		0.149		0.134
Molybdenum	None	Not Applicable	1	mg/L	0.00477	0.00237	0.00524 J	<0.0100	0.00253	0.00238	<0.005100	0.00246	0.00223		<0.00100	<0.0100	0.00144 J
Selenium	0.05	Not Applicable	+	mg/L	<0.000600	0.000342 J	<0.000300	<0.00300	<0.000300	<0.00200	<0.00150	<0.000300	<0.000300				
Thallium	0.002	Not Applicable	1	mg/L	<0.000500	<0.000800	<0.000800	<0.00800	<0.008000	<0.000800	<0.00400	<0.008000	<0.000800				
Ra-226 + Ra-228 (combined)	5	Not Applicable	†	pCi/L	1.60 +/- 0.364	1.62 +/- 0.381	1.90 +/- 0.394	2.02 +/- 0.498	1.39 +/- 0.366	1.38 +/- 0.385	1.73 +/- 0.346	1.49 +/- 0.351	1.51 +/- 0.326				
Other Parameters	<del>`</del>			•				<u>                                     </u>									
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L													
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L													
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									<5.00				
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									280				
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L									<5.00				
Iron, Total	None	Not Applicable	Not Applicable	mg/L													
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L													
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L													
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L													
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L													
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L									24.4				
Magnesium Mahyhdanum Disaahyad	None	Not Applicable	Not Applicable	mg/L									24.4				
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L						<b></b>							
Nitrate as N	None	Not Applicable	Not Applicable	mg/L									7.88				
Potassium Sodium	None None	Not Applicable Not Applicable	Not Applicable	mg/L									518				
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable Not Applicable	mg/L umhos/cm													
Sulfide	None	Not Applicable	Not Applicable	mg/L													
Field Parameters	710110	, tot / tppilodbio	. tot. tppnoabio	111g/ L													
	Mono	Not Applicable	Not Applicable	°C	20.93	22.4	21.96	17.51	17.76	I	18.84	19.83	21.41	22.9	25.6	21.33	
Temperature	None 6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.01	7.13	7.01	17.51 6.95	6.97	<b></b>	7.08	6.88	21.41 6.75	7.1	6.82	6.47	
Specific Conductance	0.5 - 8.5 None	Not Applicable Not Applicable	Not Applicable Not Applicable	μmhos/cm	2781	3345	3365	3434	3350		3390	3201	3186	3301	3415	3410	
Dissolved Oxygen	None	Not Applicable	Not Applicable  Not Applicable	μπποs/cm mg/L	0.34	0.39	0.06	0.25	0.68		0.26	0.34	0.1	0.24	252	1.65	
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	127.6	-26.6	-94.3	-219.1	-88.7		-77.1	-30.1	97.7	-48.5	0.2	68.3	
Turbidity	None	Not Applicable	Not Applicable	NTU	6.74	0.79	0.27	0.68	0.26		0.16	0.4	0.71	0.37	1.53	0.02	
Notes:		1 tot / tppiloable	110t / tppiloabio		0.17	0.10	0.21	0.00	0.20		0.10	U.7	0.71	0.01	1.00	0.02	

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  - The MCL value for lead is the EPA's Action Level.
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- 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).</li>
   10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.

  12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
  - U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit. UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
  - J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL or	Established Background	Established GWPS	Sample ID:	MW-14A	MW	-14A	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A	MV	V-14	MW-14A
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	4-Oct-18	11-Ja	an-19	24-Apr-19	2-Oct-19	17-Jun-20	8-Oct-20	31-Mar-21	13-Oct-21	30-Mar-22	Jun-22	Oct-22
Detection Monitoring Parameters	e e			Units	INITIAL ASSESSMENT MON.	INITIAL ASSES (RESA UNFILTERED	MPLE)	FIRST 2019 ASSESSMENT MON.	SECOND 2019 ASSESSMENT MON.	FIRST 2020 ASSESSMENT MON.	SECOND 2020 ASSESSMENT MON.	FIRST 2021 ASSESSMENT MON.	SECOND 2021 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	SECOND 2022 ASSESSMENT MON.
	None		Not Applicable		1.18 #	1.42	1.16	1.23	0.98	0.907	0.882	0.839	0.857	0.918	(RESAMPLE)	1.01
Boron Calcium	None		Not Applicable	mg/L mg/L	319 #	402	388	314	306	280	278	298	263	330		313
Chloride	250		Not Applicable	mg/L	14.2 #	14	14.8	13.5	14.2	13.3	14.9	14.3	12.8	13.8		12.5
Fluoride	230	Background Well	Not Applicable	mg/L	0.281 #	0.269	0.375	0.377 J	0.286	0.23	0.254 J	0.284	0.221	0.406 J		0.324
pH (laboratory)	6.5 - 8.5	(Not Applicable)	Not Applicable	S.U.	7.6 #	7.28		7.61	7.18	7.44	7.41	7.7	6.74	7.99		7.06
Sulfate	250		Not Applicable	mg/L	1650 #	1660	1630	1540	1580	1650	1770	1680	1690	1,610		1600
Total Dissolved Solids	500		Not Applicable	mg/L	2710 #	2590	2580	2680	2750	2780	2630	2680	2630	2,690		2580
Assessment Monitoring Parameter		I .	, tott ppilotisis		211011					2700	2000					
Antimony	0.006	Not Applicable		mg/L	<0.0008#	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		<0.000400
Arsenic	0.000	Not Applicable	†	mg/L	<0.004 #	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		<0.000400
Barium	2	Not Applicable	†	mg/L	0.0232 #	0.017	0.0173	0.0147	0.0118	0.0132	0.0114	0.0117	0.0121	0.0120		0.0103
Beryllium	0.004	Not Applicable	†	mg/L	<0.001 #	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Cadmium	0.005	Not Applicable	i i	mg/L	<0.0001#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Chromium	0.1	Not Applicable	i i	mg/L	<0.005 #	<0.000400	<0.000400	<0.000400	0.00110 J	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		0.000465 J
Cobalt	None	Not Applicable	Background Well	mg/L	0.000297 J#	0.000348 J	0.000324 J	0.000425 J	<0.000200	<0.000200	<0.000200	<0.000200	0.000257 J	0.00120 J		<0.000200
Fluoride	4	Not Applicable	(Not Applicable)	mg/L	0.281#	0.269	0.375	0.377 J	0.286	0.23	0.254	0.284	0.221	0.406 J		0.324
Lead	0.015	Not Applicable	(Not Applicable)	mg/L	<0.0001#	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600		<0.000600
Lithium	None	Not Applicable	[	mg/L	0.161 J #	0.166	0.172	0.155	0.154	0.151	0.146	0.152	0.151	0.180		0.158
Mercury	0.002	Not Applicable		mg/L	<0.00015#	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.0000500 J	0.0000300 J	<0.0000300		<0.0000300
Molybdenum	None	Not Applicable		mg/L	<0.01#	0.00170 J	0.00143 J	0.00104 J	0.000709 J	0.000760 J	<0.000600	<0.000600	<0.000600	<0.000600		<0.000600
Selenium	0.05	Not Applicable		mg/L	<0.0003#	<0.0011	<0.0011	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110		<0.00110
Thallium	0.002	Not Applicable		mg/L	<0.0008#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Ra-226 + Ra-228 (combined)  Other Parameters	5	Not Applicable		pCi/L	1.65 +/- 0.369 #	2.6		0.97	1.79	2.02	1.42	1.76	1.68	1.33		4.68
	Nina	Nat Amelia alala	Not Applicable	/I		<5	T .	<5.00	5.00 J	1	4F 00	45.00	0.00.1	0.00.1	ı	12.0 J
Chemical Oxygen Demand (COD)	None	Not Applicable		mg/L	<5	-		-		327	<5.00 327	<5.00 332	6.00 J 348	6.00 J 330		
Total Alkalinity as CaCO3  Carbonate Alkalinity as CaCO3	None None	Not Applicable Not Applicable	Not Applicable Not Applicable	mg/L mg/L		 <5				52 <i>1</i> <5	\$21 <5	<5	<5.00	<5		321 <5
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		321				327	327	332	348	330		321
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5.00	<5		<5
Iron, Total	None	Not Applicable	Not Applicable	mg/L						0.771(J)	0.236	0.162 J	1.22	0.249		0.803
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L						<0.0120	0.169 J	0.150 J	0.357	0.189		0.475
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L						0.098	0.184	0.055	0.285	0.13		0.578
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L								0.0340 J	<0.0200 H	0.142		0.489
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L								0.107	0.935	0.119		0.225
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L								0.116	0.357	0.0470 J		<0.0200
Magnesium	None	Not Applicable	Not Applicable	mg/L		28.8	27.9			26.6	26.2	25.9	26.5	29.2		25.4
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L						0.000768(J)	0.000621 J	0.00165 J	<0.000600	<0.000600		<0.000600
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.087 J#	0.478	0.509	1.64	<0.0300	0.316	<0.150	<0.0600	<0.0600	0.484 J		0.0777 J
Potassium	None	Not Applicable	Not Applicable	mg/L		8.64	8.37			7.66	7.94	7.87	7.84	8.73		7.8
Sodium	None	Not Applicable	Not Applicable	mg/L		516	467			382	388	413	388	503		424
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	3000#	3270					3660	3260	3320	3,490		3540
Sulfide	None	Not Applicable	Not Applicable	mg/L						<1	<1	<1	3.08	<1		<1
Field Parameters																
Temperature	None	Not Applicable	Not Applicable	°C	23.1	16.2		17.75	24.4	21	23.7	15.84	20.0	15.2		25.2
рН	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	6.93	6.9		7.28	7.1	7.04	7.1	7.33	7.00	7.17		6.9
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	3491	3251		3386	3435	3107	3394	4453	2,989	3,300		3400
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.31	0.19		1.45	0.62	0.79	0.59	0.34	0.40	0.66		0.57
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	13.1	19.5		4.6	27.7	-45.7	107.1	20.5	-128.9	35.2		-70
Turbidity	None	Not Applicable	Not Applicable	NTU	3.17	4.89	0.94	2.06	3.88	4.71	2.96	3.52	9.38	2.40		1.24

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  - The MCL value for lead is the EPA's Action Level.
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- 4. S.U.: Standard Units.
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- 7. mV : millivolts.
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- 11. Cells shaded in blue indicate results that are above the laboratory MDL.

  12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed. 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
  - U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
  - UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise. J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
  - R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL or	Established Background	Established GWPS	Sample ID:	MW-15A	MW-15A	MW-15A	MW-15A	DUP 1	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A (Shallow)	MW-15A (Deep)
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	26-May-16	23-Aug-16	28-Sep-16	30-Nov-16	30-Nov-16	30-Jan-17	30-Mar-17	1-Jun-17	9-Aug-17	24-May-18	1-Aug-18	10-Aug-18
				-	BACKGROUND 1	BACKGROUND 2	BACKGROUND 3	BACKGI	ROUND 4	BACKGROUND 5	BACKGROUND 6	BACKGROUND 7	BACKGROUND 8	DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Detection Monitoring Parameter	s			Units												
Boron	None	1.896	Not Applicable	mg/L	3.33	3.57	4.52	4.44	5.36	4.64	2.01	3.54	3.38	4.83	3.7	4.14
Calcium	None	670.30	Not Applicable	mg/L	152	154	181	209	279	151	117	183	156	160	93.4	129
Chloride	250	18.51	Not Applicable	mg/L	27.1	26.6	27.9	27	26.5	25.4	27.4	28.1	25.7	26.9	26.6	26.5
Fluoride	4	0.6359	Not Applicable	mg/L	1.23	1.32	1.49	1.32	1.33	1.4	1.15	1.09	1.37	1.76	1.2	1.17
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	7.66	8.1	8	7.6	7.7	7.6	7.4	7.5	7.5	7.6	7.8	7.8
Sulfate	250	1,824	Not Applicable	mg/L	1450	1570	1580	1630	1610	1580	1760	1610	1720	1690	1510	1490
Total Dissolved Solids	500	2,774	Not Applicable	mg/L	2470	2420	2410	2540	2530	2460	2640	2600	2710	2660	2490	2610
Assessment Monitoring Parame	ters															
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.000500	<0.00800	<0.000800	<0.00800	<0.00400	<0.00800	<0.00400	<0.00800	<0.00400			
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.00242	0.00218	0.00205	<0.00400	0.00407 J	0.00156 J	<0.00200	0.00218	0.00259 J			
Barium	2	Not Applicable	2 (MCL)	mg/L	0.0269	0.0338	0.0273	0.026	0.0383	0.0255	0.0167	0.0232	0.0217			
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.00100	<0.000100	<0.000100	<0.00100	<0.000500	<0.000100	<0.000500	<0.000100	<0.000500			
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.000400	<0.000100	<0.000100	<0.00100	<0.000500	<0.000100	<0.000500	<0.000100	<0.000500			
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	0.000638 J	<0.000500	<0.000500	<0.00500	<0.00250	<0.000500	<0.00250	<0.000500	<0.00250			
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.000664 J	0.000467 J	0.000659 J	<0.00100	0.000661 J	0.000346 J	<0.000500	0.000215 J	<0.000500			
Fluoride	4	Not Applicable	4 (MCL)	mg/L	1.23	1.32	1.49	1.32	1.33	1.4	1.15	1.09	1.37	1.76	1.2	1.17
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	0.000264 J	<0.000100	<0.000100	<0.00100	<0.000500	<0.000100	<0.000500	<0.000100	<0.000500			
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.0748	0.0646	0.0575	0.0630 J	0.0766 J	0.059	0.0437 J	0.0552	0.0538 J		0.0669	0.0594
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	0.000175 J	<0.000150	<0.000100			
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	0.306	0.208	0.256	0.276	0.343	0.261	0.182	0.235	0.255		0.202	0.182
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.000600	<0.000300	<0.000300	<0.00300	<0.00150	0.000357 J	<0.00150	0.000539 J	0.00161 J			
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000500	<0.000800	<0.000800	<0.00800	<0.00400	<0.000800	<0.00400	<0.00800	<0.00400			
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	1.01 +/- 0.268	0.846 +/- 0.371	0.636 +/- 0.292	1.38 +/- 0.431	1.33 +/- 0.426	1.21 +/- 0.359	1.36 +/- 0.333	1.86 +/- 0.390	2.19 +/- 0.392			
Other Parameters																
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L												
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L												
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									<5.00			
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									130			
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L									<5.00			
Iron, Total	None	Not Applicable	Not Applicable	mg/L												
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Magnesium	None	Not Applicable	Not Applicable	mg/L									9.36			
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Nitrate as N	10	Not Applicable	Not Applicable	mg/L												
Potassium	None	Not Applicable	Not Applicable	mg/L									5.28			
Sodium	None	Not Applicable	Not Applicable	mg/L									541			
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm												
Sulfide	None	Not Applicable	Not Applicable	mg/L												
Field Parameters				<u>J</u>		JI										
Temperature	None	Not Applicable	Not Applicable	°C	20.05	24.8	21.87	18.2		20.43	19.34	20.24	22.68	21.24	25.05	23.28
nH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.73	7.72	7.69	7.59		7.5	7.6	7.47	7.42	7.72	7.42	7.43
Specific Conductance	None	Not Applicable		5.0. μmhos/cm	3050	3373	3442	3430	 	3488	3520	3498	3524	3505	3548	3578
•		Not Applicable	Not Applicable Not Applicable	<u> </u>	0.16	0.37	0.06	0.33	<del></del>	0.29	0.22	0.08	0.06	0.14	1.62	1.23
Dissolved Oxygen Oxidation-Reduction Potential	None	<del> </del>		mg/L		-61.7	-96.7		 	-140.6		-				
Turbidity	None None	Not Applicable Not Applicable	Not Applicable Not Applicable	mV NTU	66.1 4.97	-61.7 0.7	-96.7 0.18	-211.9 0.31		-140.6 0.52	-81.1 0.66	-82.3 0.53	43.1 1.31	-101.3 0.39	133.1 5.5	140.8 1.68
Notes	140116	Not Applicable	Not Applicable	1410	4.97	0.7	0.10	0.31		0.52	0.00	0.55	1.31	U.38	0.0	1.00

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L: milligrams per liter.
- 3. pCi/L: picoCuries per liter. 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL). 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.
- 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics. U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

  - UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise. J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL	Established	Established		NAVA 45 A	DUD 6	1 g1 A /	454	BANA/ 4 F A	BANA/ 45 A	N#1454	MALAFA	MNA/ 45 A	MNA/ 4FA	8.81 a.r	454	MAN 4 F A
	or	Background	GWPS	Sample ID:	MW-15A	DUP 2	MW	-15A	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A	MW-	-15A	MW-15A
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	2-Oct-18	2-Oct-18	10-Ja	an-19	25-Apr-19	2-Oct-19	18-Jun-20	8-Oct-20	31-Mar-21	13-Oct-21	30-Mar-22	Jun-22	Oct-22
Detection Monitoring Parameters				Units	INITIAL ASSES	SSMENT MON.	INITIAL ASSES (RESA UNFILTERED	MPLE)	FIRST 2019 ASSESSMENT MON.	SECOND 2019 ASSESSMENT MON.	FIRST 2020 ASSESSMENT MON.	SECOND 2020 ASSESSMENT MON.	FIRST 2021 ASSESSMENT MON.	SECOND 2021 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON. (RESAMPLE)	SECOND 2022 ASSESSMENT MON.
		1.896	Not Applicable		3.76 #	3.77 #	3.52	5.48	3.61	3.19	4.57	3.33	3.35	2.14	3.35		3.11
Boron Calcium	None None	670.30	Not Applicable Not Applicable	mg/L mg/L	170 #	171 #	129	187	92	82.4	141	89.8	78.6	96.6	119		113
Chloride	250	18.51	Not Applicable	mg/L	26.6 #	26.5 #	26.3	26.9	21.9	25.9	26.3	26.5	27.3	25.7	27.0		26.2
Fluoride	4	0.6359	Not Applicable	mg/L	1.21 #	1.2 #	1.22	1.46	1.02	1.24	0.86	1.14	1.13	1.01	1.31		1.31
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	8.2 #	8.2 #	7.02		8.02	7.58	7.68	7.77	7.93	7.45	8.08		7.74
Sulfate	250	1,824	Not Applicable	mg/L	1570 #	1580 #	1610	1540	1310	1510	1680	1650	1590	1580	1,540		1510
Total Dissolved Solids	500	2,774	Not Applicable	mg/L	2650 #	2570 #	2590	2640	2570	2500	2520	2460	2420	2370	2,450		2370
Assessment Monitoring Paramet		<b>-</b> ,,,,	11017 (ppilodalio	mg/L	2000 11	201011	2000	2010	2010	2500	2320	2400	2 120	2010	2,100		2010
		Not Applicable	0.006 (MCL)	ma/l	<0.0008#	<0.0008#	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		<0.000400
Antimony Arsenic	0.006 0.010	Not Applicable Not Applicable	0.006 (MCL)	mg/L mg/L	0.00179 J #	0.00166 J #	0.000626 J	0.00122 J	0.000663 J	<0.000400 0.000676 J	0.000965 J	0.000592 J	0.000523 J	0.00113 J	0.000661 J		0.000400 0.000790 J
Barium	2	Not Applicable	2 (MCL)	mg/L	0.00179 3 #	0.001003#	0.000626.3	0.001223	0.000633	0.0006763	0.00965 3	0.000392 3	0.00323 3	0.001133	0.000613		0.000790 3
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.0021 #	<0.0001 #	<0.00200	<0.00200	<0.00217	<0.00216	<0.00291	<0.00200	<0.000200	<0.00224	<0.00220		<0.00215
Cadmium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.0001#	<0.0001#	0.000200 0.000231 J	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Chromium	0.003	Not Applicable	0.003 (MCL)		0.0001# 0.00119 J#	<0.0001#	<0.000400	<0.000200	<0.000200	<0.000200	0.000200 0.000900 J	<0.000200	<0.000200	0.000502 J	<0.000200		<0.000200
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L mg/L	0.000119 J #	0.000210 J #	<0.000400	0.000374 J	0.000400 0.000231 J	0.000257 J	0.000900 J	0.000400 0.000221 J	<0.000400	0.000302 J 0.000296 J	0.000651 J		<0.000400
Fluoride	4	Not Applicable	4 (MCL)	mg/L	1.21#	1.2 #	1.22	1.46	1.02	1.24	0.000402 3	1.14	1.13	1.01	1.31		1.31
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	0.000386 J #	0.000145 J #	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600		<0.000600
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.0613#	0.0598#	0.0701	0.0582	0.0858	0.0743	0.111	0.0709	0.073	0.0627	0.0815		0.0643
Mercury	0.002	Not Applicable	0.233 (OTL) 0.002 (MCL)	mg/L	<0.0010 #	<0.000100 #	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	0.0000420 J	<0.0027	<0.000300		0.000390 J
Molybdenum	None	Not Applicable	0.1 (ACL)		0.233 #	0.228 #	0.205	0.244	0.219	0.196	0.269	0.167	0.168	0.149	0.181		0.00003903
Selenium	0.05	Not Applicable	0.1 (ACL)	mg/L mg/L	0.000459 J #	0.000353 J #	<0.0011	<0.0011	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110		<0.00110
Thallium	0.002	Not Applicable	0.003 (MCL)		<0.000439 3 #	<0.000333 #	0.000565 J	0.000375 J	<0.00010	<0.000110	<0.000100	<0.00110	<0.00010	<0.00110	<0.00110		<0.000110
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	mg/L pCi/L	1.28 +/- 0.294 #		1.46	0.0003733	<0.87	2.03	1.67	1.72	1.45	2.04	1.61		1.69
Other Parameters	<u> </u>	140t Applicable	J (WOL)	POI/L	1.20 1/- 0.254 #	1.00 17- 0.000 #	1.40		10.01	2.03	1.07	1.72	1.45	2.04	1.01		1.00
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	9.51 J #	7.46 J #	7.00 J		<5.00	18		5.00 J	<5.00	11.0 J	7.00 J		11.0 J
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	9.510 #	7.40 0 m	7.00 5				209	204	196	226	193		189
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L			<5				<5	<5	<5	<5.00	<5		<5
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L			149				209	204	196	226	193		189
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L			<5				<5	<5	<5	<5.00	<5		<5
Iron, Total	None	Not Applicable	Not Applicable	mg/L							0.0535(J)	0.0496 J	0.0492 J	0.368	0.236		0.208
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L							<0.0120	0.165 J	0.133 J	0.590	0.234		0.200
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L							0.0410(J)	0.0210 J	0.054	0.390	0.2		0.089
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L				 			0.0410(3)	0.02103	0.0320 J	<0.0200 H	0.243		0.358
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L									<0.02	0.0840	0.0360 J		<0.0200
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable  Not Applicable	mg/L				 					0.101	0.590	<0.02		<0.0200
Magnesium	None	Not Applicable	Not Applicable	mg/L			12.4	10.9			165	11	10.9	10.2	12.3		10.3
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L			12.4	10.9			0.168	0.153	0.159	0.181	0.159		0.149
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.068 J #	0.065 J #	1.42	0.616	1.72	0.287	<0.0600	<0.150	1.14	0.0704 J	0.159		0.149
Potassium	None	Not Applicable	Not Applicable  Not Applicable	mg/L		0.065 3 #	5.98	5.47			8.24	5.15	5.47	4.97	5.91		4.96
Sodium	None	Not Applicable	Not Applicable	mg/L			746	703			1040	627	594	421	680		609
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable  Not Applicable	umhos/cm	3490 #	3480 #	3540	703			1040	3780	3400	3370	3,620		3590
Sulfide	None	Not Applicable	Not Applicable  Not Applicable	mg/L	3490 #	3460 #	3540				1.12	<1	<1 <1	<1.00	3,620 <1		<1
Field Parameters	INOLIC	1 TOL Applicable	ι τοι πρριισασίε	my/L							1.12	` '		11.00	71		71
	None	Not Applicable	Not Applicable	°C	22.4		10 F	I I	20.72	27.05	24.00	20.0	16.27	22.4	10.1		25.6
Temperature	None	Not Applicable	Not Applicable		23.1		18.5		20.72	27.05	24.09	22.2	16.37		18.1		25.6
Procific Conductors	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.53		7.45		7.82	7.71	7.73	7.71	7.82	7.61	7.65		7.58
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	3563		3449		3544	3575	3337	3422	4,645	3,431	3,386		3393
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.21		0.41		1.24	0.71	1.39	0.28	4.97	0.38	0.51		0.4
Oxidation-Reduction Potential Turbidity	None None	Not Applicable	Not Applicable	mV NTU	-69.9 4.11		98	1.09	-22.1	-79.5	-50.3	167.2	13.8 0.88	-59.9 3.34	93.7 2.38		-85.1
Notes:	INOILE	Not Applicable	Not Applicable	INTO	4.11		1.13	1.09	0.55	0.84	2.6	1.73	0.00	ა.ა4	2.30		0.9

### Notes:

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L: milligrams per liter. 3. pCi/L: picoCuries per liter.
- 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).
- 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.
- 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics. U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

  - UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise. J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL or	Established Background	Established GWPS	Sample ID:	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	DUP 3	MW-16	MW-16 (Shallow)	MW-16 (Deep)
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	1-Jun-16	23-Aug-16	29-Sep-16	6-Dec-16	1-Feb-17	6-Apr-17	7-Jun-17	11-Aug-17	11-Aug-17	22-May-18	1-Aug-18	10-Aug-18
	<u> </u>				BACKGROUND 1	BACKGROUND 2	BACKGROUND 3	BACKGROUND 4	BACKGROUND 5	BACKGROUND 6	BACKGROUND 7	BACKG	ROUND 8	DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Detection Monitoring Parameter	s			Units												
Boron	None	1.896	Not Applicable	mg/L	1.39	1.44	2.84	2.38	2.43	1.64	1.64	1.79	1.74	1.95	1.9	2.39 J
Calcium	None	670.30	Not Applicable	mg/L	365	242	192	311	153	241	357 J*	238	235	122	159	185
Chloride	250	18.51	Not Applicable	mg/L	<35.0	20.2	23.2	22.9	26.5	16.7 J*	15.3 J*	18	17.7	21.3	20.6	29.6
Fluoride	4	0.6359	Not Applicable	mg/L	0.843	1.02	1.36	0.936 J*	1.03	0.759 J*	0.721 J*	0.817	0.801	1.01	0.963	1.17
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	7.05	7.8	7.6	7.6	7.6	7.3	7.2	7.2	7.2	7.5	7.5	7.8
Sulfate	250	1,494	Not Applicable	mg/L	1340	1040	1070	1390	915	1180	995	1020	1020	933	938	998
Total Dissolved Solids	500	1,883	Not Applicable	mg/L	1790	1780	1760	1790	1860	1740	1690	1710	1730	1820	1810	1930
Assessment Monitoring Parame								1		1				-		
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.00250	<0.000800	<0.000800	<0.00400	<0.000800	<0.000800	<0.00400	<0.000800	<0.000800			
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	<0.00250	0.00101 J	U (0.00164)	<0.00200	0.000757 J	0.00122 J	<0.00400	0.000409 J	0.000453 J			
Barium	2	Not Applicable	2 (MCL)	mg/L	0.027	0.0291	0.0262	0.0461	0.0235	0.0246	0.027	0.024	0.024			
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.00500	<0.000100	<0.000100	<0.000500	<0.000100	U (0.000375)	<0.000500	<0.000100	<0.000100			
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.00200	<0.000100	<0.000100	<0.000500	<0.000100	<0.000100	<0.00100	<0.000100	<0.000100			
Cabalt	0.1	Not Applicable	0.1 (MCL)	mg/L	0.00604 J	<0.000500	0.0579	<0.00250 <0.000500	<0.000500	<0.000500	<0.00500	<0.000500	<0.000500			
Cobalt Fluoride	None	Not Applicable Not Applicable	0.006 (ACL) 4 (MCL)	mg/L	<0.00250 0.843	0.000340 J 1.02	0.000498 J 1.36	0.936 J*	<0.000100 1.03	<0.000100 0.759 J*	<0.00100 0.721 J*	0.000354 J 0.817	0.000343 J 0.801	1.01	0.963	1.17
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.000200	<0.000100	<0.000100	<0.000500	<0.000100	<0.000100	<0.000500	<0.000100	<0.000100			
Lithium	None	Not Applicable	0.015 (MCL)	mg/L mg/L	0.0495 J	0.0509	0.0470 J	0.0760 J	0.0632	0.0525	0.0534 J	0.0480 J	0.0472 J		0.0571	0.0491
Mercury	0.002	Not Applicable	0.233 (OTL) 0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	<0.000150 UJ	<0.0032	<0.000150	<0.000150	<0.000150	<0.000150		0.0371	0.0491
Molybdenum	None	Not Applicable	0.002 (MCL)		0.135 J	0.134	0.0949	0.17	0.114	0.177	0.218	0.181	0.181		0.145	0.154
Selenium	0.05	Not Applicable	0.1 (ACL) 0.05 (MCL)	mg/L mg/L	<0.00300	<0.000300	U (0.000418)	<0.00150	0.000307 J	<0.000300	<0.00300	<0.000300	<0.000300			
Thallium	0.002	Not Applicable	0.003 (MCL)		<0.00500	<0.000800	<0.000800	<0.00130	<0.000800	<0.000800	<0.00300	<0.000800	<0.000800			
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	mg/L pCi/L	1.28 +/- 0.305	1.01 +/- 0.359	1.11 +/- 0.324	0.925 +/- 0.572	1.09 +/- 0.398	0.504 +/- 0.260	0.608 +/- 0.256	1.55 +/- 0.391	0.994 +/- 0.366			
Other Parameters	<u> </u>	140t Applicable	3 (WOL)	POI/L	1.20 1/- 0.000	1.01 17- 0.000	1.11 1/- 0.024	0.020 17- 0.012	1.03 17- 0.000	0.304 1/- 0.200	0.000 17- 0.200	1.00 17- 0.001	0.554 1/- 0.500			
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L												
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L												
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L								<5.00	<5.00			
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L								238	215			
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L								<5.00	<5.00			
Iron, Total	None	Not Applicable	Not Applicable	mg/L												
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Magnesium	None	Not Applicable	Not Applicable	mg/L								10.3	10.1			
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Nitrate as N	10	Not Applicable	Not Applicable	mg/L												
Potassium	None	Not Applicable	Not Applicable	mg/L								3.33	3.28			
Sodium	None	Not Applicable	Not Applicable	mg/L								272	270			
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm												
Sulfide	None	Not Applicable	Not Applicable	mg/L												
Field Parameters		, ,,										·				
Temperature	None	Not Applicable	Not Applicable	°C	18.9	23.5	21.62	16.91	19.27	17.92	20.46	24.61		22.87	23.7	23.74
nH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.24	7.33	7.32	7.14	7.49	7.23	7.1	7.09		7.57	7.11	7.3
Specific Conductance				μmhos/cm							2256			2463		
· · · · · · · · · · · · · · · · · · ·	None	Not Applicable	Not Applicable		2066	2327	2492	2395	2620	2275 0.81		2330			2436	2678
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.38	2.53	0.31	0.25	0.59		0.04	0.16		0.37	1.59	2.7
Oxidation-Reduction Potential Turbidity	None None	Not Applicable	Not Applicable	mV NTU	-47.3 2.19	46	-106.4	-135.8	-104.9	10.2	0.4	60.3		-83.7	186.4	150.4
i di bidity	NOTE	Not Applicable	Not Applicable	INTU	2.18	0.85	0.33	0.98	0.18	0.63	0.61	1.11		1.21	3.49	2.96

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L : milligrams per liter.
- 3. pCi/L: picoCuries per liter.
- 4. S.U.: Standard Units.
- 5. °C: degrees Celsius. 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).
- 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.
- 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis. 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.

  U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
  - UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
  - J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample. 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
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- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL or	Established Background	Established GWPS	Sample ID:	MW-16	MW	<i>I</i> -16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MV	V-16	MW-16
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	2-Oct-18	16-Ja	an-19	23-Apr-19	3-Oct-19	18-Jun-20	13-Oct-20	1-Apr-21	14-Oct-21	1-Apr-22	7-Jun-22	6-Oct-22
					INITIAL ASSESSMENT MON.	INITIAL ASSES (RESA UNFILTERED	MPLE)	FIRST 2019 ASSESSMENT MON.	SECOND 2019 ASSESSMENT MON.	FIRST 2020 ASSESSMENT MON.	SECOND 2020 ASSESSMENT MON.	FIRST 2021 ASSESSMENT MON.	SECOND 2021 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	SECOND 2022 ASSESSMENT MON.
Detection Monitoring Parameters				Units											(RESAMPLE)	
Boron	None	1.896	Not Applicable	mg/L	2.05 #	2.23	2.38	1.85	1.53	1.43	1.78	1.57	1.61	1.85		2.54
Calcium	None	670.30	Not Applicable	mg/L	221 #	215	215	192	149	186	166	140	158	153	45.0	132
Chloride	250	18.51	Not Applicable	mg/L	18 #	19	18.8	15.8	23.8	14.7	14.8	14.4	16.2	16.6^	15.0	25.8
Fluoride	4	0.6359	Not Applicable	mg/L	0.832 #	0.82	1.11	0.741	1.07	0.694	0.893	0.916	0.964	1.3^	1.01	1.25
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	8.2 #	7.33		7.88	7.01	7.6	7.63	7.83	7.75	7.42^	7.92	7.85
Sulfate	250	1,494	Not Applicable	mg/L	959#	1020	1030	974	1020	1030	929	1070	1110	1100^	1090	996
Total Dissolved Solids	500	1,883	Not Applicable	mg/L	1780 #	1740	1670	1740	1810	1610	1610	1790	1590	1670^	1700	1,690
Assessment Monitoring Parameter							-									
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.0008#	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		<0.000400
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	<0.002 #	<0.000400	<0.000400	<0.000400	0.000465 J	<0.000400	<0.000400	<0.000400	0.000417 J	<0.000400		<0.000400
Barium	2	Not Applicable	2 (MCL)	mg/L	0.0203#	0.0226	0.0224	0.0178	0.0133	0.0142	0.0156	0.0123	0.0143	0.0127		0.0132
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.0005#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.0001#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.000218 J	<0.000200		<0.000200
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	<0.0025#	<0.000400	<0.000400	<0.000400	<0.000400	0.000423 J	0.000416 J	0.00141 J	<0.000400	<0.000400		<0.000400
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.000172 J#	<0.000200	<0.000200	<0.000200	0.000375 J	<0.000200	<0.000200	<0.000200	0.000415 J	0.000507 J		<0.000200
Fluoride	4	Not Applicable	4 (MCL)	mg/L	0.832#	0.82	1.11	0.741	1.07	0.694	0.893	0.916	0.964	1.3^	1.01	1.25
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.0001#	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600		<0.000600
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.0607 J #	0.0689	0.0632	0.0586	0.0424	0.046	0.0477	0.0454	0.0466	0.0496		0.0534
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000100#	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.0000570 J	0.000158 J	<0.0000300		<0.0000300
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	0.169#	0.18	0.18	0.193	0.149	0.172	0.149	0.166	0.163	0.146		0.113
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.0003#	<0.0011	<0.0011	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110		<0.00110
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0008#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	1.07 +/- 0.288 #	1.01		<0.62	0.81	1.18	1.35	0.99	1.82	<0.78		1.94
Other Parameters																
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	<5.00 #	<5		<5.00	<5.00		<5.00	<5.00	7.00 J	7.00 J ^	<5.00	6.00 J
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L						232	233	228	264	94^	258	288
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5.00	<5^	<5	10.7
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		256				232	233	228	264	94^	258	277
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5.00	<5^	<5	<5
Iron, Total	None	Not Applicable	Not Applicable	mg/L						0.0358(J)	0.125 J	0.0536 J	0.369	0.0158 J^	0.0145 J	0.0547 J
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L						0.0160(J)	0.0694 J	0.0140 J	0.190 J	<0.0120^	<0.0120	0.0203 J
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L						0.0380(J)	0.0240 J	<0.020	0.191	<0.02^	<0.02	<0.0200
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L								<0.020	<0.0200 H	<0.02^	<0.02	<0.0200
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L								0.0536	0.178	<0.02^	<0.02	0.0547
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L								<0.02	0.190	<0.02^	<0.02	0.0203 J
Magnesium	None	Not Applicable	Not Applicable	mg/L		10.2	10.2			8.44	7.59	7.65	7.38	8.4		7.24
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L						0.173	0.16	0.18	0.189	0.131		0.112
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.133#	<0.03	<0.03	0.854	<0.0300	<0.0600	<0.0600	0.687	<0.0300	50.4^	0.0630 J,H	0.127
Potassium	None	Not Applicable	Not Applicable	mg/L		4.18	4.07			2.85	3.09	3.12	3.18	3.58		3.61
Sodium	None	Not Applicable	Not Applicable	mg/L		405	394			309	316	325	295	389		415
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	2240 #	2340					2400	2420	2340	2500^	2,910	2,650
Sulfide	None	Not Applicable	Not Applicable	mg/L						<1	1.4	<1	<1.00	<1	<1	<1
Field Parameters				Units												
Temperature	None	Not Applicable	Not Applicable	°C	25.4	14.8		19.31	24.89	21.9	23.5	16.32	23.0	15.9	20.0	23.1
nH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.53	7.21		7.56	7.82	7.66	7.69	8.12	7.74	7.67	7.74	7.36
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	2816	2273		2330	2836	2438	2615	3178	2,699	1,865	2,358	2,412
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.25	1.37		0.83	3.67	2436	1.99	0.46	3.3	1.06	0.42	1.55
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-131.8	278.9		28.7	-191.5	-56.9	60.2	57.7	-167.2	20.9	-25.9	-51.7
Turbidity	None	Not Applicable	Not Applicable	NTU	2.89	6.82	1.03	2.53	1.48	3.09	0.75	2.16	4.38	0.25	1.84	1.55
Notes:	1	1 tot Applicable	140t Applicable		2.00	0.02	1.00	2.00	1.70	ა.სუ	0.73	2.10	7.00	0.20	1.0-7	1.00

### Notes:

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L : milligrams per liter.
- 3. pCi/L: picoCuries per liter. 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).
- 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.
- 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis. 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.

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  - UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
  - J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
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- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL or	Established Background	Established GWPS	Sample ID:	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	DUP 2	MW-17	MW-17 (Shallow)	MW-17 (Deep)
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	1-Jun-16	3-Aug-16	30-Sep-16	2-Dec-16	1-Feb-17	29-Mar-17	1-Jun-17	10-Aug-17	10-Aug-17	21-May-18	1-Aug-18	10-Aug-18
7 Grametere					BACKGROUND 1	BACKGROUND 2	BACKGROUND 3		BACKGROUND 5	BACKGROUND 6	BACKGROUND 7		GROUND 8	DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Detection Monitoring Parameter	s			Units		_					_				J 37	
Boron	None	1.896	Not Applicable	mg/L	0.634	0.586	0.854	0.838 J	0.817	<0.875	0.713	0.666	0.64	0.588	0.659	0.845 J
Calcium	None	670.30	Not Applicable	mg/L	750	529	540	535	441	727	564	528	537	436	549	787
Chloride	250	18.51	Not Applicable	mg/L	4.08	3.64	3.46	5.58 J*	3.45	3.04	3.11	3.28	3.37	3.15	3.84	3.27
Fluoride	4	0.6359	Not Applicable	mg/L	0.322	0.365	0.58	0.480 J*	0.488	0.266	0.361	0.328	0.323	0.324	0.47	0.317
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	6.82	6.8	7.5	7.6	7.1	6.9	6.8	6.9	6.8	6.9	7.2	7
Sulfate	250	1,557	Not Applicable	mg/L	1170	1300	1250	1470	1200	1140	1310	1450	1300	1140	1310	1340
Total Dissolved Solids	500	2,343	Not Applicable	mg/L	1980	2070	1980	2260	2050	1870	2180	2140	2140	2360	2340	2380
Assessment Monitoring Parame	ters	<u> </u>					<u>'</u>				<u>'</u>			· <u>·</u>	·	
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.000500	<0.00100	<0.000800	<0.00800	<0.000800	<0.00800	<0.00800	<0.00800	<0.00800		<b></b>	
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.00204	0.00154 J	0.00226	<0.00400	0.000663 J	0.00251	0.00154 J	<0.000400	<0.000400			
Barium	2	Not Applicable	2 (MCL)	mg/L	0.00545	0.00299	0.00460 J	<0.00100	0.00344	U (0.00333)	0.00160 J	0.00236	0.00293			
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.00100	<0.00200	<0.000100	<0.00100	<0.000100	<0.00250	<0.000100	<0.000100	<0.000100			
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.000400	<0.000800	<0.000100	<0.00100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100			
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	<0.000500	<0.00100	<0.000500	<0.00500	0.00140 J	<0.000500	<0.000500	<0.000500	<0.000500			
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	<0.000500	<0.00100	0.000225 J	<0.00100	<0.000100	<0.000500	<0.000100	<0.000100	<0.000100			
Fluoride	4	Not Applicable	4 (MCL)	mg/L	0.322	0.365	0.58	0.480 J*	0.488	0.266	0.361	0.328	0.323	0.324	0.47	0.317
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.000200	<0.000200	<0.000100	<0.00100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100			
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.14	0.174	0.155 J	0.158 J	0.146	0.121	0.133	0.148	0.143		0.128	0.131
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150			
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	0.000840 J	<0.00100	0.00135 J	<0.0100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100		<0.00100	<0.00100
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.000600	<0.00120	U (0.000709)	<0.00300	0.000526 J	<0.00150	<0.000300	<0.000300	<0.000300			
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000500	<0.00100	<0.000800	<0.00800	<0.000800	<0.000800	<0.00800	<0.000800	<0.000800			
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	0.539 +/- 0.261	0.265 +/- 0.260 U	1.32 +/- 0.425	0.536 +/- 0.356	0.195 +/- 0.273 U	0.311 +/- 0.238 U	0.479 +/- 0.271	0.531 +/- 0.221	0.183 +/- 0.207 U			
Other Parameters																
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L												
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L												
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L								<5.00	<5.00			
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L								260	259			
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L								<5.00	<5.00			
Iron, Total	None	Not Applicable	Not Applicable	mg/L												
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L												
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Magnesium	None	Not Applicable	Not Applicable	mg/L								36.6	36			
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Nitrate as N	10	Not Applicable	Not Applicable	mg/L												
Potassium	None	Not Applicable	Not Applicable	mg/L								5.15	5.14			
Sodium	None	Not Applicable	Not Applicable	mg/L								34.5	34.4			
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm												
Sulfide	None	Not Applicable	Not Applicable	mg/L												
Field Parameters		1 1 1 1 1 1 1 1					1	1			1			1	1	1
Temperature	None	Not Applicable	Not Applicable	°C	20.98	23.28	20.36	19.58	21.96	20.3	20.57	21.98		20.98	25.04	22.3
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	6.91	6.71	6.83	6.79	6.84	6.88	6.68	6.69		6.92	6.64	6.8
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	2052	2230	2402	2405	2386	2396	2443	2417		2416	2606	2569
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	1.07	3.66	0.43	0.95	0.63	0.79	0.22	0.29		0.21	5.57	4.59
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	42.5	4	-99.6	-183.4	-84	-55.9	-87.3	65.7		-49.2	172.9	209.4
Turbidity	None	Not Applicable	Not Applicable	NTU	0.53	0.92	0.4	0.43	0.11	0.21	0.24	0.81		0.52	4.63	14.5

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.

  2. mg/L: milligrams per liter.
- 3. pCi/L: picoCuries per liter.
- 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL). 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.
- 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.

  - U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

    UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
  - J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

    R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. #: Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	110:	Established	Established													
	MCL or	Background	GWPS	Sample ID:	MW-17	MV	V-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MV	V-17	MW-17
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	3-Oct-18	10-1	an-19	25-Apr-19	3-Oct-19	18-Jun-20	12-Oct-20	31-Mar-21	14-Oct-21	31-Mar-22	7-Jun-22	6-Oct-22
ranameters	<u> </u>	(200)	(1.661)	Gample Bate.											FIRST 2022	
					INITIAL ASSESSMENT	(RESAMPLE)	SSMENT MON. UNFILTERED	FIRST 2019 ASSESSMENT	SECOND 2019 ASSESSMENT	FIRST 2020 ASSESSMENT	SECOND 2020 ASSESSMENT	FIRST 2021 ASSESSMENT	SECOND 2021 ASSESSMENT	FIRST 2022 ASSESSMENT	ASSESSMENT MON.	SECOND 2022 ASSESSMENT
Detection Monitoring Parameter	s			Units	MON.	FILI	ERED	MON.	MON.	MON.	MON.	MON.	MON.	MON.	(RESAMPLE)	MON.
Boron	None	1.896	Not Applicable	mg/L	0.567#	0.766	0.729	0.796	0.622	0.652	0.64	0.539	0.700	0.593		0.902
Calcium	None	670.30	Not Applicable	mg/L	461 #	591	499	499	555	494	453	467	428	435		541
Chloride	250	18.51	Not Applicable	mg/L	4.81#	3.44	4.16	3.65	3.75	4.29	4.04	4.06	4.02	5.24^	4.16	4.25
Fluoride	4	0.6359	Not Applicable	mg/L	0.393#	0.337	0.27	0.392 J	0.37	0.211	0.366	0.412	0.317	<0.250^	0.371	0.34
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	7.5 #	6.59		7.53	6.37	7.38	7.51	7.34	7.12	1.87^	7.67	7.04
Sulfate	250	1,557	Not Applicable	mg/L	821#	1480	1200	1100	1310	1390	1,220 H	1310	1390	1970^	1,460	1,320
Total Dissolved Solids	500	2,343	Not Applicable	mg/L	1670#	2300	1870	2400	2160	2230	2160	2200	2210	2340^	2,220	2,170
Assessment Monitoring Parame																
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.0008 #	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		<0.000400
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	<0.0004 #	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	0.000582 J		<0.000400
Barium	2	Not Applicable	2 (MCL)	mg/L	0.00231#	<0.00190	0.00250 J	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190		<0.00190
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.0001 #	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.0001 #	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	0.0022#	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	0.00108 J		<0.000400
Cobalt Fluoride	None	Not Applicable Not Applicable	0.006 (ACL) 4 (MCL)	mg/L	<0.0001 # 0.393 #	0.000238 J 0.337	<0.000200 0.27	0.000313 J 0.392 J	<0.000200 0.37	0.000281 J 0.211	<0.000200 0.366	0.000239 J 0.412	0.000275 J 0.317	0.00148 J <0.250^	0.371	<0.000200 0.34
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L mg/L	<0.0001 #	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600		<0.000600
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.122#	0.159	0.148	0.151	0.138	0.147	0.123	0.114	0.140	0.104		0.147
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000100#	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.000142 J	0.0000540 J	<0.0000300		0.000151 J
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	<0.001 #	<0.000600	<0.000600	0.000671 J	<0.000600	<0.000600	<0.000600	0.000950 J	<0.000600	<0.000600		<0.000600
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	0.000675 J #	<0.0011	<0.0011	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	0.00149 J		<0.00110
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0008 #	<0.000200	<0.000200	<0.000200	0.000539 J	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	1.27 +/- 0.335 #	<0.78		<0.75	<0.76	<0.68	<0.69	<0.84	0.97	<0.79		1.48
Other Parameters	<u> </u>	<u>'                                      </u>	<u> </u>	<u> </u>		<u>'</u>		<u> </u>	'			·	<u>'</u>	"	<u>'</u>	
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	6.13 J #	<5.00		<5.00	<5.00		<5.00	<5.00	7.00 J	8.00 J ^	<5.00	<5.00
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L						284	273	269	288	<5^	269	276
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5.00	<5^	<5	<5
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		280				284	273	269	288	<5^	269	276
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5.00	<5^	<5	<5
Iron, Total	None	Not Applicable	Not Applicable	mg/L						<0.0120	<0.0120	0.0541 J	<0.0120	0.0325 J ^	<0.0120	<0.0120
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L						<0.0120	<0.0120	<0.0120	0.0198 J	<0.012^	<0.0120	0.0581 J
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L						0.02(J)	<0.02	<0.02	<0.0200	<0.02^	0.0220 J,H	<0.0200
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L								<0.02	<0.0200 H	<0.02^	<0.02 H	<0.0200
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L								0.0541	<0.0200	0.0325 J ^	<0.02	<0.0200
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L								<0.02	<0.0200	<0.02^	<0.02	0.0581
Magnesium	None	Not Applicable	Not Applicable	mg/L		38.1	31.3			37.8	30.9	29.3	34.6	30.9		33.7
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L						0.00123(J)	<0.000600	0.00292 J	<0.000600	<0.000600		<0.000600
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.276#	<0.03	0.519	<0.150	<0.0300	<0.0600	<0.0600	<0.0300	<0.0600	420 H ^	0.0834 J,H	0.0756 J
Potassium	None	Not Applicable	Not Applicable	mg/L		5.37	4.9			5.15	4.42	4.19	4.94	4.5		4.99
Sodium	None	Not Applicable	Not Applicable	mg/L	4000 //	35.7	32.9			35.6	29.2	28.2	32.5	35.2		32.8
Specific Conductance (laboratory) Sulfide	None	Not Applicable	Not Applicable	umhos/cm	1920 #	2450					2610	2460	2390	11900 ^	2,920	2,570
	None	Not Applicable	Not Applicable	mg/L						<1	<1	<1	1.12	<1^	<1	<1
Field Parameters	NI	Nat Amelia II	Nat Amelia da	Units	00.0	45.0		40.00	00.00	04.0	00.0	04.04	00.0	40.0	00.5	05.0
Temperature	None	Not Applicable	Not Applicable	°C	23.3	15.9		19.26	23.63	21.2	23.2	21.04	22.9	18.3	22.5	25.9
pH Specific Conductance	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	6.7	6.67		7.09	6.88	6.8	6.88	6.88	6.90	7.08	7.04	6.79
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	2548	2416		2470	2458	2344	2393	3321	2,467	1,811	2,369	2,441
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.44	0.51		1.8	0.8	1.35	0.41	0.27	0.52	1.86	0.8	1.94
Oxidation-Reduction Potential Turbidity	None None	Not Applicable Not Applicable	Not Applicable Not Applicable	mV NTU	237.5 5.4	57.8 1.24	0.69	2.4 0.63	148.3 0.65	-28.1	129.9	-2.5 0.75	61.7 1.80	103.6 0.85	81.5 1.61	37.8 1.94
Note:	INOTIC	Not Applicable	Not Applicable	1410	5.4	1.24	0.09	0.03	0.05	2.28	0.58	0.73	1.00	0.00	1.01	1.54

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.

  2. mg/L: milligrams per liter.
- 3. pCi/L: picoCuries per liter.
- 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL). 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.
- 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.

  - U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

    UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
  - J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

    R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. #: Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



ParametersDetection Monitoring ParametersBoronNonCalciumNonChloride250Fluoride4pH (laboratory)6.5 - 8Sulfate250Total Dissolved Solids500Assessment Monitoring ParametersAntimony0.00Arsenic0.01	ne 600 000 000 000 000 000 000 000 000 00	1.896 670.30 18.51 0.6359 85 - 8.018 1,820 2,006	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Units mg/L mg/L mg/L mg/L S.U.	1-Jun-16  BACKGROUND 1  5.91 39.7 6.77	3-Aug-16  BACKGROUND 2  6.45 36.9	30-Sep-16 BACKG	30-Sep-16 ROUND 3	2-Dec-16  BACKGROUND 4	31-Jan-17 BACKGROUND	5-Apr-17 BACKGROUND	7-Jun-17 BACKGROUND	10-Aug-17 BACKGROUND	18-May-18  DETECTION MON.	2-Aug-18  EVALUATION	10-Aug-18 VERIFICATION
Boron         Non           Calcium         Non           Chloride         250           Fluoride         4           pH (laboratory)         6.5 - 8           Sulfate         250           Total Dissolved Solids         500           Assessment Monitoring Parameters           Antimony         0.00	ne 60 0 0 8.5 6.48 0 2	670.30 18.51 0.6359 85 - 8.018 1,820	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Units  mg/L  mg/L  mg/L  mg/L	5.91 39.7 6.77	BACKGROUND 2	BACKG		BACKGROUND 4					DETECTION MON.		
Boron         Non           Calcium         Non           Chloride         250           Fluoride         4           pH (laboratory)         6.5 - 8           Sulfate         250           Total Dissolved Solids         500           Assessment Monitoring Parameters           Antimony         0.00	ne 60 0 0 8.5 6.48 0 2	670.30 18.51 0.6359 85 - 8.018 1,820	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	mg/L mg/L mg/L mg/L	39.7 6.77		6.88			5	6	7	8	#1	SAMPLE	SAMPLE
Calcium         Non           Chloride         250           Fluoride         4           pH (laboratory)         6.5 - 8           Sulfate         250           Total Dissolved Solids         500           Assessment Monitoring Parameters           Antimony         0.00	ne 60 0 0 8.5 6.48 0 2	670.30 18.51 0.6359 85 - 8.018 1,820	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	mg/L mg/L mg/L	39.7 6.77		6.88									
Chloride         250           Fluoride         4           pH (laboratory)         6.5 - 8           Sulfate         250           Total Dissolved Solids         500           Assessment Monitoring Parameters           Antimony         0.00	0 8.5 6.48 0	18.51 0.6359 35 - 8.018 1,820	Not Applicable Not Applicable Not Applicable Not Applicable	mg/L mg/L	6.77	36.9		6.15	6.82	9.71	8.51	6.39	6.51	6.71	4.86	6.65
Fluoride         4           pH (laboratory)         6.5 - 8           Sulfate         250           Total Dissolved Solids         500           Assessment Monitoring Parameters           Antimony         0.00	0 8.5 6.48 0 2	0.6359 35 - 8.018 1,820	Not Applicable Not Applicable Not Applicable	mg/L			34.7	35.8	34.5	34.1	30.5	37.3 J*	28.7	28.1	36.1	31.1
pH (laboratory) 6.5 - 8 Sulfate 250 Total Dissolved Solids 500  Assessment Monitoring Parameters Antimony 0.00	8.5 6.48 0 2	35 - 8.018 1,820	Not Applicable Not Applicable			6.71	6.67	6.8	6.02	6.31	5.94	5.54 J*	6.1	5.19	8.04	5.33
Sulfate 250 Total Dissolved Solids 500  Assessment Monitoring Parameters Antimony 0.00	0 2	1,820	Not Applicable	S.U.	1.15	1.26	1.49	1.6	1.38	1.29	1.43	1.38 J*	1.38	1.37	1.26	1.35
Total Dissolved Solids 500  Assessment Monitoring Parameters  Antimony 0.00	) 2				10.4	10.3	10	10	10.2	10.3	10.6	10.7	10.7	10.1	7.8	10.2
Assessment Monitoring Parameters Antimony 0.00		2,006		mg/L	1430	1800	1320	1320	1300	1090	1170	1200	1070	1120	996	1030
Antimony 0.00	)6   Not 4		Not Applicable	mg/L	2000	1910	1870	1860	1860	1830	1800	1850	1850	1740	1660	1730
,	16   Not 2										1					
Δreenic		Applicable	0.006 (MCL)	mg/L	<0.00250	<0.00100	<0.000800	<0.000800	<0.00800	<0.000800	<0.000800	<0.00400	<0.000800			
		Applicable	0.01 (MCL)	mg/L	0.00331 J	0.00476	0.00296	0.00307	0.00402 J	0.00334	0.00295	<0.00400	0.00329			
Barium 2		Applicable	2 (MCL)	mg/L	0.00489	0.00472	0.00551	0.00512 J	0.00232 J	0.00526	0.00375	0.00485 J	0.00402			
Beryllium 0.00		Applicable	0.004 (MCL)	mg/L	<0.00500	<0.00200	<0.000100	<0.000500	<0.00100	<0.000100	<0.000100	<0.000500	<0.000100			
Cadmium 0.00		Applicable	0.005 (MCL)	mg/L	<0.00200 <0.00250	<0.000800 <0.00100	<0.000100 <0.000500	<0.000100 <0.00250	<0.00100 <0.00500	0.000242 J <0.000500	0.000123 J <0.000500	<0.00100	<0.000100 <0.000500			
Chromium 0.1 Cobalt Non		Applicable Applicable	0.1 (MCL) 0.006 (ACL)	mg/L mg/L	<0.00250	<0.00100	<0.000500	<0.00250	<0.00500	<0.000100	<0.000500	<0.00500 <0.00100	<0.000500			
Fluoride 4		Applicable	4 (MCL)	mg/L	1.15	1.26	1.49	1.6	1.38	1.29	1.43	1.38 J*	1.38	1.37	1.26	1.35
Lead 0.01		Applicable	0.015 (MCL)	mg/L	<0.000200	<0.000200	<0.000100	<0.000100	<0.00100	<0.000100	<0.000100	<0.000500	<0.000100			
Lithium Non		Applicable	0.235 (UTL)	mg/L	<0.0100	0.00315 J	<0.00300	<0.0150	<0.0300	0.00305 J	<0.00300	<0.0150	<0.00300		0.0144 J	<0.00300
Mercury 0.00		Applicable	0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150			
Molybdenum Non		Applicable	0.1 (ACL)	mg/L	0.43	0.433	0.392	0.417	0.434	0.403	0.4	0.442	0.39		0.113	0.319
Selenium 0.09		Applicable	0.05 (MCL)	mg/L	0.00503 J	0.00399 J	0.00231	0.00317	0.00301 J	0.00268	0.00177 J	<0.00300	0.00278			
Thallium 0.00		Applicable	0.002 (MCL)	mg/L	<0.000500	<0.00100	<0.000800	<0.000800	<0.00800	<0.000800	<0.000800	<0.00400	<0.000800			
Ra-226 + Ra-228 (combined) 5	Not A	Applicable	5 (MCL)	pCi/L	0.201 +/- 0.213 U	0.206 +/- 0.318 U	0.449 +/- 0.289	0.550 +/- 0.308	0.201 +/- 0.260 U	0.00496 +/- 0.256 U	0.282 +/- 0.201 U	0.146 +/- 0.228 U	0.445 +/- 0.200			
Other Parameters																
Chemical Oxygen Demand (COD) Non	e Not A	Applicable	Not Applicable	mg/L												
Total Alkalinity as CaCO3 Non		Applicable	Not Applicable	mg/L												
Carbonate Alkalinity as CaCO3 Non			Not Applicable	mg/L									52.6			
Bicarbonate Alkalinity as CaCO3 Non		Applicable	Not Applicable	mg/L									<5.00			
Hydroxide Alkalinity Non		Applicable	Not Applicable	mg/L									25.3			
Iron, Total Non		Applicable	Not Applicable	mg/L												
Iron, Dissolved Non		Applicable	Not Applicable	mg/L												
Iron, Ferrous Non		Applicable	Not Applicable	mg/L												
Iron, Ferrous, Dissolved Non		Applicable	Not Applicable	mg/L												
Iron, Ferric Non		Applicable	Not Applicable	mg/L												
Iron, Ferric, Dissolved Non		Applicable	Not Applicable	mg/L									<0.220			
Magnesium Non Molybdenum, Dissolved Non		Applicable Applicable	Not Applicable Not Applicable	mg/L												
Molybdenum, Dissolved Non Nitrate as N 10		Applicable Applicable	Not Applicable	mg/L												
Potassium Non		Applicable	Not Applicable	mg/L mg/L									22			
Sodium Non		Applicable	Not Applicable	mg/L									523			
Specific Conductance (laboratory) Non			Not Applicable	umhos/cm												
Sulfide Non			Not Applicable	mg/L						<del></del>						
Field Parameters	io INOLF	, the linearie	110t / ipplicable	mg/L							]					
Temperature Non	na Not /	Applicable	Not Applicable	°C	19.74	24.14	19.59	I -	18.78	18.45	18.46	22.5	22.11	21.12	24.1	22.37
pH 6.5 - 8			Not Applicable	S.U.	10.88	10.45	10.95		10.88	10.45	10.6	10.55	10.54	10.74	9.71	10.41
Specific Conductance Non		Applicable Applicable	Not Applicable	μmhos/cm	2622	2884	2900		2854	2764	2698	2685	2716	2530	2568	2658
Dissolved Oxygen Non		Applicable	Not Applicable	mg/L	2.65	0.15	0.05		0.2	0.21	0.09	0.06	0.03	0.17	4.03	0.9
Oxidation-Reduction Potential Non		Applicable	Not Applicable	mV	-22.2	-41.7	-100		-225.5	-192.6	62.6	-11	28.2	-139.8	-65.1	-119.7
Turbidity Non			Not Applicable	NTU	0.33	0.61	0.33		0.15	0.39	0.36	1.03	1.21	0.22	0.02	0.02

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L: milligrams per liter.
- 3. pCi/L : picoCuries per liter. 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).
- 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.
- 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics. U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

  - UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise. J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



Douguestana	MCL or SMCL	Established Background	Established GWPS	Sample ID:	MW-18		V-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	DUP 3	MW-18	MW-18
Parameters	SIVICE	(Det. Mon.)	(Ass. Mon.)	Sample Date:	3-Oct-18	14-J	an-19	25-Apr-19	1-Oct-19	17-Jun-20	12-Oct-20	31-Mar-21	14-Oct-21	31-Mar-22	31-Mar-22	Jun-22	Oct-22
Detection Monitoring Parameters	s			Units	INITIAL ASSESSMENT MON.	(RESA	SSMENT MON. AMPLE) D FILTERED	FIRST 2019 ASSESSMENT MON.	SECOND 2019 ASSESSMENT MON.	FIRST 2020 ASSESSMENT MON.	SECOND 2020 ASSESSMENT MON.	FIRST 2021 ASSESSMENT MON.	SECOND 2021 ASSESSMENT MON.	ASSES	T 2022 SMENT DN.	FIRST 2022 ASSESSMENT MON. (RESAMPLE)	SECOND 2022 ASSESSMENT MON.
Boron	None	1.896	Not Applicable	mg/L	5.77 #	6.89	7.17	6.05	5.29	5.49	5.43	4.32	4.61	4.65	5.06		5.2
Calcium	None	670.30	Not Applicable	mg/L	25.1 #	31.8	30.8	33.1	25.6	21.6	20	19.3	19.3	23.9	25.3		17.7
Chloride	250	18.51	Not Applicable	mg/L	5.5 #	5.59	5.14	4.79	5.07	4.06	4.22	4.2	4.39	4.86	4.60		3.88
Fluoride	4	0.6359	Not Applicable	mg/L	1.37 #	1.32	1.44	1.25	1.47	1.28	1.66	1.71	1.90	2.10	1.92		1.84
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	9.8#	10.4		10.2	10.3	9.35	10.2	10.5	9.95	9.69	9.30		10.2
Sulfate	250	1,820	Not Applicable	mg/L	1090 #	1110	1120	933	1020	888	794	904	896	837	842		804
Total Dissolved Solids	500	2,006	Not Applicable	mg/L	1760 #	1630	1660	1680	1550	1340	1270	1260	1320	1,300	1,310		1250
Assessment Monitoring Paramet	ters						<u> </u>									<u>'</u>	
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.0008#	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		0.000555 J
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.00319#	0.0032	0.00325	0.00308	0.00264	0.00272	0.00276	0.00238	0.00299	0.00290	0.00302		0.00315
Barium	2	Not Applicable	2 (MCL)	mg/L	0.00374#	0.00393 J	0.00407	0.00401	0.00327 J	0.00294 J	0.00288 J	0.00305 J	0.00283 J	0.00305 J	0.00332 J		0.00269 J
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.0001 #	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.0001#	0.000374 J	0.000431 J	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.000298 J	0.000202 J	0.000207 J		<0.000200
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	0.000512 J#	<0.00040	<0.00040	0.000477 J	<0.000400	<0.000400	<0.000400	<0.000400	0.000968 J	<0.000400	0.000495 J		<0.000400
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	<0.0001#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Fluoride	4	Not Applicable	4 (MCL)	mg/L	1.37 #	1.32	1.44	1.25	1.47	1.28	1.66	1.71	1.90	2.10	1.92		1.84
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.0001#	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600		<0.000600
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.0105 J#	0.00290 J	0.00258 J	0.00173 J	0.00372 J	0.00226 J	0.00276 J	0.00339 J	0.00301 J	0.00329 J	0.00347 J		0.00257 J
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000100#	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.0000500 J	0.000247	<0.0000300	<0.0000300		<0.0000300
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	0.33#	0.333	0.332	0.342	0.257	0.194	0.18	0.195	0.209	0.206	0.222		0.183
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	0.0019 J#	0.00506	0.00501	0.00577	0.00166 J	0.0037	0.00347	0.00234	0.00137 J	0.00247	0.00157 J		0.00208
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0008#	0.000323 J	0.000563 J	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	0.387 +/- 0.253 U#	<0.77		<0.77	<0.71	<0.74	<0.71	<0.88	1.05	<0.79	<0.8		2.01
Other Parameters																	
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	8.9 J #	<5		<5.00	11.0 J		5.00 J	<5.00	9.00 J	5.00 J	5.00 J		6.00 J
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L						71	69.9	65.5	73.8	63.6	89.1		61.6
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		42.2				60.6	64.3	46.8	55.8	58.6	64.7		56.5
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5.00	<5	24.4		<5
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L		32.9				10.4	5.63	18.7	17.9	<5	<5		5.06
Iron, Total	None	Not Applicable	Not Applicable	mg/L						<0.0120	<0.0120	<0.0120	<0.0120	<0.0120	<0.0120		<0.0120
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L						<0.0120	<0.0120	<0.0120	<0.0120	<0.0120	<0.0120		<0.0120
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L						0.02(J)	<0.020	<0.02	<0.0200	<0.0200	<0.02		<0.0200
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L								<0.02	<0.0200 H	<0.02	<0.02		<0.0200
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L								<0.02	<0.0200	<0.02	<0.02		<0.0200
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L			0.475			0.444(1)	0.07	<0.02	<0.0200	<0.02	<0.02		<0.0200
Magnesium Malubdanum Diagaluad	None	Not Applicable	Not Applicable	mg/L		0.244	0.175 J			0.141(J)	0.27	0.426	0.152 J	0.559	0.587		0.181
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L	0.052.1#	0.075		 -0.450	 -0.0200	0.18	0.166	0.215	0.211	0.199	0.203		0.172
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.053 J #	0.075 J	<0.03	<0.150	<0.0300	<0.0600	<0.0300	<0.0300	0.0606 J	0.712	0.146 J		0.0851 J
Potassium	None	Not Applicable	Not Applicable	mg/L		22.3	21.9			15.9	14.6	13.6	15.0	14.6	15.3		14.5
Sodium	None	Not Applicable	Not Applicable	mg/L	0500#	603	510			376	348	324	329	391	406		381
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	2590 #	2520					2200	2090	2040	2,070	2,080		2090
Sulfide	None	Not Applicable	Not Applicable	mg/L						<1	<1	<1	<1.00	<1	<1		<1
Field Parameters		NI ( A	1 N1 ( A	20			1	1 <del>-</del> 05		1	1	1	22.7	17.0	1	1	
Temperature	None	Not Applicable	Not Applicable	°C	23.6	14		17.89	24.8	22.45	23.5	17	20.7	17.6			26
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	10.45	10.47		10.93	10.4	10.65	10.4	10.39	10.46	9.97			9.96
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	2632	2442		2486	2350	1998	1986	1999	2,041	1,962			1976
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.21	0.36		1.44	0.33	0.55	0.24	0.39	0.36	0.40			0.51
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	130.1	174.9		-152.8	-71.2	-140.3	-80.5	-49.7	-9.7	-0.8			-72.2
Turbidity	None	Not Applicable	Not Applicable	NTU	2.04	2.79	1.47	0.49	0.92	2.43	0.34	1	1.99	2.53			2.26

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
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- 3. pCi/L: picoCuries per liter. 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm : micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).
- 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.
- 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis. 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics. U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

  - UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise. J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
  - R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL or	Established Background	Established GWPS	Sample ID:	MW-19S	MW-19S	DUP-1	MW-19S	MW-19S	MW-19S	MW-19S	MW-19S	MW-19S	MW-19S	DUP 1	MW-19S (Shallow)	MW-19S (Deep)
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	13-Dec-16	26-Jan-17	26-Jan-17	3-Feb-17	28-Mar-17	7-Apr-17	31-May-17	9-Jun-17	10-Aug-17	18-May-18	18-May-18	2-Aug-18	10-Aug-18
7 41 411700070	1 -			Jampio Jato	BACKGROUND	BACKG	<u>'</u>	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	DETE	CTION	EVALUATION	VERIFICATION
Data stie w Manita viva v Dava vo stava				11:4	1	2	4	3	4	5	6	7	8	MOI	N. #1	SAMPLE	SAMPLE
Detection Monitoring Parameters	None	1.896	Not Applicable	Units ma/l	8.02	10.8	9.33	7.83	7.81	8.16	8.31	9.17	7.64	8.43	8.36	8.64	3.78
Boron Calcium	None	670.30	Not Applicable	mg/L mg/L	71.7	47.2	43.8	51.8	51.9	72.5	51.3	71.5	41.3	45.7	44	35	24.8
Chloride	250	18.51	Not Applicable	mg/L	16.1	17.6	17.3	15.8	16.1	17.8	14.3	15.2	15.7	14.5	14.6	15.1	14.9
Fluoride	4	0.6359	Not Applicable	mg/L	1.44 J*	1.51	1.44	1.3	1.32	17.0	1.23	1.23	1.32	1.3	1.3	1.34	1.3
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	10.4	11	10.9	10.7	10.8	10.7	10.9	10.8	10.8	10.5	10.4	9.7	10.5
Sulfate	250	1,708	Not Applicable	mg/L	1620	1620	1600	1530	1550	1560	1450	1510	1650	1630	1610	1520	1480
Total Dissolved Solids	500	2,505	Not Applicable	mg/L	2420	2420	2530	2460	2460	2340	2420	2410	2440	2560	2480	2390	2440
	<u>'</u>	2,000	тостррноавто	mg/L	2 120	2 120	2000	2100	2100	2010	2 120	2110	2110	2000	2100	2000	2110
Assessment Monitoring Paramet		Nat Ameliana	0.006 (MOL)		40.00400	40,000000	<b>40 000000</b>	<b>40 000000</b>	<b>40.000000</b>	<b>40.00400</b>	<b>40.000000</b>	<b>40.00400</b>	<b>40.000000</b>				1
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.00400	<0.000800	<0.000800	<0.000800	<0.000800	<0.00400	<0.000800	<0.00400	<0.000800				
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.00920 J	0.0073	0.00683	0.00728 J	0.0073	0.00837 J	0.00702	0.00681 J	0.00756				
Barium		Not Applicable	2 (MCL)	mg/L	0.0538	0.0192	0.0195	0.0215	0.0189	0.0249	0.0186	0.0233	0.0211				
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.000500	<0.000100	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100	<0.000500	<0.000100				
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.000500	<0.000100	<0.000100	<0.000100	0.000196 J	<0.000500	<0.000100	<0.000500	<0.000100				
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	<0.00250	<0.000500	<0.000500	U (0.00108)	<0.000500	<0.00250	<0.000500	<0.00250	<0.000500				
Cobalt Fluoride	None	Not Applicable Not Applicable	0.006 (ACL)	mg/L	0.000568 J 1.44 J*	<0.000100 1.51	<0.000100 1.44	0.000237 J	0.000103 J 1.32	<0.000500 1.1	<0.000100 1.23	0.000872 J 1.23	<0.000100 1.32	1.3	1.3	1.34	1.3
Lead	0.015		4 (MCL)	mg/L				1.3 0.000589 J	<0.000100	<0.000500		<0.000500					1
Lithium	0.015	Not Applicable	0.015 (MCL)	mg/L	0.000621 J <0.0150	<0.000100 <0.00300	<0.000100 <0.00300	<0.00300	<0.000100	<0.00500	<0.000100 <0.00300	<0.00500	0.000114 J <0.00300			<0.00300	<0.00300
Mercury	None 0.002	Not Applicable	0.235 (UTL) 0.002 (MCL)	mg/L	<0.00150	<0.00300	<0.00300	<0.00300	0.000100 UJ	<0.0150	<0.00300	<0.0150	<0.00300			1	
		Not Applicable	, ,	mg/L	0.466	0.484	0.483	0.435	0.481	0.586	0.495	0.607	0.469			0.384	0.112
Molybdenum	None 0.05	Not Applicable	0.1 (ACL)	mg/L	0.466 0.00616 J	0.464	0.463	0.435 0.00888 J	0.461	0.0131	0.00879	0.0152	0.00349				
Selenium Thallium	0.002	Not Applicable	0.05 (MCL)	mg/L	<0.00400	<0.000800	<0.00800	<0.00800	<0.000800	<0.00400	<0.00879	<0.00400	<0.00349				
Ra-226 + Ra-228 (combined)	5	Not Applicable Not Applicable	0.002 (MCL) 5 (MCL)	mg/L pCi/L	1.47 +/- 0.739	-0.0377 +/- 0.325 U							0.296 +/- 0.222 U				
Other Parameters	<u> </u>	Not Applicable	3 (IVICE)	роис	1.47 17-0.733	-0.0377 17- 0.323 0	0.0310 17- 0.204 0	0.403 17- 0.372 0	0.201 17- 0.211 0	0.121 1/- 0.233 0	0.130 17- 0.220 0	0.202 17- 0.190 0	0.230 17- 0.222 0			<u></u>	
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	ma/l				1			I						1
Total Alkalinity as CaCO3			Not Applicable	mg/L mg/L				-	-	-	-					-	-
-	None	Not Applicable											95.9				
Carbonate Alkalinity as CaCO3  Bicarbonate Alkalinity as CaCO3	None None	Not Applicable	Not Applicable	mg/L									85.8 <5.00				
Hydroxide Alkalinity	None	Not Applicable Not Applicable	Not Applicable	mg/L									46.2				
Iron, Total	None		Not Applicable	mg/L													
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L													
Iron, Ferrous		Not Applicable	Not Applicable	mg/L													
	None	Not Applicable	Not Applicable	mg/L													
Iron, Ferrous, Dissolved Iron, Ferric	None	Not Applicable	Not Applicable	mg/L													
	None	Not Applicable	Not Applicable	mg/L													
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L									<0.220				
Magnesium Malybdanum Disaalyad	None	Not Applicable	Not Applicable	mg/L													
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L													
Nitrate as N	None	Not Applicable	Not Applicable	mg/L									25.0				
Potassium	None	Not Applicable	Not Applicable	mg/L									35.9				
Sodium	None	Not Applicable	Not Applicable	mg/L									697				
Specific Conductance (laboratory) Sulfide	None None	Not Applicable	Not Applicable	umhos/cm													
	None	Not Applicable	Not Applicable	mg/L													
Field Parameters																	
Temperature	None	Not Applicable	Not Applicable	°C	17.71	15.41		15.44	18.96	18.56	21.58	20.76	24.37	20.38		26.67	24.71
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	11.14	11.16		11.16	11.09	11.08	10.8	10.95	10.72	11.09		10.55	10.56
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	3576	3585		3389	3602	3575	3546	3526	3552	3530		3587	3563
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.37	0.26		0.18	0.22	0.18	0.02	0.02	0.02	0.24		4.64	1.32
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-347.7	-310.2		-267.7	-299.3	-270.6	-235.7	-125.3	-215.4	-312.1		-227.4	-249
Turbidity	None	Not Applicable	Not Applicable	NTU	103	1.1		0.32	0.34	0.4	0.62	0.43	1.26	0.47		0.02	4.16

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L: milligrams per liter.
- 3. pCi/L : picoCuries per liter.
- 4. S.U.: Standard Units.
- 5. °C: degrees Celsius. 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).
- 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.

  12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
  - U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
  - UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
  - J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL or	Established Background	Established GWPS	Sample ID:	MW-19S	MW	<i>I-</i> 19S	MW-19S	MW-19S	MW-19S	DUP 2	MW-19S	MW-19S	DUP 3	MW-19S	MW	-19S	MW-19S
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	3-Oct-18	15-J	an-19	25-Apr-19	1-Oct-19	17-J	un-20	12-Oct-20	31-M	ar-21	15-Oct-21	1-Apr-22	Jun-22	Oct-22
Detection Monitoring Paramete	ers			Units	INITIAL ASSESSMENT MON.		SSMENT MON. AMPLE) D FILTERED	FIRST 2019 ASSESSMENT MON.	SECOND 2019 ASSESSMENT MON.	ASSES	T 2020 SSMENT ON.	SECOND 2020 ASSESSMENT MON.	FIRST ASSES MO	SMENT	SECOND 2021 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON. (RESAMPLE)	SECOND 2022 ASSESSMENT MON.
Boron	None	1.896	Not Applicable	mg/L	10.2 #	9.79	9.07	8.57	6.64	6.8	7.18	6.88	6.86	8.41	588	9.73		8.43
Calcium	None	670.30	Not Applicable	mg/L	35.3 #	50	49.6	52.4	40.4	43.6	42.1	40.7	42.3	35.3	41.6	44.2		40.7
Chloride	250	18.51	Not Applicable	mg/L	14.8 #	14.2	14.1	13.7	14.4	13.8	14	14.1	13.7	14	13.6	14.6		13.3
Fluoride	4	0.6359	Not Applicable	mg/L	1.24 #	1.27	1.59	1.13	1.37	1.15	1.04	1.38	1.46	1.54	1.57	1.66		1.59
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	9.9 #	10.4		10.5	10.6	10.2	9.88	10.9	10.8	10.6	10.8	10.8		10.8
Sulfate	250	1,708	Not Applicable	mg/L	1950 #	1640	1580	1520	1580	1490	1590	1640	1560	1560	1570	1,420		1480
Total Dissolved Solids	500	2,505	Not Applicable	mg/L	2490#	2500	2470	2440	2460	2300	2290	2340	2360	2310	2290	2,180		2210
Assessment Monitoring Param	eters																	
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.0008 #	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		<0.000400
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	<0.008 #	0.00634	0.00643	0.00673	0.00624	0.0061	0.00577	0.00588	0.00554	0.00452	0.00689	0.00689		0.0072
Barium	2	Not Applicable	2 (MCL)	mg/L	0.0106 J#	0.0216	0.0201	0.0197	0.0164	0.0221	0.0177	0.0162	0.0176	0.0152	0.0166	0.0189		0.0164
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.002 #	<0.00100	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	0.000133 J#	0.000386 J	0.000429 J	0.000219 J	0.000222 J	0.000387 J	0.000328 J	<0.000200	0.000238 J	<0.000200	0.000502 J	0.000380 J		<0.000200
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	<0.01 #	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	0.000930 J	0.000829 J		<0.000400
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.000102 J#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.000234 J		<0.000200
Fluoride	4	Not Applicable	4 (MCL)	mg/L	1.24 #	1.27	1.59	1.13	1.37	1.15	1.04	1.38	1.46	1.54	1.57	1.66		1.59
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	0.000116 J #	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600		<0.000600
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	<0.06 #	0.00148 J	0.00128 J	0.00192 J	0.00169 J	0.00134 J	0.00114 J	0.00102 J	0.00121 J	0.00144 J	0.00150 J	0.00249 J		0.00111 J
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150 #	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.0000450 J	0.0000460 J	0.000113 J	<0.0000300		<0.0000300
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	0.439#	0.472 0.011	0.463	0.462	0.377 0.0124	0.402	0.394	0.367	0.398	0.351	0.407 0.0113	0.445 0.0127		0.43
Selenium Thallium	0.05	Not Applicable	0.05 (MCL)	mg/L	0.00889 # <0.0008 #	<0.00200	0.00631 <0.000200	0.0141 <0.000200	<0.00200	0.00655 <0.000200	0.0064 <0.000200	0.0113 <0.000200	0.00857 <0.000200	0.00743 <0.000200	<0.000200	<0.00200		0.00944
Ra-226 + Ra-228 (combined)	5	Not Applicable Not Applicable	0.002 (MCL) 5 (MCL)	mg/L pCi/L	0.933 +/- 0.391 #	<0.98	~0.000200 	<0.79	<0.00200	<0.73	<0.72	<0.73	<0.87	<0.82	<0.00200	<0.82		<0.000200 1.82
Other Parameters	<u> </u>	140t Applicable	J (WOL)	роис	0.555 17- 0.551 #	10.00		10.73	10.74	10.70	10.12	10.70	-0.01	10.02	10.04	10.02		1.02
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	26.2	25		21	23			19	16	14.0 J	21.0	21.0		18
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L						128	130	132	135	133	150	136		130
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		59.8				92.6	98.7	89.2	63.8	69	77.3	53.6		61
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5	<5	<5.00	<5		<5
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L		81.2				35.1	31.4	42.6	71.6	64.4	73.0	82.4		68.7
Iron, Total	None	Not Applicable	Not Applicable	mg/L						0.0153(J)	<0.0120	<0.0120	<0.012	<0.012	0.0509 J	0.0554 J		<0.0120
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L						<0.0120	<0.0120	<0.0120	<0.012	<0.012	0.0210 J	<0.0120		<0.0120
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L						0.043(J)	0.330(J)	0.0310 J	<0.02	<0.02	0.0450 J	0.03 J		0.0230 J
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L									<0.02	<0.02	<0.0200 H	0.029 J		<0.02
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L									<0.02	<0.02	<0.0200	0.0254 J		<0.02
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L									<0.02	<0.02	0.0210 J	<0.02		<0.02
Magnesium	None	Not Applicable	Not Applicable	mg/L		0.121 J	0.0852 J			0.0553(J)	0.0510(J)	0.0346 J	0.0773 J	0.0681 J	0.0415 J	0.0836 J		0.0228 J
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L						0.373	0.383	0.37	0.457	0.398	0.440	0.406		0.413
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	<0.049 #	<0.03	0.117	<0.150	<0.0300	<0.0600	<0.0600	<0.150	<0.0600	<0.0600	<0.0600	0.102 J		<0.0300
Potassium	None	Not Applicable	Not Applicable	mg/L		38.2	37.7			35.2	34.1	33.7	33.9	29	34.6	37		37.7
Sodium	None	Not Applicable	Not Applicable	mg/L		801	774			644	598	610	639	545	462	723		752
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	2470 #	3530				4.50		3860	3500	3540	3370	3,570		3570
Sulfide	None	Not Applicable	Not Applicable	mg/L						1.52	<1	1.8	<1	<1	<1.00	<1		<1
Field Parameters																		
Temperature	None	Not Applicable	Not Applicable	°C	25.4	13.4		17.92	25.86	22.99		23.8	18.3		21.8	17.2		23.5
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	10.63	11.01		11.26	10.65	10.97		10.92	11.09		10.84	10.94		10.54
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	3610	3438		3524	3552	3309		3433	3406		3,342	3,309		3277
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.33	0.21		1.5	0.5	0.36		0.16	0.27		0.21	0.27		0.32
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	172.1	-162		-281.7	-252.4	-588.1		209.2	-191.7		-237.2	-244.4		-249.1
Turbidity	None	Not Applicable	Not Applicable	NTU	2.05	5.19	2.24	0.57	0.61	2.86		1.24	0.73		2.77	2.22		1.82

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L: milligrams per liter.
- 3. pCi/L : picoCuries per liter. 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).
- 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.

  12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis. 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
  - U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample. 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL or	Established Background	Established GWPS	Sample ID:	MW-20	MW-20	MW-20	DUP 1	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20 (Deep)
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	31-May-16	23-Aug-16	29-Sep-16	29-Sep-16	2-Dec-16	31-Jan-17	5-Apr-17	7-Jun-17	9-Aug-17	21-May-18	1-Aug-18
					BACKGROUND 1	BACKGROUND 2	BACKG	ROUND 3	BACKGROUND 4	BACKGROUND 5	BACKGROUND 6	BACKGROUND 7	BACKGROUND 8	DETECTION MON. #1	VERIFICATION SAMPLE
Detection Monitoring Parameter	s			Units											
Boron	None	1.896	Not Applicable	mg/L	0.704	1.11	1.06	0.945	1.02	1	0.58	0.784	0.643	0.813	1.2
Calcium	None	670.30	Not Applicable	mg/L	434	563	416	391	451	528	583	611 J*	382	355	552
Chloride	250	18.51	Not Applicable	mg/L	5.99 J*	5.79	4.85	4.8	4.44	5.4	6.77	6.00 J*	5.08	6.14	4.96
Fluoride	4	0.6359	Not Applicable	mg/L	0.322 J*	0.41	0.424	0.416	0.397	0.362	0.248	0.340 J*	0.349	0.323	0.309
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	6.94	7.6	7.4	7.3	7.3	7	6.8	6.7	6.7	6.8	6.9
Sulfate	250	1,363	Not Applicable	mg/L	1140	1110	1100	1110	1290	949	907	1020	1180	839	1060
Total Dissolved Solids	500	2,066	Not Applicable	mg/L	1710	1980	1860	1810	1980	1870	1750	1770	1760	1760	1980
Assessment Monitoring Parame	eters							·			<u>'</u>		·	<u> </u>	
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.000500	<0.000800	<0.00800	<0.000800	<0.00800	<0.00800	<0.00800	<0.00400	<0.000800		
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.00222	0.00101 J	0.00198 J	0.00199 J	<0.00400	0.000732 J	0.00174 J	<0.00400	0.000598 J		
Barium	2	Not Applicable	2 (MCL)	mg/L	0.0136	0.0151	0.0116	0.0109	0.0100 J	0.0122	0.0108	0.0128	0.00216		
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.00100	<0.000100	<0.000100	<0.000100	<0.00100	<0.000100	<0.000100	<0.000500	<0.000100		
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.000400	<0.000100	<0.000100	<0.000100	<0.00100	<0.000100	<0.000100	<0.00100	<0.000100		
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	<0.000500	<0.000500	<0.000500	<0.000500	<0.00500	<0.000500	<0.000500	<0.00500	<0.00250		
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	<0.000500	0.000327 J	0.000383 J	0.000366 J	<0.00100	0.000642 J	0.000215 J	<0.00100	<0.000500		
Fluoride	4	Not Applicable	4 (MCL)	mg/L	0.322 J*	0.41	0.424	0.416	0.397	0.362	0.248	0.340 J*	0.349	0.323	0.309
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.000200	<0.000100	<0.000100	<0.000100	<0.00100	<0.000100	<0.000100	<0.000500	<0.000500		
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.123	0.117	0.124	0.114	0.126 J	0.12	0.0962	0.112 J	0.110 J		0.109
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000100		
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	0.00120 J	0.00121 J	<0.00500	0.00126 J	<0.0100	<0.00100	<0.00100	<0.0100	<0.00500		<0.00100
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.000600	<0.000300	<0.000300	<0.000300	<0.00300	0.000633 J	<0.000300	<0.00300	<0.00150		
Thallium	0.002	Not Applicable	0.003 (MCL)	mg/L	<0.000500	<0.000800	<0.000800	<0.000800	<0.00800	<0.000800	<0.000300	<0.00300	<0.00400		<del></del>
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	1.04 +/- 0.357	1.61 +/- 0.395	1.10 +/- 0.359	1.66 +/- 0.377	1.46 +/- 0.421	0.863 +/- 0.381	1.29 +/- 0.322	0.969 +/- 0.294	0.670 +/- 0.261		<del></del>
Other Parameters		140t / tppilodbio	O (WIGE)	роис	1.04 17 0.007	1.01 17 0.000	1.10 17 0.000	1.00 17 0.077	1.40 17 0.421	0.000 17 0.001	1.20 17 0.022	0.000 17 0.204	0.070 17 0.201		
	l Ni	NI. 4 A P I. I.	Not Applicable	/1				1	П	1	TI TI TI TI TI TI TI TI TI TI TI TI TI T	II	1	Г	
Chemical Oxygen Demand (COD)	None	Not Applicable		mg/L											
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L											
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									<5.00		
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									259		
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L									<5.00		
Iron, Total	None	Not Applicable	Not Applicable	mg/L											
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L											
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L											
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L											
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L											
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L											
Magnesium	None	Not Applicable	Not Applicable	mg/L									20.9		
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L											
Nitrate as N	10	Not Applicable	Not Applicable	mg/L											
Potassium	None	Not Applicable	Not Applicable	mg/L									5.54		
Sodium	None	Not Applicable	Not Applicable	mg/L									86.1		
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm											
Sulfide	None	Not Applicable	Not Applicable	mg/L											
Field Parameters									*		45				
Temperature	None	Not Applicable	Not Applicable	°C	21.43	21.4	18.92		17.06	19.18	18.75	20.84	21.17	20.26	21.05
nH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	6.85	6.94	6.79		6.75	6.76	6.67	6.69	6.62	6.89	6.51
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	1742	2245	2332		2364	2259	2057	2088	2083	1999	2345
Dissolved Oxygen	None	Not Applicable	Not Applicable	•	0.47	1.76	0.05		0.25	0.21	0.35	0.07	0.1	0.27	1.43
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mg/L mV	-4.6	935	-101		-211.5	-167.1	60.7	-7.7	62.1	-57	54.1
Turbidity	None	Not Applicable	Not Applicable  Not Applicable	NTU	1.2	2.96	3.23		2.55	1.85	0.38	1.01	1.82	1.95	4.38
i si si si si si	140110	I NOT Whhileanie	I NOT Whhileanie	1110	1.4	2.30	ال ال		2.00	1.00	0.30	1.01	1.02	1.53	4.50

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L: milligrams per liter. 3. pCi/L: picoCuries per liter.
- 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL). 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.
- 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.

  - U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

    UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

  R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. #: Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL or	Established Background	Established GWPS	Sample ID:	MW-20	MW	<i>I-</i> 20	MW-20	MW-20	Dup 1	MW-20	MW-20	MW-20	MW-20	MW	<i>1</i> -20	MW-20
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	4-Oct-18	10-Ja	an-19	23-Apr-19	30-S	↓ ep-19	17-Jun-20	12-Oct-20	31-Mar-21	15-Oct-21	31-Mar-22	6-Jun-22	5-Oct-22
				Campie Date:	INITIAL ASSESSMENT MON.	INITIAL ASSES (RESA UNFILTERED	SSMENT MON. MPLE)	FIRST 2019 ASSESSMENT MON.	SECON ASSES	ND 2019 SSMENT ON.	FIRST 2020 ASSESSMENT MON.	SECOND 2020 ASSESSMENT MON.	FIRST 2021 ASSESSMENT MON.	SECOND 2021 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	SECOND 2022 ASSESSMENT MON.
Detection Monitoring Parameters		1 000	Ni t A Partit	/1	4.40.11	4.40	0.044	0.704	0.777	0.000	0.004	0.057	0.007	0.000	0.550	(RESAMPLE)	0.007
Boron	None	1.896	Not Applicable	mg/L	1.19#	1.19	0.911	0.721	0.777	0.668	0.624	0.857	0.927	0.930	0.550		0.837
Calcium	None	670.30	Not Applicable	mg/L	448#	398	386	327	368	331	320	312	309	325	324	 	358
Chloride	250	18.51	Not Applicable	mg/L	4.74 #	6.29 0.298	7.27	8.02	5.3	5.32	6.18	5.69	5.78	5.17 0.264	8.67	5.34 0.289	5.39
Fluoride	4	0.6359	Not Applicable	mg/L	0.326 #		0.304	0.294	0.34	0.311	0.22	0.336	0.279		<0.500^		0.209
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	7.4 #	7.17		7.35	6.67	6.76	6.55	6.73	6.91	7.94	1.5 <sup>^</sup>	7.6	7.03
Sulfate Total Dissolved Solids	250 500	1,363 2,066	Not Applicable	mg/L	1110 # 1900 #	977 1630	892 1530	794 1690	1060 1890	1080 1850	870	989	782 1490	1030 1850	1940^	732 1440	950 1,760
		2,000	Not Applicable	mg/L	1900 #	1030	1530	1090	1090	1000	1560	1710	1490	1000	1940*	1440	1,700
Assessment Monitoring Paramet												1					
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.0008#	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		<0.000400
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	<0.004 #	<0.000400	<0.000400	0.00107 J	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400		<0.000400
Barium	2	Not Applicable	2 (MCL)	mg/L	0.014 J #	0.0103	0.012	0.0131	0.0102	0.00931	0.0102	0.00927	0.00981	0.0124	0.0125		0.01
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.001 #	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.0001 #	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	<0.005#	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	0.000401 J	0.000592 J	0.000674 J		<0.000400
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.00102 J #	0.000414 J	0.000442 J	0.000449 J	<0.000200	<0.000200	<0.000200	0.000318 J	<0.000200	0.000234 J	0.00112 J		<0.000200
Fluoride	4	Not Applicable	4 (MCL)	mg/L	0.326#	0.298	0.304	0.294	0.34	0.311	0.22	0.336	0.279	0.264	<0.500^	0.289	0.209
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.001#	<0.000600	<0.000600	<0.000600	<0.000600	0.00964	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600		<0.000600
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.121 J #	0.0969	0.0959	0.0827	0.101	0.0944	0.0895	0.0891	0.0781	0.105	0.0693		0.108
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.00015#	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.0000650 J	0.000224	<0.0000300		<0.0000300
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	<0.001 #	0.000616 J	0.000663 J	0.000835 J	<0.000600	<0.000600	0.000727 J	0.000677 J	0.00220 J	<0.000600	0.000659 J		<0.000600
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.0003#	<0.0011	0.00142 J	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110		<0.00110
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0008#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	0.888 +/- 0.291 #	<0.72		0.91	0.82	<0.74	<0.72	1.33	0.85	0.91	<0.87		3.39
Other Parameters																	
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	<5	<5.00		<5.00	<5.00	<5.00		6.00 J	5.00 J	10.0 J	7.00 J ^	<5.00	<5.00
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L													
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		<5											
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		359											
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L		<5											
Iron, Total	None	Not Applicable	Not Applicable	mg/L													
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L													
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L													
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L							<b></b>						
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L													
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L													
Magnesium	None	Not Applicable	Not Applicable	mg/L		29.2	26.3				<b></b>						
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L													
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	<0.049#	<0.03	< 0.03	<0.0300	0.105	0.0616 J	<0.0300	<0.0300	<0.0300	0.0434 J	972^	0.0769 J	<0.0300
Potassium	None	Not Applicable	Not Applicable	mg/L		6.72	6.01										
Sodium	None	Not Applicable	Not Applicable	mg/L		70.2	84.7										
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	2050 #	1960						2230	1890	2140	23700^	2,170	2,270
Sulfide	None	Not Applicable	Not Applicable	mg/L													
Field Parameters								· · · · · · · · · · · · · · · · · · ·									
Temperature	None	Not Applicable	Not Applicable	°C	24.9	15.2		21.57	23.46		22.06	21.3	18.61	20.9	16.3	22.9	22.5
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	6.71	6.65		7	6.83		6.86	6.81	7.07	6.80	6.95	6.84	6.62
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	2330	1979		1937	2240		1795	1981	2605	2,140	1,342	1,743	2,087
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.86	0.46		1.08	0.56		1.11	0.28	0.46	0.49	0.30	0.39	0.49
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	29.7	-13		-4.3	-15.7		-32.8	29	7.6	58.8	-3.4	28	-40.4
Turbidity	None	Not Applicable	Not Applicable	NTU	8.14	37.7	2.09	0.38	2.9		4.04	2.79	3.99	2.44	0.82	1.57	2.01
Notes:					<u> </u>	<u> </u>		<u> </u>		<u> </u>	<del>_</del>	2.13		<u>-</u>			

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L : milligrams per liter. 3. pCi/L: picoCuries per liter.
- 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL). 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.
- 12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.

  - U(): The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

    UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
  - J\*: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

    R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. #: Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MCL or	Established Background	Established GWPS	Sample ID:	MW-21	MW-21	DUP 1	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21 (Deep)
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	26-May-16	27-Jul-16	27-Jul-16	28-Sep-16	1-Dec-16	31-Jan-17	5-Apr-17	6-Jun-17	8-Aug-17	17-May-18	10-Aug-18
				·	BACKGROUND 1		ROUND 2	BACKGROUND 3	BACKGROUND 4		BACKGROUND 6	BACKGROUND 7		DETECTION MON. #1	VERIFICATION SAMPLE
Detection Monitoring Parame	ters			Units											
Boron	None	1.896	Not Applicable	mg/L	2.9	2.76	2.86	2.59	3.98	4.41	3.43	3.36	3.07 J	2.95	2.99
Calcium	None	670.30	Not Applicable	mg/L	148	186	205	156	251	176	214	149	165	136	147
Chloride	250	18.51	Not Applicable	mg/L	22.9	22.2	21.8	23.1	22.3	21.5	20.5	21.4	17.8	22	21.9
Fluoride	4	0.6359	Not Applicable	mg/L	0.594	0.752	0.801	0.582	0.564	0.498	0.49	0.559	0.779	0.53	0.453
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	7.56	7.98	8.02	7.9	7.9	7.5	7.4	7.3	7.4	7.5	7.5
Sulfate	250	1,591	Not Applicable	mg/L	1370	1350	1420	1500	1500	1360	1470	1400	1250	1480	1410
Total Dissolved Solids	500	2,546	Not Applicable	mg/L	2410	2380	2360	2510	2430	2440	2320	2430	2320	2570	2560
Assessment Monitoring Para		, , , ,		<u> </u>				<u></u>	,,						
		Not Applicable	0.006 (MCL)	m a /l	<0.000500	<0.000E00	<0.000500	<0.000000	<0.00400	<0.000000	<0.000000	<0.000000	<0.000000		
Antimony	0.006 0.010	Not Applicable	0.006 (MCL)	mg/L	<0.000500 0.00259	<0.000500	<0.000500 0.00154 J	<0.000800 0.00145 J	<0.00400 <0.00200	<0.000800 0.000960 J	<0.000800 0.00119 J	<0.000800	<0.000800 0.00155 J		
Arsenic		Not Applicable	0.01 (MCL)	mg/L		0.00140 J						<0.000400			
Barium	2	Not Applicable	2 (MCL)	mg/L	0.0144	0.0131	0.0128	0.012	0.0202	0.0121	0.0114	0.0107	0.11		
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.00100	<0.00100	<0.00100	<0.000100	<0.000500	<0.000100	<0.000100	<0.000100	<0.00100		
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.000400	<0.000400	<0.000400	<0.000100	<0.000500	<0.000100	<0.000100	<0.000100	<0.00100		
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	0.000586 J	<0.000500	<0.000500	<0.000500	<0.00250	<0.000500	<0.000500	<0.000500	<0.000500		
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.000571 J	<0.000500	<0.000500	0.000403 J	0.000555 J	0.000434 J	0.000316 J	<0.000100	0.000281 J	0.53	0.452
Fluoride	0.045	Not Applicable	4 (MCL)	mg/L	0.594	0.752	0.801	0.582	0.564	0.498	0.49	0.559	0.779		0.453
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.000200	<0.000200	<0.000200	<0.000100	<0.000500	<0.000100	<0.000100	<0.000100	<0.000100		
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.163	0.129	0.126	0.13	0.224 J	0.143	0.137	0.131	0.147		0.121
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150		
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	0.00385	0.00193 J	0.00188 J	0.00212	<0.00500	0.0023	0.002	0.00175 J	0.00152 J		<0.00100
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.000600	<0.000600	<0.000600	<0.000300	<0.00150	0.000512 J	<0.000300	0.00391	<0.000300		
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000500	<0.000500	<0.000500	<0.000800	<0.00400	<0.000800	<0.000800	<0.000800	<0.000800		
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	1.99 +/- 0.327	1.62 +/- 0.384	1.91 +/- 0.376	2.17 +/- 0.422	1.87 +/- 0.494	2.19 +/- 0.444	1.26 +/- 0.315	2.06 +/- 0.383	0.973 +/- 0.258		
Other Parameters	1		L. N. J. J. A P J. L.				1	1	1	1	1	1			
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L											
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L											
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									<5.00		
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									312		
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L									<5.00		
Iron, Total	None	Not Applicable	Not Applicable	mg/L											
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L											
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L											
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L											
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L											
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L											
Magnesium	None	Not Applicable	Not Applicable	mg/L									35.1		
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L											
Nitrate as N	10	Not Applicable	Not Applicable	mg/L											
Potassium	None	Not Applicable	Not Applicable	mg/L									9.21		
Sodium	None	Not Applicable	Not Applicable	mg/L									791		
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm											
Sulfide	None	Not Applicable	Not Applicable	mg/L											
Field Parameters								T		1	1				
Temperature	None	Not Applicable	Not Applicable	°C	20.64	22.37		21.75	19.28	20.91	18.26	22.05	20.69	21.36	25.09
nH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.37	7.32		7.32	7.28	7.26	6.19	7.2	7.11	7.28	6.91
Specific Conductance	None	Not Applicable	Not Applicable	s.σ. μmhos/cm	3111	3578		3600	3586	3625	3555	3493	3421	3504	3544
•				<b>.</b>				0.07	0.17	0.27	0.32	0.12	0.07	0.16	1.45
Dissolved Oxygen Oxidation Poduction Potential	None	Not Applicable	Not Applicable	mg/L	0.24	0.45				-182	-				
Oxidation-Reduction Potential Turbidity	None None	Not Applicable	Not Applicable	mV NTU	62.8	-72.7 0.32		-92.6	-239 0.29	0.27	247.3 0.84	-12.6 0.74	59.8 1.07	-45.2 0.28	99
Notes	INOILE	Not Applicable	Not Applicable	INTO	2.1	0.32		0.3	0.29	0.27	0.04	0.74	1.07	0.26	0.5

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
- 2. mg/L: milligrams per liter. 3. pCi/L: picoCuries per liter.
- 4. S.U.: Standard Units.
- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL). 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.

  12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
  - U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
  - UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
  - J\* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- R: The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample. 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.



	MOI	Established	Established																
	MCL or	Background	GWPS	Sample ID:	MW-21	MV	V-21	MW-21	DUP-2	MW-21	DUP-2	MW-21	MW-21	MW-21	MW-21	DUP 3	MV	<i>I</i> -21	MW-21
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	3-Oct-18	15-J	an-19	24-A	pr-19	2-0	ct-19	17-Jun-20	12-Oct-20	31-Mar-21	13-0	ct-21	30-Mar-22	6-Jun-22	5-Oct-22
Detection Monitoring Paramete	ers			Units	INITIAL ASSESSMENT MON.		SSMENT MON. MPLE) FILTERED	ASSES	T 2019 SSMENT ON.	ASSES	ND 2019 SSMENT ON.	FIRST 2020 ASSESSMENT MON.	SECOND 2020 ASSESSMENT MON.	FIRST 2021 ASSESSMENT MON.	SECOND 2021	ASSESSMENT DN.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON. (RESAMPLE)	SECOND 2022 ASSESSMENT MON.
Boron	None	1.896	Not Applicable	mg/L	3.07 #	3.96	3.92	3.79	3.63	2.63	2.89	2.84	2.77	2.42	2.53	2.31	3.17		2.36
Calcium	None	670.30	Not Applicable	mg/L	152 #	187	187	145	142	146	155	139	141	154	128	135	173		140
Chloride	250	18.51	Not Applicable	mg/L	21.9#	22.1	22	20.6	19.8	22.1	22.2	21.8	22.8	23.3	21.5	22.1	23^	22.4	21.8
Fluoride	4	0.6359	Not Applicable	mg/L	0.458#	0.438	2.05	0.513	0.505	0.537	0.509	0.524	0.470 J	0.578	0.411	0.471	0.683^	0.543	0.445
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	7.9 #	6.89		7.77	7.74	7.58	7.12	7.07	7.64	7.28	7.28	7.43	1.64^	7.57	7.42
Sulfate	250	1,591	Not Applicable	mg/L	1610#	1670	1710	1440	1530	1560	1530	1470	1780	1660	1670	1520	2340^	1,610	1,440
Total Dissolved Solids	500	2,546	Not Applicable	mg/L	2650 #	2740	2720	2550	2650	2700	2720	2470	2660	2650	2660	2560	3500^	2,660	2,440
Assessment Monitoring Param	neters									·									
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.0008#	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	0.000545 J	<0.000400		<0.000400
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	<0.008 #	0.00329	0.00223	0.00112 J	0.00136 J	0.000638 J	0.000574 J	0.000551 J	0.000536 J	0.000534 J	0.000539 J	0.000521 J	0.000695 J		0.000569 J
Barium	2	Not Applicable	2 (MCL)	mg/L	0.0137 J#	0.0182	0.0176	0.0127	0.0117	0.00999	0.0111	0.0106	0.0107	0.0112	0.0102	0.0105	0.0139		0.00932
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.002 #	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.0001#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200		<0.000200
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	<0.01#	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	0.000669 J		<0.000400
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.000216 J#	0.00175 J	0.00140 J	0.000407 J	0.000321 J	0.000227 J	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.000620 J		<0.000200
Fluoride	4	Not Applicable	4 (MCL)	mg/L	0.458 #	0.438	2.05	0.513	0.505	0.537	0.509	0.524	0.470 J	0.578	0.411	0.471	0.683^	0.543	0.445
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.0001#	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600		<0.000600
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.164 J #	0.157	0.16	0.14	0.134	0.118	0.129	0.14	0.123	0.137	0.125	0.114	0.143		0.144
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.00015#	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.0000380 J	<0.0000300	0.0000330 J	<0.0000300		<0.0000300
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	<0.001#	0.00161 J	0.00160 J	0.00131 J	0.00118 J	0.00105 J	0.00184 J	0.00103 J	0.00103 J	0.000902 J	0.000677 J	0.000876 J	0.00172 J		<0.000600
Selenium Thallium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.0003#	<0.0011	<0.0011	<0.00110	0.00111 J <0.000200	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110 <0.000200	<0.00110	<0.00110 <0.000200	<0.00110		<0.00110
Ra-226 + Ra-228 (combined)	0.002	Not Applicable Not Applicable	0.002 (MCL) 5 (MCL)	mg/L pCi/L	<0.0008 # 3.41 +/- 0.496 #	<0.000200 6.29	<0.000200	<0.000200 2.24	1.67	<0.000200 1.59	<0.000200 2.57	<0.000200 3.09	<0.000200 2.38	2.44	<0.000200 2.94	2.58	<0.000200 2.58		<0.000200 3.28
Other Parameters	U	14017 (βρίιοαδίο	O (IVIOL)	POWE	0.41 17 0.400 11	0.20		2.27	1.07	1.00	2.07	3.09	2.30	2.77	2.04	2.00	2.00		0.20
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	<5 #	<5		<5.00	<5.00	<5.00	7.00 J		<5.00	<5.00	<5.00	7.00 J	5.00 J ^	<5.00	16
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L															
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	<b></b>	<5													
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		393													
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L		<5													
Iron, Total	None	Not Applicable	Not Applicable	mg/L															
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L															
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L															
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L															
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L															
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L															
Magnesium	None	Not Applicable	Not Applicable	mg/L		62.1	62.3												
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L															
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.449#	0.14	0.145	1.16	1.36	0.329	0.467	<0.150	<0.150	0.961	0.207	0.168 J	687^	0.399	0.28
Potassium	None	Not Applicable	Not Applicable	mg/L		12	11.8												
Sodium	None	Not Applicable	Not Applicable	mg/L		684	688												
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	3120 #	3610							3940	3550	3620	3480	22000^	9,390	3,530
Sulfide	None	Not Applicable	Not Applicable	mg/L								<u></u>							
Field Parameters										1		Tr.							
Temperature	None	Not Applicable	Not Applicable	°C	24	13.8		18.12		24.38		23.17	23.2	15.44	21.3		13.8	25	24.1
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.13	7.1		7.42		7.29		7.23	7.26	7.43	7.23		7.44	7.28	7.06
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	3627	3585		3533		3633		3352	3516	4806	3,262		2,769	3542	3355
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.43	0.59		1.23		0.64		0.65	0.48	5	0.31		0.43	0.63	0.51
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	45.9	-67.1		84		91.9		-38	119.3	25.6	-212.1		-33.3	47.7	52.9
Turbidity	None	Not Applicable	Not Applicable	NTU	2.38	3.3	1.11	0.44		0.26		2.04	0.52	1.27	1.33		0.68	1.3	3.27

- 1. MCL: Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
- The MCL value for lead is the EPA's Action Level.
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- 5. °C: degrees Celsius.
- 6. μmhos/cm: micromhos per centimeter.
- 7. mV : millivolts.
- 8. NTU: Nephelometric Turbidity Unit.
- 9. < : Analyte not detected at the laboratory method detection limit (MDL).
- 10. J: Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
- 11. Cells shaded in blue indicate results that are above the laboratory MDL.

  12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
- 13. --- : no analysis performed.
- 14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
  - U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
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- 15. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.
- 16. # : Data from Initial Assessment Monitoring determined to be invalid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered and unfiltered analysis from January 2019 is appropriate for statistical evaluation.
- 17. ^ : Data for select parameters from the First 2022 Assessment Monitoring were determined to not be valid due to use of inappropriate preservative. Resampling for these was conducted in June 2022. For these, data from June 2022 is appropriate for statistical evaluation.

