

PO Box 429

Anadarko, OK 73005

June 28, 2022

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 First 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 first 2022 assessment monitoring was conducted between March 29 and April 1, 2022. During QA/QC evaluation of the data, it was determined that at monitoring wells MW-3, MW-5s, MW-16, MW-17, MW-20, and MW-21 (for the Landfill CCR Unit) and at monitoring wells MW-9, MW-11, MW-22A, MW-23A, MW-24, and MW-25R (for the Surface Impoundment CCR Unit) samples for chloride, fluoride, pH, sulfate, TDS, and for some parameters utilized to evaluate corrective measures were inadvertently placed into inappropriately preserved containers. Because of this, and as part of the first 2022 assessment monitoring, the above referenced monitoring wells were resampled between June 6 and June 7, 2022 for the affected analytes. The lab analytical results from the March 29/April 1, 2022 event for affected analytes were not used for comparison to background or Ground Water Protection Standards (GWPS) and will not be used for future statistical evaluation.

Based upon review of data from the first 2022 assessment monitoring meeting QA/QC standards, WFEC has identified constituents listed in Appendix B of Oklahoma Administrative Code Chapter 517, <u>Disposal of Coal Combustion Residuals from Electric Utilities</u> (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),

Alfalfa Electric Cooperative • Altus Air Force Base • Canadian Valley Electric Cooperative • Central Valley Electric Cooperative • Choctaw Electric Cooperative • Cimarron Electric Cooperative • CKenergy Electric Cooperative • Cotton Electric Cooperative • East Central Oklahoma Electric Cooperative • Farmers' Electric Cooperative • Harmon Electric Association • Kay Electric Cooperative • Kiamichi Electric Cooperative • Lea County Electric Cooperative • Northfork Electric Cooperative • Northwestern Electric Cooperative • Oklahoma Electric Cooperative • Red River Valley Rural Electric Association • Roosevelt County Electric Cooperative • Rural Electric Cooperative • Southeastern Electric Cooperative • Southwest Rural Electric Association

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Ms. Hillary Young June 28, 2022 Page 2 of 2

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 March 29- April 1, 2022 sampling and for the June 2022 resample 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 first 2022 assessment monitoring are included in **Attachment B**.

Molybdenum is consistently 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.

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,

flitcher

Kent Fletcher Environmental Coordinator

cc: John McCreight / WFEC Chris Schaefer and Bert Smith / Altamira-US, LLC.

# ATTACHMENT A

# FIRST 2022 ASSESSMENT MONITORING LABORATORY REPORT (LANDFILL CCR UNIT)



10450 Stancliff Rd. Suite 210 Houston, TX 77099 T: +1 281 530 5656 F: +1 281 530 5887

June 22, 2022

Bert Smith Altamira 525 central park Dr Suite 500 Oklahoma City, OK 73013

Work Order: HS22040016

Laboratory Results for: WFEC CCR/Landfill

Dear Bert Smith,

ALS Environmental received 13 sample(s) on Apr 01, 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 Ragen Giga Project Manager

alsglobal.com

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#### Date: 22-Jun-22

# Client:AltamiraProject:WFEC CCR/LandfillWork Order:HS22040016

# SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22040016-01	MW-14A	Water		30-Mar-2022 15:29	01-Apr-2022 09:40	
HS22040016-02	MW-15A	Water		30-Mar-2022 12:22	01-Apr-2022 09:40	
HS22040016-03	MW-21	Water		30-Mar-2022 17:33	01-Apr-2022 09:40	
HS22040016-04	MW-3	Water		30-Mar-2022 15:51	01-Apr-2022 09:40	
HS22040016-05	MW-5S	Water		31-Mar-2022 15:31	02-Apr-2022 09:45	
HS22040016-06	MW-7S	Water		01-Apr-2022 19:29	02-Apr-2022 09:45	
HS22040016-07	MW-13	Water		01-Apr-2022 11:54	02-Apr-2022 09:45	
HS22040016-08	MW-16	Water		01-Apr-2022 13:31	02-Apr-2022 09:45	
HS22040016-09	MW-17	Water		31-Mar-2022 17:22	02-Apr-2022 09:45	
HS22040016-10	MW-18	Water		31-Mar-2022 17:08	02-Apr-2022 09:45	
HS22040016-11	MW-19S	Water		01-Apr-2022 13:35	02-Apr-2022 09:45	
HS22040016-12	MW-20	Water		31-Mar-2022 19:20	02-Apr-2022 09:45	
HS22040016-13	DUP 3	Water		31-Mar-2022 17:08	02-Apr-2022 09:45	

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# Client: Altamira Project: WFEC CCR/Landfill Work Order: HS22040016

#### **CASE NARRATIVE**

#### Work Order Comments

• Report Revised on May 23,2022 to attach Revised Sub Data Report from ALS Fort Collins.(RAD data was inadvertently not reported as combined 226/228 on the original report submitted)

Sample ID's - MW-5S, MW-16, MW-17 & MW-20 Radium 226 Metals pH>2 (7) Preserved with 4ml HNO3 on 4/2/2022 @12:00pm Lot # 318173210 - After preservation pH (1)

The analyses for Radium-226 and Radium-228 were subcontracted to ALS Environmental in Fort Collins, CO. Final report attached.

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.

#### Metals by Method SM3500FED

#### Batch ID: R406808,R406809,R405511,R405513,R405615,R405619

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

# Metals by Method SW7470A

#### Batch ID: 177568

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

#### Metals by Method SW6020A

#### Batch ID: 177562

#### Sample ID: MW-19S (HS22040016-11MS)

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

#### Batch ID: 177564

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

#### Wet Chemistry by Method E300

#### Batch ID: R405613

#### Sample ID: HS22031336-03MS

• MS and MSD are for an unrelated sample

#### Batch ID: R406347

#### Sample ID: HS22040585-02MS

• MS and MSD are for an unrelated sample

#### WetChemistry by Method SM4500H+ B

#### Batch ID: R406522

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

#### **ALS Houston, US**

**CASE NARRATIVE** 

Client: Altamira Project: WFEC CCR/Landfill Work Order: HS22040016

# WetChemistry by Method SM4500 S2-F

#### Batch ID: R406135,R406136

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

#### WetChemistry by Method SM2320B

#### Batch ID: R406334

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

# WetChemistry by Method E410.4

#### Batch ID: R406426

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

# WetChemistry by Method M2510 B

#### Batch ID: R405864, R405967

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

#### WetChemistry by Method M2540C

#### Batch ID: R405818,R406177

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

# WetChemistry by Method E300

#### Batch ID: R405597

#### Sample ID: DUP 3 (HS22040016-13)

• The reporting limit(s) is/are elevated due to dilution for high concentrations of SO4

#### Sample ID: MW-13 (HS22040016-07)

• The reporting limit(s) is/are elevated due to dilution for high concentrations of SO4

#### Sample ID: MW-17 (HS22040016-09)

• The reporting limit(s) is/are elevated due to dilution for high concentrations of SO4

#### Sample ID: MW-18 (HS22040016-10)

• The reporting limit(s) is/are elevated due to dilution for high concentrations of SO4

# Sample ID: MW-19S (HS22040016-11)

• The reporting limit(s) is/are elevated due to dilution for high concentrations of SO4

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### **ALS Houston, US**

**CASE NARRATIVE** 

Client:AltamiraProject:WFEC CCR/LandfillWork Order:HS22040016

# WetChemistry by Method E300

#### Batch ID: R405587

#### Sample ID: MW-14A (HS22040016-01)

• The reporting limit(s) is/are elevated due to dilution for high concentrations of SO4

#### Sample ID: MW-15A (HS22040016-02)

• The reporting limit(s) is/are elevated due to dilution for high concentrations of SO4

#### Sample ID: HS22031619-07MS/HS22031669-03MS

• MS and MSD are for an unrelated sample

#### Batch ID: R405613

#### Sample ID: MW-17 (HS22040016-09)

- Sample dilution was performed outside of hold time.
- Sample originally ran withing holding time at 5X, re-analyzed out of holding time at 50X dilution due to high concentration of Nitrate.

# Batch ID: R406349

#### Sample ID: MW-21 (HS22040016-03MS)

- 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)
- The recovery of the Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) associated with this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS/MSD may be due to sample matrix interference. (Fluoride)

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ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION E SM3500FED	BY I	Method:	SM3500FED				Analyst: JHD
Ferric Iron	0.119		0.0200	0.0500	mg/L	1	19-Apr-2022 10:04
FERRIC IRON (DISS)- BY CALCULA BY SM3500FED	TION I	Nethod: dis)	SM3500FED solved)				Analyst: JHD
Ferric Iron, Dissolved	0.0470	J	0.0200	0.0500	mg/L	1	19-Apr-2022 10:07
ICP-MS METALS BY SW6020A		Method	I:SW6020A		Prep:SW3010A /	13-Apr-2022	Analyst: JC
Antimony	U		0.000400	0.00200	mg/L	1	15-Apr-2022 21:58
Arsenic	U		0.000400	0.00200	mg/L	1	15-Apr-2022 21:58
Barium	0.0120		0.00190	0.00400	mg/L	1	15-Apr-2022 21:58
Beryllium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 21:58
Boron	0.918		0.110	0.200	mg/L	10	18-Apr-2022 12:23
Cadmium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 21:58
Calcium	330		0.340	5.00	mg/L	10	18-Apr-2022 12:23
Chromium	U		0.000400	0.00400	mg/L	1	15-Apr-2022 21:58
Cobalt	0.00120	J	0.000200	0.00500	mg/L	1	15-Apr-2022 21:58
Iron	0.249		0.0120	0.200	mg/L	1	15-Apr-2022 21:58
Lead	U		0.000600	0.00200	mg/L	1	15-Apr-2022 21:58
Lithium	0.180		0.00100	0.00500	mg/L	1	15-Apr-2022 21:58
Magnesium	29.2		0.0100	0.200	mg/L	1	15-Apr-2022 21:58
Molybdenum	U		0.000600	0.00500	mg/L	1	15-Apr-2022 21:58
Potassium	8.73		0.0180	0.200	mg/L	1	15-Apr-2022 21:58
Selenium	U		0.00110	0.00200	mg/L	1	15-Apr-2022 21:58
Sodium	503		0.140	2.00	mg/L	10	18-Apr-2022 12:23
Thallium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 21:58
DISSOLVED METALS BY SW6020A	Meth	od:SW6	020A (dissol	lved)	Prep:SW3010A /	13-Apr-2022	Analyst: JC
Iron	0.189	J	0.0120	0.200	mg/L	1	13-Apr-2022 19:51
Molybdenum	U		0.000600	0.00500	mg/L	1	13-Apr-2022 19:51
MERCURY BY SW7470A		Method	I:SW7470A		Prep:SW7470A /	13-Apr-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Apr-2022 14:16
ANIONS BY E300.0, REV 2.1, 1993		Meth	od:E300				Analyst: YP
Chloride	13.8		1.00	2.50	mg/L	5	01-Apr-2022 12:00
Fluoride	0.406	J	0.250	0.500	mg/L	5	01-Apr-2022 12:00
Nitrogen, Nitrate (As N)	0.484	J	0.150	0.500	mg/L	5	01-Apr-2022 12:00
Sulfate	1,610		10.0	25.0	mg/L	50	12-Apr-2022 19:54
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Metho	od:E410.4				Analyst: TH
Chemical Oxygen Demand	6.00	J	5.00	15.0	mg/L	1	13-Apr-2022 17:00
SPECIFIC CONDUCTANCE BY SM 2 2011	2510B-	Metho	d:M2510 B				Analyst: TH
Specific Conductivity	3,490		5.00	5.00	umhos/cm @ 25.0 °C	1	07-Apr-2022 10:00

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Client:	Altamira	ANALYTICAL REPORT
Project:	WFEC CCR/Landfill	WorkOrder:HS22040016
Sample ID:	MW-14A	Lab ID:HS22040016-01
Collection Date:	30-Mar-2022 15:29	Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY S -2011	SM2540C	Method:	M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	2,690		5.00	10.0	mg/L	1	05-Apr-2022 15:25
ALKALINITY BY SM 2320B-2011		Method:	SM2320B				Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	330		5.00	5.00	mg/L	1	12-Apr-2022 15:45
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	12-Apr-2022 15:45
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	12-Apr-2022 15:45
Alkalinity, Total (As CaCO3)	330		5.00	5.00	mg/L	1	12-Apr-2022 15:45
FERROUS IRON BY SM3500 FE B	; I	Method:SN	M3500FED				Analyst: AP
Ferrous Iron	0.130		0.0200	0.0500	mg/L	1	01-Apr-2022 12:05
FERROUS IRON BY SM3500 FE D	) Method:SM3500FED (dissolved)						Analyst: AP
Ferrous Iron, Dissolved	0.142		0.0200	0.0500	mg/L	1	01-Apr-2022 12:08
SULFIDE BY SM4500 S2-F-2011	N	lethod:SN	14500 S2-F				Analyst: JHD
Sulfide	U		1.00	1.00	mg/L	1	06-Apr-2022 17:00
PH BY SM4500H+ B-2011	Ν	lethod:SN	/4500H+ B				Analyst: MZD
рН	7.99	Н	0.100	0.100	pH Units	1	14-Apr-2022 14:15
Temp Deg C @pH	21.1	Н	0	0	°C	1	14-Apr-2022 14:15
SUBCONTRACT ANALYSIS - RAI 226	MUIC	Metho	od:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16
SUBCONTRACT ANALYSIS - RAI	DIUM 228	Metho	od:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16

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Client:	Altamira	ANALYTICAL REPORT
Project:	WFEC CCR/Landfill	WorkOrder:HS22040016
Sample ID:	MW-15A	Lab ID:HS22040016-02
Collection Date:	30-Mar-2022 12:22	Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION SM3500FED	BY I	Method:	SM3500FED				Analyst: JHD
Ferric Iron	0.0360	J	0.0200	0.0500	mg/L	1	19-Apr-2022 10:04
FERRIC IRON (DISS)- BY CALCULA BY SM3500FED	ATION I	Method: (dis	SM3500FED solved)				Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	19-Apr-2022 10:07
ICP-MS METALS BY SW6020A		Method	:SW6020A		Prep:SW3010A / 1	13-Apr-2022	Analyst: JC
Antimony	U		0.000400	0.00200	mg/L	1	15-Apr-2022 22:00
Arsenic	0.000661	J	0.000400	0.00200	mg/L	1	15-Apr-2022 22:00
Barium	0.0222		0.00190	0.00400	mg/L	1	15-Apr-2022 22:00
Beryllium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:00
Boron	3.35		0.110	0.200	mg/L	10	18-Apr-2022 12:25
Cadmium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:00
Calcium	119		0.0340	0.500	mg/L	1	15-Apr-2022 22:00
Chromium	U		0.000400	0.00400	mg/L	1	15-Apr-2022 22:00
Cobalt	0.000651	J	0.000200	0.00500	mg/L	1	15-Apr-2022 22:00
Iron	0.236		0.0120	0.200	mg/L	1	15-Apr-2022 22:00
Lead	U		0.000600	0.00200	mg/L	1	15-Apr-2022 22:00
Lithium	0.0815		0.00100	0.00500	mg/L	1	15-Apr-2022 22:00
Magnesium	12.3		0.0100	0.200	mg/L	1	15-Apr-2022 22:00
Molybdenum	0.181		0.000600	0.00500	mg/L	1	15-Apr-2022 22:00
Potassium	5.91		0.0180	0.200	mg/L	1	15-Apr-2022 22:00
Selenium	U		0.00110	0.00200	mg/L	1	15-Apr-2022 22:00
Sodium	680		0.140	2.00	mg/L	10	18-Apr-2022 12:25
Thallium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:00
DISSOLVED METALS BY SW6020A	Meth	od:SW6	020A (dissolv	red)	Prep:SW3010A / 1	13-Apr-2022	Analyst: JC
Iron	0.234		0.0120	0.200	mg/L	1	13-Apr-2022 19:53
Molybdenum	0.159		0.000600	0.00500	mg/L	1	13-Apr-2022 19:53
MERCURY BY SW7470A		Method	:SW7470A		Prep:SW7470A / 1	13-Apr-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Apr-2022 14:18
ANIONS BY E300.0, REV 2.1, 1993		Meth	od:E300				Analyst: YP
Chloride	27.0		1.00	2.50	mg/L	5	01-Apr-2022 12:05
Fluoride	1.31		0.250	0.500	mg/L	5	01-Apr-2022 12:05
Nitrogen, Nitrate (As N)	0.894		0.150	0.500	mg/L	5	01-Apr-2022 12:05
Sulfate	1,540		10.0	25.0	mg/L	50	12-Apr-2022 19:43
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Meth	od:E410.4				Analyst: TH
Chemical Oxygen Demand	7.00	J	5.00	15.0	mg/L	1	13-Apr-2022 17:00
SPECIFIC CONDUCTANCE BY SM 2011	2510B-	Metho	d:M2510 B				Analyst: TH
Specific Conductivity	3,620		5.00	5.00	umhos/cm @ 25.0 °C	1	07-Apr-2022 10:00

Revision: 1

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Client:	Altamira	ANALYTICAL REPORT
Project:	WFEC CCR/Landfill	WorkOrder:HS22040016
Sample ID:	MW-15A	Lab ID:HS22040016-02
Collection Date:	30-Mar-2022 12:22	Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SM2540C Method:M2540C			M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	2,450		5.00	10.0	mg/L	1	05-Apr-2022 15:25
ALKALINITY BY SM 2320B-2011		Method:S	SM2320B				Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	193		5.00	5.00	mg/L	1	12-Apr-2022 15:52
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	12-Apr-2022 15:52
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	12-Apr-2022 15:52
Alkalinity, Total (As CaCO3)	193		5.00	5.00	mg/L	1	12-Apr-2022 15:52
FERROUS IRON BY SM3500 FE B Method:SM3500FED							Analyst: AP
Ferrous Iron	0.200		0.0200	0.0500	mg/L	1	01-Apr-2022 12:05
FERROUS IRON BY SM3500 FE D	Method:SM3500FED (dissolved)						Analyst: AP
Ferrous Iron, Dissolved	0.243	•	0.0200	0.0500	mg/L	1	01-Apr-2022 12:08
SULFIDE BY SM4500 S2-F-2011	Ν	/lethod:SN	14500 S2-F				Analyst: JHD
Sulfide	U		1.00	1.00	mg/L	1	06-Apr-2022 17:00
PH BY SM4500H+ B-2011	Γ	Method:SN	14500H+ B				Analyst: MZD
рН	8.08	Н	0.100	0.100	pH Units	1	14-Apr-2022 14:15
Temp Deg C @pH	21.2	Н	0	0	°C	1	14-Apr-2022 14:15
SUBCONTRACT ANALYSIS - RADIUM 226		Metho	od:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16
SUBCONTRACT ANALYSIS - RAD	DIUM 228	Metho	d:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16

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# **ALS Houston, US**

Altamira
WFEC CCR/Landfill
MW-21
30-Mar-2022 17:33

ANALYTICAL REPORT

WorkOrder:HS22040016 Lab ID:HS22040016-03 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A			Method:SW6020A		Prep:SW3010A /	Prep:SW3010A / 13-Apr-2022	
Antimony	U		0.000400	0.00200	mg/L	1	15-Apr-2022 11:41
Arsenic	0.000695	J	0.000400	0.00200	mg/L	1	15-Apr-2022 11:41
Barium	0.0139		0.00190	0.00400	mg/L	1	15-Apr-2022 11:41
Beryllium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 11:41
Boron	3.17		0.110	0.200	mg/L	10	18-Apr-2022 12:19
Cadmium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 11:41
Calcium	173		0.0340	0.500	mg/L	1	15-Apr-2022 11:41
Chromium	0.000669	J	0.000400	0.00400	mg/L	1	15-Apr-2022 11:41
Cobalt	0.000620	J	0.000200	0.00500	mg/L	1	15-Apr-2022 11:41
Lead	U		0.000600	0.00200	mg/L	1	15-Apr-2022 11:41
Lithium	0.143		0.00100	0.00500	mg/L	1	15-Apr-2022 11:41
Molybdenum	0.00172	J	0.000600	0.00500	mg/L	1	15-Apr-2022 11:41
Selenium	U		0.00110	0.00200	mg/L	1	15-Apr-2022 11:41
Thallium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 11:41
MERCURY BY SW7470A	'470A Me			/lethod:SW7470A		13-Apr-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Apr-2022 14:19
ANIONS BY E300.0, REV 2.1, 1993	3	Meth	od:E300				Analyst: YP
Chloride	23.0		1.00	2.50	mg/L	5	12-Apr-2022 21:56
Fluoride	0.683		0.250	0.500	mg/L	5	12-Apr-2022 21:56
Nitrogen, Nitrate (As N)	687		1.50	5.00	mg/L	50	01-Apr-2022 12:10
Sulfate	2,340		10.0	25.0	mg/L	50	01-Apr-2022 12:10
CHEMICAL OXYGEN DEMAND B' E410.4, REV 2.0, 1993	Y	Metho	d:E410.4				Analyst: TH
Chemical Oxygen Demand	5.00	J	5.00	15.0	mg/L	1	13-Apr-2022 17:00
SPECIFIC CONDUCTANCE BY SI 2011	M 2510B-	Method	I:M2510 B				Analyst: TH
Specific Conductivity	22,000		50.0	50.0	umhos/cm @ 25.0 °C	10	07-Apr-2022 10:00
TOTAL DISSOLVED SOLIDS BY S -2011	SM2540C	Method	d:M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	3,500		5.00	10.0	mg/L	1	05-Apr-2022 15:25
PH BY SM4500H+ B-2011	N	Method:S	6M4500H+ B				Analyst: MZD
рН	1.64	Н	0.100	0.100	pH Units	1	14-Apr-2022 14:15
Temp Deg C @pH	21.3	Н	0	0	°C	1	14-Apr-2022 14:15
SUBCONTRACT ANALYSIS - RAI 226	DIUM	Meth	nod:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16
SUBCONTRACT ANALYSIS - RAI	DIUM 228	Meth	nod:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16

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

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# **ALS Houston, US**

Altamira
WFEC CCR/Landfill
MW-3
30-Mar-2022 15:51

ANALYTICAL REPORT

WorkOrder:HS22040016 Lab ID:HS22040016-04 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A			Method:SW6020A		Prep:SW3010A /	13-Apr-2022	Analyst: JC
Antimony	U		0.000400	0.00200	mg/L	1	15-Apr-2022 22:04
Arsenic	0.000576	J	0.000400	0.00200	mg/L	1	15-Apr-2022 22:04
Barium	0.0133		0.00190	0.00400	mg/L	1	15-Apr-2022 22:04
Beryllium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:04
Boron	1.06		0.0550	0.100	mg/L	5	18-Apr-2022 12:27
Cadmium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:04
Calcium	210		0.170	2.50	mg/L	5	18-Apr-2022 12:27
Chromium	U		0.000400	0.00400	mg/L	1	15-Apr-2022 22:04
Cobalt	0.000765	J	0.000200	0.00500	mg/L	1	15-Apr-2022 22:04
Lead	U		0.000600	0.00200	mg/L	1	15-Apr-2022 22:04
Lithium	0.142		0.00100	0.00500	mg/L	1	15-Apr-2022 22:04
Molybdenum	U		0.000600	0.00500	mg/L	1	15-Apr-2022 22:04
Selenium	U		0.00110	0.00200	mg/L	1	15-Apr-2022 22:04
Thallium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:04
MERCURY BY SW7470A		Method	:SW7470A		Prep:SW7470A /	13-Apr-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Apr-2022 14:21
ANIONS BY E300.0, REV 2.1, 1993	3	Meth	od:E300				Analyst: YP
Chloride	13.0		1.00	2.50	mg/L	5	12-Apr-2022 22:11
Fluoride	2.12		0.250	0.500	mg/L	5	12-Apr-2022 22:11
Nitrogen, Nitrate (As N)	670		1.50	5.00	mg/L	50	01-Apr-2022 12:15
Sulfate	1,790		10.0	25.0	mg/L	50	01-Apr-2022 12:15
CHEMICAL OXYGEN DEMAND B E410.4, REV 2.0, 1993	(	Metho	d:E410.4				Analyst: TH
Chemical Oxygen Demand	5.00	J	5.00	15.0	mg/L	1	13-Apr-2022 17:00
SPECIFIC CONDUCTANCE BY SM 2011	I 2510B-	Method	i:M2510 B				Analyst: TH
Specific Conductivity	20,900		50.0	50.0	umhos/cm @ 25.0 °C	10	07-Apr-2022 10:00
-2011	M2540C	Method	d:M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	2,700		5.00	10.0	mg/L	1	05-Apr-2022 15:25
PH BY SM4500H+ B-2011	N	Nethod:S	6M4500H+ B				Analyst: MZD
рН	1.61	Н	0.100	0.100	pH Units	1	14-Apr-2022 14:15
Temp Deg C @pH	21.4	Н	0	0	°C	1	14-Apr-2022 14:15
SUBCONTRACT ANALYSIS - RAE 226	DIUM	Meth	nod:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16
SUBCONTRACT ANALYSIS - RAD	DIUM 228	Meth	nod:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16

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

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Client:	Altamira	ANALYTICAL REPORT
Project:	WFEC CCR/Landfill	WorkOrder:HS22040016
Sample ID:	MW-5S	Lab ID:HS22040016-05
Collection Date:	31-Mar-2022 15:31	Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION SM3500FED	BY	Method:	M3500FED				Analyst: JHD
Ferric Iron	0.0435	J	0.0200	0.0500	mg/L	1	19-Apr-2022 10:04
FERRIC IRON (DISS)- BY CALCUL BY SM3500FED	ATION	Method:S (diss)	SM3500FED solved)				Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	19-Apr-2022 10:07
ICP-MS METALS BY SW6020A		Method	SW6020A		Prep:SW3010A /	13-Apr-2022	Analyst: JC
Antimony	U		0.000400	0.00200	mg/L	1	15-Apr-2022 22:06
Arsenic	0.000423	J	0.000400	0.00200	mg/L	1	15-Apr-2022 22:06
Barium	0.0113		0.00190	0.00400	mg/L	1	15-Apr-2022 22:06
Beryllium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:06
Boron	1.64		0.0550	0.100	mg/L	5	18-Apr-2022 12:29
Cadmium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:06
Calcium	53.8		0.0340	0.500	mg/L	1	15-Apr-2022 22:06
Chromium	U		0.000400	0.00400	mg/L	1	15-Apr-2022 22:06
Cobalt	0.000237	J	0.000200	0.00500	mg/L	1	15-Apr-2022 22:06
Iron	0.0435	J	0.0120	0.200	mg/L	1	15-Apr-2022 22:06
Lead	U		0.000600	0.00200	mg/L	1	15-Apr-2022 22:06
Lithium	0.0654		0.00100	0.00500	mg/L	1	15-Apr-2022 22:06
Magnesium	5.79		0.0100	0.200	mg/L	1	15-Apr-2022 22:06
Molybdenum	0.00257	J	0.000600	0.00500	mg/L	1	15-Apr-2022 22:06
Potassium	3.74		0.0180	0.200	mg/L	1	15-Apr-2022 22:06
Selenium	U		0.00110	0.00200	mg/L	1	15-Apr-2022 22:06
Sodium	341		0.0700	1.00	mg/L	5	18-Apr-2022 12:29
Thallium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:06
DISSOLVED METALS BY SW6020A	A Meth	od:SW60	20A (dissol	ved)	Prep:SW3010A /	13-Apr-2022	Analyst: JC
Iron	U		0.0120	0.200	mg/L	1	13-Apr-2022 19:55
Molybdenum	0.00248	J	0.000600	0.00500	mg/L	1	13-Apr-2022 19:55
MERCURY BY SW7470A		Method	:SW7470A		Prep:SW7470A /	13-Apr-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Apr-2022 14:23
ANIONS BY E300.0, REV 2.1, 1993		Meth	od:E300				Analyst: YP
Chloride	23.0		2.00	5.00	mg/L	10	12-Apr-2022 22:17
Fluoride	3.24		0.500	1.00	mg/L	10	12-Apr-2022 22:17
Nitrogen, Nitrate (As N)	705		3.00	10.0	mg/L	100	02-Apr-2022 13:24
Sulfate	1,540		20.0	50.0	mg/L	100	04-Apr-2022 15:52
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Metho	d:E410.4				Analyst: TH
Chemical Oxygen Demand	U		5.00	15.0	mg/L	1	13-Apr-2022 17:00
SPECIFIC CONDUCTANCE BY SM 2011	2510B-	Method	:M2510 B				Analyst: TH
Specific Conductivity	15,600		50.0	50.0	umhos/cm @ 25.0 °C	10	07-Apr-2022 10:00

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Client:	Altamira	ANALYTICAL REPORT
Project:	WFEC CCR/Landfill	WorkOrder:HS22040016
Sample ID:	MW-5S	Lab ID:HS22040016-05
Collection Date:	31-Mar-2022 15:31	Matrix:Water

ANALYSES	RESULT QI	JAL MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SI -2011	M2540C M	ethod:M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	1,540	5.00	10.0	mg/L	1	05-Apr-2022 15:25
ALKALINITY BY SM 2320B-2011	Me	thod:SM2320B				Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	U	5.00	5.00	mg/L	1	12-Apr-2022 15:55
Alkalinity, Carbonate (As CaCO3)	U	5.00	5.00	mg/L	1	12-Apr-2022 15:55
Alkalinity, Hydroxide (As CaCO3)	U	5.00	5.00	mg/L	1	12-Apr-2022 15:55
Alkalinity, Total (As CaCO3)	U	5.00	5.00	mg/L	1	12-Apr-2022 15:55
FERROUS IRON BY SM3500 FE B	Met	hod:SM3500FED				Analyst: AP
Ferrous Iron	U	0.0200	0.0500	mg/L	1	02-Apr-2022 13:40
FERROUS IRON BY SM3500 FE D	Met	hod:SM3500FED (dissolved)				Analyst: AP
Ferrous Iron, Dissolved	U	0.0200	0.0500	mg/L	1	02-Apr-2022 14:00
SULFIDE BY SM4500 S2-F-2011	Meth	nod:SM4500 S2-F				Analyst: JHD
Sulfide	U	1.00	1.00	mg/L	1	06-Apr-2022 17:00
PH BY SM4500H+ B-2011	Meth	nod:SM4500H+ B				Analyst: MZD
рН	1.68	H <b>0.100</b>	0.100	pH Units	1	14-Apr-2022 14:15
Temp Deg C @pH	24.4	Н 0	0	°C	1	14-Apr-2022 14:15
SUBCONTRACT ANALYSIS - RAD	IUM	Method:NA				Analyst: SUBFC
Subcontract Analysis	See Attached	0		NA	1	29-Apr-2022 10:16
SUBCONTRACT ANALYSIS - RAD	IUM 228	Method:NA				Analyst: SUBFC
Subcontract Analysis	See Attached	0		NA	1	29-Apr-2022 10:16

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Client:	Altamira
Project:	WFEC CCR/Landfill
Sample ID:	MW-7S
Collection Date:	01-Apr-2022 19:29

ANALYTICAL REPORT

WorkOrder:HS22040016 Lab ID:HS22040016-06 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATIO SM3500FED	N BY	Method:	SM3500FED				Analyst: JHD
Ferric Iron	U		0.0200	0.0500	mg/L	1	19-Apr-2022 10:04
FERRIC IRON (DISS)- BY CALCU BY SM3500FED	LATION N	Nethod: dis:	SM3500FED solved)				Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	19-Apr-2022 10:07
ICP-MS METALS BY SW6020A		Method	:SW6020A		Prep:SW3010A /	13-Apr-2022	Analyst: JC
Antimony	U		0.000400	0.00200	mg/L	1	15-Apr-2022 22:10
Arsenic	U		0.000400	0.00200	mg/L	1	15-Apr-2022 22:10
Barium	0.0336		0.00190	0.00400	mg/L	1	15-Apr-2022 22:10
Beryllium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:10
Boron	0.646		0.0110	0.0200	mg/L	1	15-Apr-2022 22:10
Cadmium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:10
Calcium	302		0.340	5.00	mg/L	10	18-Apr-2022 12:31
Chromium	0.000494	J	0.000400	0.00400	mg/L	1	15-Apr-2022 22:10
Cobalt	0.00110	J	0.000200	0.00500	mg/L	1	15-Apr-2022 22:10
Iron	U		0.0120	0.200	mg/L	1	15-Apr-2022 22:10
Lead	U		0.000600	0.00200	mg/L	1	15-Apr-2022 22:10
Lithium	0.0533		0.00100	0.00500	mg/L	1	15-Apr-2022 22:10
Magnesium	20.0		0.0100	0.200	mg/L	1	15-Apr-2022 22:10
Molybdenum	0.000973	J	0.000600	0.00500	mg/L	1	15-Apr-2022 22:10
Potassium	4.56		0.0180	0.200	mg/L	1	15-Apr-2022 22:10
Selenium	U		0.00110	0.00200	mg/L	1	15-Apr-2022 22:10
Sodium	272		0.140	2.00	mg/L	10	18-Apr-2022 12:31
Thallium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:10
DISSOLVED METALS BY SW6020	A Metho	od:SW6	020A (dissol	ved)	Prep:SW3010A /	13-Apr-2022	Analyst: JC
Iron	U		0.0120	0.200	mg/L	1	13-Apr-2022 19:57
Molybdenum	0.000830	J	0.000600	0.00500	mg/L	1	13-Apr-2022 19:57
MERCURY BY SW7470A		Method	I:SW7470A		Prep:SW7470A /	13-Apr-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Apr-2022 14:24
ANIONS BY E300.0, REV 2.1, 1993	3	Meth	od:E300				Analyst: YP
Chloride	19.9		0.200	0.500	mg/L	1	02-Apr-2022 13:30
Fluoride	0.515		0.0500	0.100	mg/L	1	02-Apr-2022 13:30
Nitrogen, Nitrate (As N)	0.0613	J	0.0300	0.100	mg/L	1	02-Apr-2022 13:30
Sulfate	1,190		10.0	25.0	mg/L	50	12-Apr-2022 21:50
CHEMICAL OXYGEN DEMAND B` E410.4, REV 2.0, 1993	Y	Metho	od:E410.4				Analyst: TH
Chemical Oxygen Demand	U		5.00	15.0	mg/L	1	13-Apr-2022 17:00
SPECIFIC CONDUCTANCE BY SI 2011	A 2510B-	Method	d:M2510 B				Analyst: TH
Specific Conductivity	2,530		5.00	5.00	umhos/cm @ 25.0 °C	1	07-Apr-2022 15:00

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

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Client:	Altamira	ANALYTICAL REPORT
Project:	WFEC CCR/Landfill	WorkOrder:HS22040016
Sample ID:	MW-7S	Lab ID:HS22040016-06
Collection Date:	01-Apr-2022 19:29	Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY 9 -2011	SM2540C	Method:	M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	1,920		5.00	10.0	mg/L	1	08-Apr-2022 14:43
ALKALINITY BY SM 2320B-2011		Method:S	SM2320B				Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	205		5.00	5.00	mg/L	1	12-Apr-2022 16:18
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	12-Apr-2022 16:18
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	12-Apr-2022 16:18
Alkalinity, Total (As CaCO3)	205		5.00	5.00	mg/L	1	12-Apr-2022 16:18
FERROUS IRON BY SM3500 FE E	3 1	Method:SM	/3500FED				Analyst: AP
Ferrous Iron	U		0.0200	0.0500	mg/L	1	02-Apr-2022 13:40
FERROUS IRON BY SM3500 FE I	Method:SM3500FED (dissolved)						Analyst: AP
Ferrous Iron, Dissolved	U	•	0.0200	0.0500	mg/L	1	02-Apr-2022 14:00
SULFIDE BY SM4500 S2-F-2011	N	/lethod:SN	14500 S2-F				Analyst: JHD
Sulfide	U		1.00	1.00	mg/L	1	08-Apr-2022 17:00
PH BY SM4500H+ B-2011	Ν	Method:SN	14500H+ B				Analyst: MZD
рН	7.88	Н	0.100	0.100	pH Units	1	14-Apr-2022 14:15
Temp Deg C @pH	21.3	Н	0	0	°C	1	14-Apr-2022 14:15
SUBCONTRACT ANALYSIS - RA	DIUM	Metho	od:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16
SUBCONTRACT ANALYSIS - RA	DIUM 228	Metho	d:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16

# **ALS Houston, US**

Client:	Altamira
Project:	WFEC CCR/Landfill
Sample ID:	MW-13
Collection Date:	01-Apr-2022 11:54

ANALYTICAL REPORT

WorkOrder:HS22040016 Lab ID:HS22040016-07 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method	:SW6020A		Prep:SW3010A /	13-Apr-2022	Analyst: JC
Antimony	U		0.000400	0.00200	mg/L	1	15-Apr-2022 22:12
Arsenic	0.000569	J	0.000400	0.00200	mg/L	1	15-Apr-2022 22:12
Barium	0.0104		0.00190	0.00400	mg/L	1	15-Apr-2022 22:12
Beryllium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:12
Boron	3.00		0.0550	0.100	mg/L	5	18-Apr-2022 12:32
Cadmium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:12
Calcium	116		0.0340	0.500	mg/L	1	15-Apr-2022 22:12
Chromium	U		0.000400	0.00400	mg/L	1	15-Apr-2022 22:12
Cobalt	0.000435	J	0.000200	0.00500	mg/L	1	15-Apr-2022 22:12
Lead	U		0.000600	0.00200	mg/L	1	15-Apr-2022 22:12
Lithium	0.120		0.00100	0.00500	mg/L	1	15-Apr-2022 22:12
Molybdenum	0.00117	J	0.000600	0.00500	mg/L	1	15-Apr-2022 22:12
Selenium	U		0.00110	0.00200	mg/L	1	15-Apr-2022 22:12
Thallium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:12
MERCURY BY SW7470A		Method	SW7470A		Prep:SW7470A /	13-Apr-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Apr-2022 14:33
ANIONS BY E300.0, REV 2.1, 199	3	Metho	od:E300				Analyst: YP
Chloride	30.0		1.00	2.50	mg/L	5	02-Apr-2022 13:40
Fluoride	0.453	J	0.250	0.500	mg/L	5	02-Apr-2022 13:40
Nitrogen, Nitrate (As N)	0.304	J	0.150	0.500	mg/L	5	02-Apr-2022 13:40
Sulfate	1,510		10.0	25.0	mg/L	50	12-Apr-2022 21:24
CHEMICAL OXYGEN DEMAND B E410.4, REV 2.0, 1993	Y	Metho	d:E410.4				Analyst: TH
Chemical Oxygen Demand	U		5.00	15.0	mg/L	1	13-Apr-2022 17:00
SPECIFIC CONDUCTANCE BY S 2011	M 2510B-	Method	:M2510 B				Analyst: TH
Specific Conductivity	3,840		5.00	5.00	umhos/cm @ 25.0 °C	1	07-Apr-2022 15:00
TOTAL DISSOLVED SOLIDS BY	SM2540C	Method	1:M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	2,520		5.00	10.0	mg/L	1	08-Apr-2022 14:43
PH BY SM4500H+ B-2011	N	lethod:S	M4500H+ B				Analyst: MZD
рН	7.91	Н	0.100	0.100	pH Units	1	14-Apr-2022 14:15
Temp Deg C @pH	21.4	Н	0	0	°C	1	14-Apr-2022 14:15
SUBCONTRACT ANALYSIS - RA 226		Meth	od:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16
SUBCONTRACT ANALYSIS - RA	DIUM 228	Meth	iod:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16

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

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Client:	Altamira
Project:	WFEC CCR/Landfill
Sample ID:	MW-16
Collection Date:	01-Apr-2022 13:31

ANALYTICAL REPORT

WorkOrder:HS22040016 Lab ID:HS22040016-08 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATI SM3500FED	ION BY	Method:S	M3500FED				Analyst: JHD
Ferric Iron	U		0.0200	0.0500	mg/L	1	19-Apr-2022 10:04
FERRIC IRON (DISS)- BY CALC BY SM3500FED		Method:S (diss)	M3500FED olved)				Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	19-Apr-2022 10:07
ICP-MS METALS BY SW6020A		Method:	SW6020A		Prep:SW3010A /	13-Apr-2022	Analyst: JC
Antimony	U		0.000400	0.00200	mg/L	1	15-Apr-2022 22:20
Arsenic	U		0.000400	0.00200	mg/L	1	15-Apr-2022 22:20
Barium	0.0127		0.00190	0.00400	mg/L	1	15-Apr-2022 22:20
Beryllium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:20
Boron	1.85		0.0550	0.100	mg/L	5	18-Apr-2022 12:34
Cadmium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:20
Calcium	153		0.0340	0.500	mg/L	1	15-Apr-2022 22:20
Chromium	U		0.000400	0.00400	mg/L	1	15-Apr-2022 22:20
Cobalt	0.000507	J	0.000200	0.00500	mg/L	1	15-Apr-2022 22:20
Iron	0.0158	J	0.0120	0.200	mg/L	1	15-Apr-2022 22:20
Lead	U		0.000600	0.00200	mg/L	1	15-Apr-2022 22:20
Lithium	0.0496		0.00100	0.00500	mg/L	1	15-Apr-2022 22:20
Magnesium	8.40		0.0100	0.200	mg/L	1	15-Apr-2022 22:20
Molybdenum	0.146		0.000600	0.00500	mg/L	1	15-Apr-2022 22:20
Potassium	3.58		0.0180	0.200	mg/L	1	15-Apr-2022 22:20
Selenium	U		0.00110	0.00200	mg/L	1	15-Apr-2022 22:20
Sodium	389		0.0700	1.00	mg/L	5	18-Apr-2022 12:34
Thallium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:20
DISSOLVED METALS BY SW60	20A Meth	od:SW60	20A (dissol	ved)	Prep:SW3010A	13-Apr-2022	Analyst: JC
Iron	U		0.0120	0.200	mg/L	1	13-Apr-2022 19:59
Molybdenum	0.131		0.000600	0.00500	mg/L	1	13-Apr-2022 19:59
MERCURY BY SW7470A		Method:	SW7470A		Prep:SW7470A	13-Apr-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Apr-2022 14:35
ANIONS BY E300.0, REV 2.1, 19	993	Metho	d:E300				Analyst: YP
Chloride	16.6		1.00	2.50	mg/L	5	12-Apr-2022 22:22
Fluoride	1.30		0.250	0.500	mg/L	5	12-Apr-2022 22:22
Nitrogen, Nitrate (As N)	50.4		1.50	5.00	mg/L	50	02-Apr-2022 13:46
Sulfate	1,100		10.0	25.0	mg/L	50	04-Apr-2022 15:57
CHEMICAL OXYGEN DEMAND E410.4, REV 2.0, 1993	ВҮ	Method	d:E410.4				Analyst: TH
Chemical Oxygen Demand	7.00	J	5.00	15.0	mg/L	1	13-Apr-2022 17:00
SPECIFIC CONDUCTANCE BY 2011	SM 2510B-	Method:	:M2510 B				Analyst: TH
Specific Conductivity	2,500		5.00	5.00	umhos/cm @ 25.0 °C	1	07-Apr-2022 15:00

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

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Client:	Altamira	ANALYTICAL REPORT
Project:	WFEC CCR/Landfill	WorkOrder:HS22040016
Sample ID:	MW-16	Lab ID:HS22040016-08
Collection Date:	01-Apr-2022 13:31	Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY S -2011	SM2540C	Method:	M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	1,670		5.00	10.0	mg/L	1	08-Apr-2022 14:43
ALKALINITY BY SM 2320B-2011		Method:S	SM2320B				Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	94.0		5.00	5.00	mg/L	1	12-Apr-2022 16:25
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	12-Apr-2022 16:25
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	12-Apr-2022 16:25
Alkalinity, Total (As CaCO3)	94.0		5.00	5.00	mg/L	1	12-Apr-2022 16:25
FERROUS IRON BY SM3500 FE E	в I	Method:SN	M3500FED				Analyst: AP
Ferrous Iron	U		0.0200	0.0500	mg/L	1	02-Apr-2022 13:08
FERROUS IRON BY SM3500 FE D	) 1	Method:SM (disso)	M3500FED blved)				Analyst: AP
Ferrous Iron, Dissolved	U	•	0.0200	0.0500	mg/L	1	02-Apr-2022 13:14
SULFIDE BY SM4500 S2-F-2011	N	lethod:SN	14500 S2-F				Analyst: JHD
Sulfide	U		1.00	1.00	mg/L	1	08-Apr-2022 17:00
PH BY SM4500H+ B-2011	Ν	/lethod:SN	14500H+ B				Analyst: MZD
рН	7.42	Н	0.100	0.100	pH Units	1	14-Apr-2022 14:15
Temp Deg C @pH	21.2	Н	0	0	°C	1	14-Apr-2022 14:15
SUBCONTRACT ANALYSIS - RAI 226	MUIC	Metho	od:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16
SUBCONTRACT ANALYSIS - RAI	DIUM 228	Metho	od:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16

Client:	Altamira	ANALYTICAL REPORT
Project:	WFEC CCR/Landfill	WorkOrder:HS22040016
Sample ID:	MW-17	Lab ID:HS22040016-09
Collection Date:	31-Mar-2022 17:22	Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION SM3500FED	BY I	Method:	SM3500FED				Analyst: JHD
Ferric Iron	0.0325	J	0.0200	0.0500	mg/L	1	19-Apr-2022 10:04
FERRIC IRON (DISS)- BY CALCULA BY SM3500FED	TION I	Method: dis)	SM3500FED solved)				Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	19-Apr-2022 10:07
ICP-MS METALS BY SW6020A		Method	d:SW6020A		Prep:SW3010A /	13-Apr-2022	Analyst: JC
Antimony	U		0.000400	0.00200	mg/L	1	15-Apr-2022 22:22
Arsenic	0.000582	J	0.000400	0.00200	mg/L	1	15-Apr-2022 22:22
Barium	U		0.00190	0.00400	mg/L	1	15-Apr-2022 22:22
Beryllium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:22
Boron	0.593		0.0110	0.0200	mg/L	1	15-Apr-2022 22:22
Cadmium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:22
Calcium	435		1.70	25.0	mg/L	50	18-Apr-2022 12:42
Chromium	0.00108	J	0.000400	0.00400	mg/L	1	15-Apr-2022 22:22
Cobalt	0.00148	J	0.000200	0.00500	mg/L	1	15-Apr-2022 22:22
Iron	0.0325	J	0.0120	0.200	mg/L	1	15-Apr-2022 22:22
Lead	U		0.000600	0.00200	mg/L	1	15-Apr-2022 22:22
Lithium	0.104		0.00100	0.00500	mg/L	1	15-Apr-2022 22:22
Magnesium	30.9		0.0100	0.200	mg/L	1	15-Apr-2022 22:22
Molybdenum	U		0.000600	0.00500	mg/L	1	15-Apr-2022 22:22
Potassium	4.50		0.0180	0.200	mg/L	1	15-Apr-2022 22:22
Selenium	0.00149	J	0.00110	0.00200	mg/L	1	15-Apr-2022 22:22
Sodium	35.2		0.0140	0.200	mg/L	1	15-Apr-2022 22:22
Thallium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:22
DISSOLVED METALS BY SW6020A	Meth	od:SW6	020A (dissol	ved)	Prep:SW3010A /	13-Apr-2022	Analyst: JC
Iron	U		0.0120	0.200	mg/L	1	13-Apr-2022 20:01
Molybdenum	U		0.000600	0.00500	mg/L	1	13-Apr-2022 20:01
MERCURY BY SW7470A		Method	:SW7470A		Prep:SW7470A /	13-Apr-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Apr-2022 14:37
ANIONS BY E300.0, REV 2.1, 1993		Meth	od:E300				Analyst: YP
Chloride	5.24		1.00	2.50	mg/L	5	02-Apr-2022 13:51
Fluoride	U		0.250	0.500	mg/L	5	02-Apr-2022 13:51
Nitrogen, Nitrate (As N)	420	Н	1.50	5.00	mg/L	50	04-Apr-2022 15:36
Sulfate	1,970		10.0	25.0	mg/L	50	04-Apr-2022 15:36
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Metho	od:E410.4				Analyst: TH
Chemical Oxygen Demand	8.00	J	5.00	15.0	mg/L	1	13-Apr-2022 17:00
SPECIFIC CONDUCTANCE BY SM 2 2011	2510B-	Metho	d:M2510 B				Analyst: TH
Specific Conductivity	11,900		25.0	25.0	umhos/cm @ 25.0 °C	5	07-Apr-2022 15:00

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Client:	Altamira	ANALYTICAL REPORT
Project:	WFEC CCR/Landfill	WorkOrder:HS22040016
Sample ID:	MW-17	Lab ID:HS22040016-09
Collection Date:	31-Mar-2022 17:22	Matrix:Water

ANALYSES	RESULT QU	AL MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SM -2011	//2540C Me	ethod:M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	2,340	5.00	10.0	mg/L	1	05-Apr-2022 15:25
ALKALINITY BY SM 2320B-2011	Me	thod:SM2320B				Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	U	5.00	5.00	mg/L	1	12-Apr-2022 16:28
Alkalinity, Carbonate (As CaCO3)	U	5.00	5.00	mg/L	1	12-Apr-2022 16:28
Alkalinity, Hydroxide (As CaCO3)	U	5.00	5.00	mg/L	1	12-Apr-2022 16:28
Alkalinity, Total (As CaCO3)	U	5.00	5.00	mg/L	1	12-Apr-2022 16:28
FERROUS IRON BY SM3500 FE B	Meth	od:SM3500FED				Analyst: AP
Ferrous Iron	U	0.0200	0.0500	mg/L	1	02-Apr-2022 13:40
FERROUS IRON BY SM3500 FE D	Meth	od:SM3500FED (dissolved)				Analyst: AP
Ferrous Iron, Dissolved	U	0.0200	0.0500	mg/L	1	02-Apr-2022 14:00
SULFIDE BY SM4500 S2-F-2011	Meth	od:SM4500 S2-F				Analyst: JHD
Sulfide	U	1.00	1.00	mg/L	1	06-Apr-2022 17:00
PH BY SM4500H+ B-2011	Meth	od:SM4500H+ B				Analyst: MZD
рН	1.87	H <b>0.100</b>	0.100	pH Units	1	14-Apr-2022 14:15
Temp Deg C @pH	21.3	Н О	0	°C	1	14-Apr-2022 14:15
SUBCONTRACT ANALYSIS - RADI 226	UM	Method:NA				Analyst: SUBFC
Subcontract Analysis	See Attached	0		NA	1	29-Apr-2022 10:16
SUBCONTRACT ANALYSIS - RADI	UM 228	Method:NA				Analyst: SUBFC
Subcontract Analysis S	See Attached	0		NA	1	29-Apr-2022 10:16

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Altamira
WFEC CCR/Landfill
MW-18
31-Mar-2022 17:08

ANALYTICAL REPORT

WorkOrder:HS22040016 Lab ID:HS22040016-10 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION SM3500FED	I BY	Method:	SM3500FED				Analyst: JHD
Ferric Iron	U		0.0200	0.0500	mg/L	1	19-Apr-2022 10:04
FERRIC IRON (DISS)- BY CALCUL BY SM3500FED	ATION	Method: dis:	SM3500FED solved)				Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	19-Apr-2022 10:07
ICP-MS METALS BY SW6020A		Method	:SW6020A		Prep:SW3010A /	13-Apr-2022	Analyst: JC
Antimony	U		0.000400	0.00200	mg/L	1	15-Apr-2022 22:26
Arsenic	0.00290		0.000400	0.00200	mg/L	1	15-Apr-2022 22:26
Barium	0.00305	J	0.00190	0.00400	mg/L	1	15-Apr-2022 22:26
Beryllium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:26
Boron	4.65		0.110	0.200	mg/L	10	18-Apr-2022 12:46
Cadmium	0.000202	J	0.000200	0.00200	mg/L	1	15-Apr-2022 22:26
Calcium	23.9		0.0340	0.500	mg/L	1	15-Apr-2022 22:26
Chromium	U		0.000400	0.00400	mg/L	1	15-Apr-2022 22:26
Cobalt	U		0.000200	0.00500	mg/L	1	15-Apr-2022 22:26
Iron	U		0.0120	0.200	mg/L	1	15-Apr-2022 22:26
Lead	U		0.000600	0.00200	mg/L	1	15-Apr-2022 22:26
Lithium	0.00329	J	0.00100	0.00500	mg/L	1	15-Apr-2022 22:26
Magnesium	0.559		0.0100	0.200	mg/L	1	15-Apr-2022 22:26
Molybdenum	0.206		0.000600	0.00500	mg/L	1	15-Apr-2022 22:26
Potassium	14.6		0.0180	0.200	mg/L	1	15-Apr-2022 22:26
Selenium	0.00247		0.00110	0.00200	mg/L	1	15-Apr-2022 22:26
Sodium	391		0.140	2.00	mg/L	10	18-Apr-2022 12:46
Thallium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:26
DISSOLVED METALS BY SW6020	A Meth	od:SW6	020A (dissolve	ed)	Prep:SW3010A /	13-Apr-2022	Analyst: JC
Iron	U		0.0120	0.200	mg/L	1	13-Apr-2022 20:03
Molybdenum	0.199		0.000600	0.00500	mg/L	1	13-Apr-2022 20:03
MERCURY BY SW7470A		Method	:SW7470A		Prep:SW7470A /	13-Apr-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Apr-2022 14:38
ANIONS BY E300.0, REV 2.1, 1993	1	Meth	od:E300				Analyst: YP
Chloride	4.86		1.00	2.50	mg/L	5	02-Apr-2022 13:56
Fluoride	2.10		0.250	0.500	mg/L	5	02-Apr-2022 13:56
Nitrogen, Nitrate (As N)	0.712		0.150	0.500	mg/L	5	02-Apr-2022 13:56
Sulfate	837		10.0	25.0	mg/L	50	12-Apr-2022 21:13
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993	,	Metho	od:E410.4				Analyst: TH
Chemical Oxygen Demand	5.00	J	5.00	15.0	mg/L	1	13-Apr-2022 17:00
SPECIFIC CONDUCTANCE BY SM 2011	1 2510B-	Method	1:M2510 B				Analyst: TH
Specific Conductivity	2,070		5.00	5.00	umnos/cm @ 25.0 °C	1	07-Apr-2022 15:00

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

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Client:	Altamira	ANALYTICAL REPORT
Project:	WFEC CCR/Landfill	WorkOrder:HS22040016
Sample ID:	MW-18	Lab ID:HS22040016-10
Collection Date:	31-Mar-2022 17:08	Matrix:Water

ANALYSES	RESULT QU	AL MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SN -2011	12540C Me	thod:M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	1,300	5.00	10.0	mg/L	1	05-Apr-2022 15:25
ALKALINITY BY SM 2320B-2011	Met	hod:SM2320B				Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	U	5.00	5.00	mg/L	1	12-Apr-2022 16:36
Alkalinity, Carbonate (As CaCO3)	58.6	5.00	5.00	mg/L	1	12-Apr-2022 16:36
Alkalinity, Hydroxide (As CaCO3)	U	5.00	5.00	mg/L	1	12-Apr-2022 16:36
Alkalinity, Total (As CaCO3)	63.6	5.00	5.00	mg/L	1	12-Apr-2022 16:36
FERROUS IRON BY SM3500 FE B	Meth	od:SM3500FED				Analyst: AP
Ferrous Iron	U	0.0200	0.0500	mg/L	1	02-Apr-2022 13:40
FERROUS IRON BY SM3500 FE D	Meth	od:SM3500FED (dissolved)				Analyst: AP
Ferrous Iron, Dissolved	U	0.0200	0.0500	mg/L	1	02-Apr-2022 14:00
SULFIDE BY SM4500 S2-F-2011	Metho	od:SM4500 S2-F				Analyst: JHD
Sulfide	U	1.00	1.00	mg/L	1	06-Apr-2022 17:00
PH BY SM4500H+ B-2011	Meth	od:SM4500H+ B				Analyst: MZD
рН	9.69	H <b>0.100</b>	0.100	pH Units	1	14-Apr-2022 14:15
Temp Deg C @pH	22.4	Н О	0	°C	1	14-Apr-2022 14:15
SUBCONTRACT ANALYSIS - RADI 226	UM	Method:NA				Analyst: SUBFC
Subcontract Analysis S	See Attached	0		NA	1	29-Apr-2022 10:16
SUBCONTRACT ANALYSIS - RADI	UM 228	Method:NA				Analyst: SUBFC
Subcontract Analysis S	See Attached	0		NA	1	29-Apr-2022 10:16

Client:	Altamira	ANALYTICAL REPORT
Project:	WFEC CCR/Landfill	WorkOrder:HS22040016
Sample ID:	MW-19S	Lab ID:HS22040016-11
Collection Date:	01-Apr-2022 13:35	Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION SM3500FED	BY I	Method:	SM3500FED				Analyst: JHD
Ferric Iron	0.0254	J	0.0200	0.0500	mg/L	1	19-Apr-2022 10:04
FERRIC IRON (DISS)- BY CALCULA BY SM3500FED	ATION I	Method: (dis	SM3500FED solved)				Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	19-Apr-2022 10:07
ICP-MS METALS BY SW6020A		Method	I:SW6020A		Prep:SW3010A /	13-Apr-2022	Analyst: JC
Antimony	U		0.000400	0.00200	mg/L	1	15-Apr-2022 11:31
Arsenic	0.00689		0.000400	0.00200	mg/L	1	15-Apr-2022 11:31
Barium	0.0189		0.00190	0.00400	mg/L	1	15-Apr-2022 11:31
Beryllium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 11:31
Boron	9.73		0.550	1.00	mg/L	50	15-Apr-2022 13:44
Cadmium	0.000380	J	0.000200	0.00200	mg/L	1	15-Apr-2022 11:31
Calcium	44.2		0.0340	0.500	mg/L	1	15-Apr-2022 11:31
Chromium	0.000829	J	0.000400	0.00400	mg/L	1	15-Apr-2022 11:31
Cobalt	0.000234	J	0.000200	0.00500	mg/L	1	15-Apr-2022 11:31
Iron	0.0554	J	0.0120	0.200	mg/L	1	15-Apr-2022 11:31
Lead	U		0.000600	0.00200	mg/L	1	15-Apr-2022 11:31
Lithium	0.00249	J	0.00100	0.00500	mg/L	1	15-Apr-2022 11:31
Magnesium	0.0836	J	0.0100	0.200	mg/L	1	15-Apr-2022 11:31
Molybdenum	0.445		0.000600	0.00500	mg/L	1	15-Apr-2022 11:31
Potassium	37.0		0.0180	0.200	mg/L	1	15-Apr-2022 11:31
Selenium	0.0127		0.00110	0.00200	mg/L	1	15-Apr-2022 11:31
Sodium	723		0.280	4.00	mg/L	20	15-Apr-2022 13:21
Thallium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 11:31
DISSOLVED METALS BY SW6020A	Meth	od:SW6	020A (dissol	ved)	Prep:SW3010A /	13-Apr-2022	Analyst: JC
Iron	U		0.0120	0.200	mg/L	1	13-Apr-2022 19:37
Molybdenum	0.406		0.000600	0.00500	mg/L	1	13-Apr-2022 19:37
MERCURY BY SW7470A		Method	I:SW7470A		Prep:SW7470A /	13-Apr-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Apr-2022 14:11
ANIONS BY E300.0, REV 2.1, 1993		Meth	od:E300				Analyst: YP
Chloride	14.6		0.400	1.00	mg/L	2	02-Apr-2022 14:28
Fluoride	1.66		0.100	0.200	mg/L	2	02-Apr-2022 14:28
Nitrogen, Nitrate (As N)	0.102	J	0.0600	0.200	mg/L	2	02-Apr-2022 14:28
Sulfate	1,420		4.00	10.0	mg/L	20	12-Apr-2022 21:45
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Metho	od:E410.4				Analyst: TH
Chemical Oxygen Demand	21.0		5.00	15.0	mg/L	1	13-Apr-2022 17:00
SPECIFIC CONDUCTANCE BY SM 2 2011	2510B-	Metho	d:M2510 B				Analyst: TH
Specific Conductivity	3,570		5.00	5.00	umhos/cm @ 25.0 °C	1	07-Apr-2022 15:00

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Altamira	ANALYTICAL REPORT
WFEC CCR/Landfill	WorkOrder:HS22040016
MW-19S	Lab ID:HS22040016-11
01-Apr-2022 13:35	Matrix:Water
	Altamira WFEC CCR/Landfill MW-19S 01-Apr-2022 13:35

ANALYSES	RESULT Q	UAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY S -2011	M2540C N	/lethod:M	2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	2,180		5.00	10.0	mg/L	1	08-Apr-2022 14:43
ALKALINITY BY SM 2320B-2011	м	ethod:SN	12320B				Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	U		5.00	5.00	mg/L	1	12-Apr-2022 14:02
Alkalinity, Carbonate (As CaCO3)	53.6		5.00	5.00	mg/L	1	12-Apr-2022 14:02
Alkalinity, Hydroxide (As CaCO3)	82.4		5.00	5.00	mg/L	1	12-Apr-2022 14:02
Alkalinity, Total (As CaCO3)	136		5.00	5.00	mg/L	1	12-Apr-2022 14:02
FERROUS IRON BY SM3500 FE B	Me	thod:SM3	500FED				Analyst: AP
Ferrous Iron	0.0300	J	0.0200	0.0500	mg/L	1	02-Apr-2022 13:08
FERROUS IRON BY SM3500 FE D	Me	thod:SM3 (dissolv	500FED red)				Analyst: AP
Ferrous Iron, Dissolved	0.0290	J	0.0200	0.0500	mg/L	1	02-Apr-2022 13:14
SULFIDE BY SM4500 S2-F-2011	Met	hod:SM4	500 S2-F				Analyst: JHD
Sulfide	U		1.00	1.00	mg/L	1	08-Apr-2022 17:00
PH BY SM4500H+ B-2011	Met	thod:SM4	500H+ B				Analyst: MZD
рН	10.8	Н	0.100	0.100	pH Units	1	14-Apr-2022 14:15
Temp Deg C @pH	21.2	Н	0	0	°C	1	14-Apr-2022 14:15
SUBCONTRACT ANALYSIS - RAD 226	NUM	Method	:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16
SUBCONTRACT ANALYSIS - RAD	OIUM 228	Method	:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16

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# **ALS Houston, US**

Client:	Altamira
Project:	WFEC CCR/Landfill
Sample ID:	MW-20
Collection Date:	31-Mar-2022 19:20

ANALYTICAL REPORT

WorkOrder:HS22040016 Lab ID:HS22040016-12 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method	SW6020A		Prep:SW3010A /	13-Apr-2022	Analyst: JC
Antimony	U		0.000400	0.00200	mg/L	1	15-Apr-2022 22:28
Arsenic	U		0.000400	0.00200	mg/L	1	15-Apr-2022 22:28
Barium	0.0125		0.00190	0.00400	mg/L	1	15-Apr-2022 22:28
Beryllium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:28
Boron	0.550		0.0110	0.0200	mg/L	1	15-Apr-2022 22:28
Cadmium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:28
Calcium	324		0.680	10.0	mg/L	20	18-Apr-2022 12:48
Chromium	0.000674	J	0.000400	0.00400	mg/L	1	15-Apr-2022 22:28
Cobalt	0.00112	J	0.000200	0.00500	mg/L	1	15-Apr-2022 22:28
Lead	U		0.000600	0.00200	mg/L	1	15-Apr-2022 22:28
Lithium	0.0693		0.00100	0.00500	mg/L	1	15-Apr-2022 22:28
Molybdenum	0.000659	J	0.000600	0.00500	mg/L	1	15-Apr-2022 22:28
Selenium	U		0.00110	0.00200	mg/L	1	15-Apr-2022 22:28
Thallium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:28
MERCURY BY SW7470A		Method	SW7470A		Prep:SW7470A /	13-Apr-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Apr-2022 14:40
ANIONS BY E300.0, REV 2.1, 1993	3	Metho	od:E300				Analyst: YP
Chloride	8.67		2.00	5.00	mg/L	10	12-Apr-2022 22:27
Fluoride	U		0.500	1.00	mg/L	10	12-Apr-2022 22:27
Nitrogen, Nitrate (As N)	972		3.00	10.0	mg/L	100	02-Apr-2022 14:44
Sulfate	2,070		20.0	50.0	mg/L	100	04-Apr-2022 16:02
CHEMICAL OXYGEN DEMAND B' E410.4, REV 2.0, 1993	Y	Metho	d:E410.4				Analyst: TH
Chemical Oxygen Demand	7.00	J	5.00	15.0	mg/L	1	13-Apr-2022 17:00
SPECIFIC CONDUCTANCE BY SI 2011	M 2510B-	Method	:M2510 B				Analyst: TH
Specific Conductivity	23,700		50.0	50.0	umhos/cm @ 25.0 °C	10	07-Apr-2022 15:00
TOTAL DISSOLVED SOLIDS BY 9 -2011	SM2540C	Method	I:M2540C				Analyst: CWG
Filterable)	1,940		5.00	10.0	mg/L	1	05-Apr-2022 15:25
PH BY SM4500H+ B-2011	1	Method:S	M4500H+ B				Analyst: MZD
рН	1.50	Н	0.100	0.100	pH Units	1	14-Apr-2022 14:15
Temp Deg C @pH	22.3	Н	0	0	°C	1	14-Apr-2022 14:15
SUBCONTRACT ANALYSIS - RAI 226		Meth	iod:NA				Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16
SUBCONTRACT ANALYSIS - RAI	DIUM 228	Meth	iod:NA				SUBFC
Subcontract Analysis	See Attached		0		NA	1	29-Apr-2022 10:16

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

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Client:	Altamira
Project:	WFEC CCR/Landfill
Sample ID:	DUP 3
Collection Date:	31-Mar-2022 17:08

ANALYTICAL REPORT

WorkOrder:HS22040016 Lab ID:HS22040016-13 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCU SM3500FED	JLATION BY	Method:	SM3500FED				Analyst: JHD
Ferric Iron	U		0.0200	0.0500	mg/L	1	19-Apr-2022 10:04
FERRIC IRON (DISS)- BY BY SM3500FED	CALCULATION	Method: (dis	SM3500FED solved)				Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	19-Apr-2022 10:07
ICP-MS METALS BY SW6	020A	Method	I:SW6020A		Prep:SW3010A /	13-Apr-2022	Analyst: JC
Antimony	U		0.000400	0.00200	mg/L	1	15-Apr-2022 22:32
Arsenic	0.00302		0.000400	0.00200	mg/L	1	15-Apr-2022 22:32
Barium	0.00332	J	0.00190	0.00400	mg/L	1	15-Apr-2022 22:32
Beryllium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:32
Boron	5.06		0.110	0.200	mg/L	10	18-Apr-2022 12:50
Cadmium	0.000207	J	0.000200	0.00200	mg/L	1	15-Apr-2022 22:32
Calcium	25.3		0.0340	0.500	mg/L	1	15-Apr-2022 22:32
Chromium	0.000495	J	0.000400	0.00400	mg/L	1	15-Apr-2022 22:32
Cobalt	U		0.000200	0.00500	mg/L	1	15-Apr-2022 22:32
Iron	U		0.0120	0.200	mg/L	1	15-Apr-2022 22:32
Lead	U		0.000600	0.00200	mg/L	1	15-Apr-2022 22:32
Lithium	0.00347	J	0.00100	0.00500	mg/L	1	15-Apr-2022 22:32
Magnesium	0.587		0.0100	0.200	mg/L	1	15-Apr-2022 22:32
Molybdenum	0.222		0.000600	0.00500	mg/L	1	15-Apr-2022 22:32
Potassium	15.3		0.0180	0.200	mg/L	1	15-Apr-2022 22:32
Selenium	0.00157	J	0.00110	0.00200	mg/L	1	15-Apr-2022 22:32
Sodium	406		0.140	2.00	mg/L	10	18-Apr-2022 12:50
Thallium	U		0.000200	0.00200	mg/L	1	15-Apr-2022 22:32
DISSOLVED METALS BY	SW6020A Meth	od:SW6	020A (dissol <sup>a</sup>	ved)	Prep:SW3010A /	13-Apr-2022	Analyst: JC
Iron	U		0.0120	0.200	mg/L	1	13-Apr-2022 20:05
Molybdenum	0.203		0.000600	0.00500	mg/L	1	13-Apr-2022 20:05
MERCURY BY SW7470A		Method	I:SW7470A		Prep:SW7470A /	13-Apr-2022	Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	13-Apr-2022 14:42
ANIONS BY E300.0, REV 2	2.1, 1993	Meth	od:E300				Analyst: YP
Chloride	4.60		0.400	1.00	mg/L	2	02-Apr-2022 14:49
Fluoride	1.92		0.100	0.200	mg/L	2	02-Apr-2022 14:49
Nitrogen, Nitrate (As N)	0.146	J	0.0600	0.200	mg/L	2	02-Apr-2022 14:49
Sulfate	842		4.00	10.0	mg/L	20	12-Apr-2022 21:19
CHEMICAL OXYGEN DEM E410.4, REV 2.0, 1993	IAND BY	Metho	od:E410.4				Analyst: TH
Chemical Oxygen Deman	d 5.00	J	5.00	15.0	mg/L	1	13-Apr-2022 17:00
SPECIFIC CONDUCTANC 2011	E BY SM 2510B-	Metho	d:M2510 B				Analyst: TH
Specific Conductivity	2,080		5.00	5.00	umhos/cm	1	07-Apr-2022 15:00

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

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Client:	Altamira	ANALYTICAL REPORT
Project:	WFEC CCR/Landfill	WorkOrder:HS22040016
Sample ID:	DUP 3	Lab ID:HS22040016-13
Collection Date:	31-Mar-2022 17:08	Matrix:Water

ANALYSES	RESULT QU	AL MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SM -2011	M2540C Me	ethod:M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	1,310	5.00	10.0	mg/L	1	05-Apr-2022 15:25
ALKALINITY BY SM 2320B-2011	Me	thod:SM2320B				Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	24.4	5.00	5.00	mg/L	1	12-Apr-2022 16:43
Alkalinity, Carbonate (As CaCO3)	64.7	5.00	5.00	mg/L	1	12-Apr-2022 16:43
Alkalinity, Hydroxide (As CaCO3)	U	5.00	5.00	mg/L	1	12-Apr-2022 16:43
Alkalinity, Total (As CaCO3)	89.1	5.00	5.00	mg/L	1	12-Apr-2022 16:43
FERROUS IRON BY SM3500 FE B	Meth	od:SM3500FED				Analyst: AP
Ferrous Iron	U	0.0200	0.0500	mg/L	1	02-Apr-2022 13:40
FERROUS IRON BY SM3500 FE D	Meth	od:SM3500FED (dissolved)				Analyst: AP
Ferrous Iron, Dissolved	U	0.0200	0.0500	mg/L	1	02-Apr-2022 14:00
SULFIDE BY SM4500 S2-F-2011	Meth	od:SM4500 S2-F				Analyst: JHD
Sulfide	U	1.00	1.00	mg/L	1	06-Apr-2022 17:00
PH BY SM4500H+ B-2011	Meth	od:SM4500H+ B				Analyst: MZD
рН	9.30	H <b>0.100</b>	0.100	pH Units	1	14-Apr-2022 14:15
Temp Deg C @pH	22.8	Н О	0	°C	1	14-Apr-2022 14:15
SUBCONTRACT ANALYSIS - RADI 226	UM	Method:NA				Analyst: SUBFC
Subcontract Analysis	See Attached	0		NA	1	29-Apr-2022 10:16
SUBCONTRACT ANALYSIS - RADI	UM 228	Method:NA				Analyst: SUBFC
Subcontract Analysis	See Attached	0		NA	1	29-Apr-2022 10:16

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Batch ID: 177562

# Method: WATER - SW3010A

# End Date: 13 Apr 2022 19:00 Prep Code: 3010A

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22040016-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-12		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-13		10 (mL)	10 (mL)	1	120 plastic HNO3
Batch ID: 177564		Start Date:	13 Apr 20	22 10:00	End Date: 13 Apr 2022 14:00
Method: DISS METALS PR	EP - WATER -	- SW3010A			Prep Code: 3010A DISS

Start Date: 13 Apr 2022 09:00

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22040016-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-13		10 (mL)	10 (mL)	1	120 plastic HNO3

## Batch ID: 177568

# Start Date: 13 Apr 2022 08:00

# Method: MERCURY PREP BY 7470A- WATER

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22040016-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-12		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22040016-13		10 (mL)	10 (mL)	1	120 plastic HNO3

Weight / Prep Log

# Revision:

**RIGHT SOLUTIONS | RIGHT PARTNER** 

End Date: 13 Apr 2022 11:00

Prep Code: HG\_WPR

DATES REPORT

# Client:AltamiraProject:WFEC CCR/LandfillWorkOrder:HS22040016

Sample ID	Client Sam	p ID Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 177562	(0)	Test Name : ICP-MS METALS BY SW	/6020A		Matrix: Water	
HS22040016-01	MW-14A	30 Mar 2022 15:29		13 Apr 2022 09:00	18 Apr 2022 12:23	10
HS22040016-01	MW-14A	30 Mar 2022 15:29		13 Apr 2022 09:00	15 Apr 2022 21:58	1
HS22040016-02	MW-15A	30 Mar 2022 12:22		13 Apr 2022 09:00	18 Apr 2022 12:25	10
HS22040016-02	MW-15A	30 Mar 2022 12:22		13 Apr 2022 09:00	15 Apr 2022 22:00	1
HS22040016-03	MW-21	30 Mar 2022 17:33		13 Apr 2022 09:00	18 Apr 2022 12:19	10
HS22040016-03	MW-21	30 Mar 2022 17:33		13 Apr 2022 09:00	15 Apr 2022 11:41	1
HS22040016-04	MW-3	30 Mar 2022 15:51		13 Apr 2022 09:00	18 Apr 2022 12:27	5
HS22040016-04	MW-3	30 Mar 2022 15:51		13 Apr 2022 09:00	15 Apr 2022 22:04	1
HS22040016-05	MW-5S	31 Mar 2022 15:31		13 Apr 2022 09:00	18 Apr 2022 12:29	5
HS22040016-05	MW-5S	31 Mar 2022 15:31		13 Apr 2022 09:00	15 Apr 2022 22:06	1
HS22040016-06	MW-7S	01 Apr 2022 19:29		13 Apr 2022 09:00	18 Apr 2022 12:31	10
HS22040016-06	MW-7S	01 Apr 2022 19:29		13 Apr 2022 09:00	15 Apr 2022 22:10	1
HS22040016-07	MW-13	01 Apr 2022 11:54		13 Apr 2022 09:00	18 Apr 2022 12:32	5
HS22040016-07	MW-13	01 Apr 2022 11:54		13 Apr 2022 09:00	15 Apr 2022 22:12	1
HS22040016-08	MW-16	01 Apr 2022 13:31		13 Apr 2022 09:00	18 Apr 2022 12:34	5
HS22040016-08	MW-16	01 Apr 2022 13:31		13 Apr 2022 09:00	15 Apr 2022 22:20	1
HS22040016-09	MW-17	31 Mar 2022 17:22		13 Apr 2022 09:00	18 Apr 2022 12:42	50
HS22040016-09	MW-17	31 Mar 2022 17:22		13 Apr 2022 09:00	15 Apr 2022 22:22	1
HS22040016-10	MW-18	31 Mar 2022 17:08		13 Apr 2022 09:00	18 Apr 2022 12:46	10
HS22040016-10	MW-18	31 Mar 2022 17:08		13 Apr 2022 09:00	15 Apr 2022 22:26	1
HS22040016-11	MW-19S	01 Apr 2022 13:35		13 Apr 2022 09:00	15 Apr 2022 13:44	50
HS22040016-11	MW-19S	01 Apr 2022 13:35		13 Apr 2022 09:00	15 Apr 2022 13:21	20
HS22040016-11	MW-19S	01 Apr 2022 13:35		13 Apr 2022 09:00	15 Apr 2022 11:31	1
HS22040016-12	MW-20	31 Mar 2022 19:20		13 Apr 2022 09:00	18 Apr 2022 12:48	20
HS22040016-12	MW-20	31 Mar 2022 19:20		13 Apr 2022 09:00	15 Apr 2022 22:28	1
HS22040016-13	DUP 3	31 Mar 2022 17:08		13 Apr 2022 09:00	18 Apr 2022 12:50	10
HS22040016-13	DUP 3	31 Mar 2022 17:08		13 Apr 2022 09:00	15 Apr 2022 22:32	1
Batch ID: 177564	(0)	Test Name : DISSOLVED METALS B	Y SW6020A		Matrix: Water	
HS22040016-01	MW-14A	30 Mar 2022 15:29		13 Apr 2022 10:00	13 Apr 2022 19:51	1
HS22040016-02	MW-15A	30 Mar 2022 12:22		13 Apr 2022 10:00	13 Apr 2022 19:53	1
HS22040016-05	MW-5S	31 Mar 2022 15:31		13 Apr 2022 10:00	13 Apr 2022 19:55	1
HS22040016-06	MW-7S	01 Apr 2022 19:29		13 Apr 2022 10:00	13 Apr 2022 19:57	1
HS22040016-08	MW-16	01 Apr 2022 13:31		13 Apr 2022 10:00	13 Apr 2022 19:59	1
HS22040016-09	MW-17	31 Mar 2022 17:22		13 Apr 2022 10:00	13 Apr 2022 20:01	1
HS22040016-10	MW-18	31 Mar 2022 17:08		13 Apr 2022 10:00	13 Apr 2022 20:03	1
HS22040016-11	MW-19S	01 Apr 2022 13:35		13 Apr 2022 10:00	13 Apr 2022 19:37	1
HS22040016-13	DUP 3	31 Mar 2022 17:08		13 Apr 2022 10:00	13 Apr 2022 20:05	1

# Revision: 1

Client: Project: WorkOrder:	Altamira WFEC CCR/Landfill HS22040016				DATES REPORT		
Sample ID	Client Samp	ID Collection Date	Leachate Date	Prep Date	Analysis Date	DF	
Batch ID: 177568(0)		Test Name : MERCURY BY SW747(	DA		Matrix: Water		
HS22040016-01	MW-14A	30 Mar 2022 15:29		13 Apr 2022 08:00	13 Apr 2022 14:16	1	
HS22040016-02	MW-15A	30 Mar 2022 12:22		13 Apr 2022 08:00	13 Apr 2022 14:18	1	
HS22040016-03	MW-21	30 Mar 2022 17:33		13 Apr 2022 08:00	13 Apr 2022 14:19	1	
HS22040016-04	MW-3	30 Mar 2022 15:51		13 Apr 2022 08:00	13 Apr 2022 14:21	1	
HS22040016-05	MW-5S	31 Mar 2022 15:31		13 Apr 2022 08:00	13 Apr 2022 14:23	1	
HS22040016-06	MW-7S	01 Apr 2022 19:29		13 Apr 2022 08:00	13 Apr 2022 14:24	1	
HS22040016-07	MW-13	01 Apr 2022 11:54		13 Apr 2022 08:00	13 Apr 2022 14:33	1	
HS22040016-08	MW-16	01 Apr 2022 13:31		13 Apr 2022 08:00	13 Apr 2022 14:35	1	
HS22040016-09	MW-17	31 Mar 2022 17:22		13 Apr 2022 08:00	13 Apr 2022 14:37	1	
HS22040016-10	MW-18	31 Mar 2022 17:08		13 Apr 2022 08:00	13 Apr 2022 14:38	1	
HS22040016-11	MW-19S	01 Apr 2022 13:35		13 Apr 2022 08:00	13 Apr 2022 14:11	1	
HS22040016-12	MW-20	31 Mar 2022 19:20		13 Apr 2022 08:00	13 Apr 2022 14:40	1	
HS22040016-13	DUP 3	31 Mar 2022 17:08		13 Apr 2022 08:00	13 Apr 2022 14:42	1	
Batch ID: R405511(0)		Test Name : FERROUS IRON BY SI	M3500 FE B		Matrix: Water		
HS22040016-01	MW-14A	30 Mar 2022 15:29			01 Apr 2022 12:05	1	
HS22040016-02	MW-15A	30 Mar 2022 12:22			01 Apr 2022 12:05	1	
Batch ID: R4055	13 ( 0 )	Test Name : FERROUS IRON BY SI	M3500 FE D		Matrix: Water		
HS22040016-01	MW-14A	30 Mar 2022 15:29			01 Apr 2022 12:08	1	
HS22040016-02	MW-15A	30 Mar 2022 12:22			01 Apr 2022 12:08	1	
Batch ID: R40558	87(0)	Test Name: ANIONS BY E300.0, RE	EV 2.1, 1993		Matrix: Water		
HS22040016-01	MW-14A	30 Mar 2022 15:29			01 Apr 2022 12:00	5	
HS22040016-02	MW-15A	30 Mar 2022 12:22			01 Apr 2022 12:05	5	
HS22040016-03	MW-21	30 Mar 2022 17:33			01 Apr 2022 12:10	50	
HS22040016-04	MW-3	30 Mar 2022 15:51			01 Apr 2022 12:15	50	
Batch ID: R405597(0)		Test Name: ANIONS BY E300.0, RE	EV 2.1, 1993		Matrix: Water		
HS22040016-05	MW-5S	31 Mar 2022 15:31			02 Apr 2022 13:24	100	
HS22040016-06	MW-7S	01 Apr 2022 19:29			02 Apr 2022 13:30	1	
HS22040016-07	MW-13	01 Apr 2022 11:54			02 Apr 2022 13:40	5	
HS22040016-08	MW-16	01 Apr 2022 13:31			02 Apr 2022 13:46	50	
HS22040016-09	MW-17	31 Mar 2022 17:22			02 Apr 2022 13:51	5	
HS22040016-10	MW-18	31 Mar 2022 17:08			02 Apr 2022 13:56	5	
HS22040016-11	MW-19S	01 Apr 2022 13:35			02 Apr 2022 14:28	2	
HS22040016-12	MW-20	31 Mar 2022 19:20			02 Apr 2022 14:44	100	
HS22040016-13	DUP 3	31 Mar 2022 17:08			02 Apr 2022 14:49	2	

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Client: Project: WorkOrder:	Altamira WFEC ( HS2204	CCR/Landfill 0016				DATES RE	PORT
Sample ID	Client Sam	o ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R4056	13 ( 0 )	Test Name : A	NIONS BY E300.0, RE	EV 2.1, 1993		Matrix: Water	
HS22040016-05	MW-5S		31 Mar 2022 15:31			04 Apr 2022 15:52	100
HS22040016-08	MW-16		01 Apr 2022 13:31			04 Apr 2022 15:57	50
HS22040016-09	MW-17		31 Mar 2022 17:22			04 Apr 2022 15:36	50
HS22040016-12	MW-20		31 Mar 2022 19:20			04 Apr 2022 16:02	100
Batch ID: R4056	15(0)	Test Name: F	ERROUS IRON BY SM	/3500 FE B		Matrix: Water	
HS22040016-05	MW-5S		31 Mar 2022 15:31			02 Apr 2022 13:40	1
HS22040016-06	MW-7S		01 Apr 2022 19:29			02 Apr 2022 13:40	1
HS22040016-08	MW-16		01 Apr 2022 13:31			02 Apr 2022 13:08	1
HS22040016-09	MW-17		31 Mar 2022 17:22			02 Apr 2022 13:40	1
HS22040016-10	MW-18		31 Mar 2022 17:08			02 Apr 2022 13:40	1
HS22040016-11	MW-19S		01 Apr 2022 13:35			02 Apr 2022 13:08	1
HS22040016-13	DUP 3		31 Mar 2022 17:08			02 Apr 2022 13:40	1
Batch ID: R4056	19 ( 0 )	Test Name: F	ERROUS IRON BY SM	/3500 FE D		Matrix: Water	
HS22040016-05	MW-5S		31 Mar 2022 15:31			02 Apr 2022 14:00	1
HS22040016-06	MW-7S		01 Apr 2022 19:29			02 Apr 2022 14:00	1
HS22040016-08	MW-16		01 Apr 2022 13:31			02 Apr 2022 13:14	1
HS22040016-09	MW-17		31 Mar 2022 17:22			02 Apr 2022 14:00	1
HS22040016-10	MW-18		31 Mar 2022 17:08			02 Apr 2022 14:00	1
HS22040016-11	MW-19S		01 Apr 2022 13:35			02 Apr 2022 13:14	1
HS22040016-13	DUP 3		31 Mar 2022 17:08			02 Apr 2022 14:00	1
Batch ID: R4058	18 ( 0 )	Test Name : ⊤	OTAL DISSOLVED SC	LIDS BY SM2540C-	-2011	Matrix: Water	
HS22040016-01	MW-14A		30 Mar 2022 15:29			05 Apr 2022 15:25	1
HS22040016-02	MW-15A		30 Mar 2022 12:22			05 Apr 2022 15:25	1
HS22040016-03	MW-21		30 Mar 2022 17:33			05 Apr 2022 15:25	1
HS22040016-04	MW-3		30 Mar 2022 15:51			05 Apr 2022 15:25	1
HS22040016-05	MW-5S		31 Mar 2022 15:31			05 Apr 2022 15:25	1
HS22040016-09	MW-17		31 Mar 2022 17:22			05 Apr 2022 15:25	1
HS22040016-10	MW-18		31 Mar 2022 17:08			05 Apr 2022 15:25	1
HS22040016-12	MW-20		31 Mar 2022 19:20			05 Apr 2022 15:25	1
HS22040016-13	DUP 3		31 Mar 2022 17:08			05 Apr 2022 15:25	1
Batch ID: R4058	64 ( 0 )	Test Name : S	PECIFIC CONDUCTA	NCE BY SM 2510B-	2011	Matrix: Water	
HS22040016-01	MW-14A		30 Mar 2022 15:29			07 Apr 2022 10:00	1
HS22040016-02	MW-15A		30 Mar 2022 12:22			07 Apr 2022 10:00	1
HS22040016-03	MW-21		30 Mar 2022 17:33			07 Apr 2022 10:00	10
HS22040016-04	MW-3		30 Mar 2022 15:51			07 Apr 2022 10:00	10
HS22040016-05	MW-5S		31 Mar 2022 15:31			07 Apr 2022 10:00	10

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Client:	Altamira						
Project:	WFEC CCR/Landfill					DATES RE	PORT
WorkOrder:	HS220400	16					
Sample ID	Client Samp ID	) (	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R40596	67 (0) <b>Te</b>	est Name : SPE		NCE BY SM 2510B-20	)11	Matrix: Water	
HS22040016-06	MW-7S	0	)1 Apr 2022 19:29			07 Apr 2022 15:00	1
HS22040016-07	MW-13	0	)1 Apr 2022 11:54			07 Apr 2022 15:00	1
HS22040016-08	MW-16	0	)1 Apr 2022 13:31			07 Apr 2022 15:00	1
HS22040016-09	MW-17	3	31 Mar 2022 17:22			07 Apr 2022 15:00	5
HS22040016-10	MW-18	3	31 Mar 2022 17:08			07 Apr 2022 15:00	1
HS22040016-11	MW-19S	0	)1 Apr 2022 13:35			07 Apr 2022 15:00	1
HS22040016-12	MW-20	3	31 Mar 2022 19:20			07 Apr 2022 15:00	10
HS22040016-13	DUP 3	3	31 Mar 2022 17:08			07 Apr 2022 15:00	1
Batch ID: R40613	35 (0) <b>Te</b>	st Name : SUL	FIDE BY SM4500 S	2-F-2011		Matrix: Water	
HS22040016-01	MW-14A	3	30 Mar 2022 15:29			06 Apr 2022 17:00	1
HS22040016-02	MW-15A	3	30 Mar 2022 12:22			06 Apr 2022 17:00	1
HS22040016-05	MW-5S	3	31 Mar 2022 15:31			06 Apr 2022 17:00	1
HS22040016-09	MW-17	3	31 Mar 2022 17:22			06 Apr 2022 17:00	1
HS22040016-10	MW-18	3	31 Mar 2022 17:08			06 Apr 2022 17:00	1
HS22040016-13	DUP 3	3	31 Mar 2022 17:08			06 Apr 2022 17:00	1
Batch ID: R40613	36 ( 0 ) <b>Te</b>	st Name : SUL	FIDE BY SM4500 S	2-F-2011		Matrix: Water	
HS22040016-06	MW-7S	0	)1 Apr 2022 19:29			08 Apr 2022 17:00	1
HS22040016-08	MW-16	0	)1 Apr 2022 13:31			08 Apr 2022 17:00	1
HS22040016-11	MW-19S	0	)1 Apr 2022 13:35			08 Apr 2022 17:00	1
Batch ID: R40617	77 (0) <b>Te</b>	est Name: TOT	AL DISSOLVED SO	LIDS BY SM2540C-2	011	Matrix: Water	
HS22040016-06	MW-7S	0	01 Apr 2022 19:29			08 Apr 2022 14:43	1
HS22040016-07	MW-13	0	)1 Apr 2022 11:54			08 Apr 2022 14:43	1
HS22040016-08	MW-16	0	)1 Apr 2022 13:31			08 Apr 2022 14:43	1
HS22040016-11	MW-19S	0	01 Apr 2022 13:35			08 Apr 2022 14:43	1
Batch ID: R406334 (0)		st Name: ALK	ALINITY BY SM 232	0B-2011		Matrix: Water	
HS22040016-01	MW-14A	3	30 Mar 2022 15:29			12 Apr 2022 15:45	1
HS22040016-02	MW-15A	3	30 Mar 2022 12:22			12 Apr 2022 15:52	1
HS22040016-05	MW-5S	3	31 Mar 2022 15:31			12 Apr 2022 15:55	1
HS22040016-06	MW-7S	0	01 Apr 2022 19:29			12 Apr 2022 16:18	1
HS22040016-08	MW-16	0	)1 Apr 2022 13:31			12 Apr 2022 16:25	1
HS22040016-09	MW-17	3	31 Mar 2022 17:22			12 Apr 2022 16:28	1
HS22040016-10	MW-18	3	31 Mar 2022 17:08			12 Apr 2022 16:36	1
HS22040016-11	MW-19S	0	01 Apr 2022 13:35			12 Apr 2022 14:02	1
HS22040016-13	DUP 3	3	31 Mar 2022 17:08			12 Apr 2022 16:43	1
Batch ID: R40634	47 (0) <b>Te</b>	est Name : ANIC	ONS BY E300.0, RE	V 2.1, 1993		Matrix: Water	
HS22040016-01	MW-14A	3	80 Mar 2022 15:29			12 Apr 2022 19:54	50
HS22040016-02	MW-15A	3	30 Mar 2022 12:22			12 Apr 2022 19:43	50

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Client: Project: WorkOrder:	Altamir WFEC HS220	a CCR/Landfill 40016	I			DATES REPORT		
Sample ID	Client San	np ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF	
Batch ID: R406349(0)		Test Name :	ANIONS BY E300.0, R	EV 2.1, 1993		Matrix: Water		
HS22040016-03	MW-21		30 Mar 2022 17:33			12 Apr 2022 21:56	5	
HS22040016-04	MW-3		30 Mar 2022 15:51			12 Apr 2022 22:11	5	
HS22040016-05	MW-5S		31 Mar 2022 15:31			12 Apr 2022 22:17	10	
HS22040016-06	MW-7S		01 Apr 2022 19:29			12 Apr 2022 21:50	50	
HS22040016-07	MW-13		01 Apr 2022 11:54			12 Apr 2022 21:24	50	
HS22040016-08	MW-16		01 Apr 2022 13:31			12 Apr 2022 22:22	5	
HS22040016-10	MW-18		31 Mar 2022 17:08			12 Apr 2022 21:13	50	
HS22040016-11	MW-19S		01 Apr 2022 13:35			12 Apr 2022 21:45	20	
HS22040016-12	MW-20		31 Mar 2022 19:20			12 Apr 2022 22:27	10	
HS22040016-13	DUP 3		31 Mar 2022 17:08			12 Apr 2022 21:19	20	
Batch ID: R4064	26 ( 0 )	Test Name :	CHEMICAL OXYGEN	DEMAND BY E410.4	, REV 2.0, 1993	Matrix: Water		
HS22040016-01	MW-14A		30 Mar 2022 15:29			13 Apr 2022 17:00	1	
HS22040016-02	MW-15A		30 Mar 2022 12:22			13 Apr 2022 17:00	1	
HS22040016-03	MW-21		30 Mar 2022 17:33			13 Apr 2022 17:00	1	
HS22040016-04	MW-3		30 Mar 2022 15:51			13 Apr 2022 17:00	1	
HS22040016-05	MW-5S		31 Mar 2022 15:31			13 Apr 2022 17:00	1	
HS22040016-06	MW-7S		01 Apr 2022 19:29			13 Apr 2022 17:00	1	
HS22040016-07	MW-13		01 Apr 2022 11:54			13 Apr 2022 17:00	1	
HS22040016-08	MW-16		01 Apr 2022 13:31			13 Apr 2022 17:00	1	
HS22040016-09	MW-17		31 Mar 2022 17:22			13 Apr 2022 17:00	1	
HS22040016-10	MW-18		31 Mar 2022 17:08			13 Apr 2022 17:00	1	
HS22040016-11	MW-19S		01 Apr 2022 13:35			13 Apr 2022 17:00	1	
HS22040016-12	MW-20		31 Mar 2022 19:20			13 Apr 2022 17:00	1	
HS22040016-13	DUP 3		31 Mar 2022 17:08			13 Apr 2022 17:00	1	
Batch ID: R4065	622(0)	Test Name :	PH BY SM4500H+ B-20	011		Matrix: Water		
HS22040016-01	MW-14A		30 Mar 2022 15:29			14 Apr 2022 14:15	1	
HS22040016-02	MW-15A		30 Mar 2022 12:22			14 Apr 2022 14:15	1	
HS22040016-03	MW-21		30 Mar 2022 17:33			14 Apr 2022 14:15	1	
HS22040016-04	MW-3		30 Mar 2022 15:51			14 Apr 2022 14:15	1	
HS22040016-05	MW-5S		31 Mar 2022 15:31			14 Apr 2022 14:15	1	
HS22040016-06	MW-7S		01 Apr 2022 19:29			14 Apr 2022 14:15	1	
HS22040016-07	MW-13		01 Apr 2022 11:54			14 Apr 2022 14:15	1	
HS22040016-08	MW-16		01 Apr 2022 13:31			14 Apr 2022 14:15	1	
HS22040016-09	MW-17		31 Mar 2022 17:22			14 Apr 2022 14:15	1	
HS22040016-10	MW-18		31 Mar 2022 17:08			14 Apr 2022 14:15	1	
HS22040016-11	MW-19S		01 Apr 2022 13:35			14 Apr 2022 14:15	1	
HS22040016-12	MW-20		31 Mar 2022 19:20			14 Apr 2022 14:15	1	
HS22040016-13	DUP 3		31 Mar 2022 17:08			14 Apr 2022 14:15	1	

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Client: Project:	Altamir WFEC	a CCR/Landfill				DATES RE	PORT
WorkOrder:	HS2204	40016					
Sample ID	Client San	np ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R4068	808 ( 0 )	Test Name :	FERRIC IRON - BY CA	LCULATION BY SM	3500FED	Matrix: Water	
HS22040016-01	MW-14A		30 Mar 2022 15:29			19 Apr 2022 10:04	1
HS22040016-02	MW-15A		30 Mar 2022 12:22			19 Apr 2022 10:04	1
HS22040016-05	MW-5S		31 Mar 2022 15:31			19 Apr 2022 10:04	1
HS22040016-06	MW-7S		01 Apr 2022 19:29			19 Apr 2022 10:04	1
HS22040016-08	MW-16		01 Apr 2022 13:31			19 Apr 2022 10:04	1
HS22040016-09	MW-17		31 Mar 2022 17:22			19 Apr 2022 10:04	1
HS22040016-10	MW-18		31 Mar 2022 17:08			19 Apr 2022 10:04	1
HS22040016-11	MW-19S		01 Apr 2022 13:35			19 Apr 2022 10:04	1
HS22040016-13	DUP 3		31 Mar 2022 17:08			19 Apr 2022 10:04	1
Batch ID: R4068	809(0)	Test Name :	FERRIC IRON (DISS)-	BY CALCULATION I	BY SM3500FED	Matrix: Water	
HS22040016-01	MW-14A		30 Mar 2022 15:29			19 Apr 2022 10:07	1
HS22040016-02	MW-15A		30 Mar 2022 12:22			19 Apr 2022 10:07	1
HS22040016-05	MW-5S		31 Mar 2022 15:31			19 Apr 2022 10:07	1
HS22040016-06	MW-7S		01 Apr 2022 19:29			19 Apr 2022 10:07	1
HS22040016-08	MW-16		01 Apr 2022 13:31			19 Apr 2022 10:07	1
HS22040016-09	MW-17		31 Mar 2022 17:22			19 Apr 2022 10:07	1
HS22040016-10	MW-18		31 Mar 2022 17:08			19 Apr 2022 10:07	1
HS22040016-11	MW-19S		01 Apr 2022 13:35			19 Apr 2022 10:07	1
HS22040016-13	DUP 3		31 Mar 2022 17:08			19 Apr 2022 10:07	1

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#### **ALS Houston, US**

Client:	Altamira
Project:	WFEC CCR/Landfill
WorkOrder:	HS22040016

Sample ID	Client Sam	p ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R40761	7(0)	Test Name : St	JBCONTRACT ANAL	YSIS - RADIUM 228		Matrix: Water	
HS22040016-01	MW-14A		30 Mar 2022 15:29			29 Apr 2022 10:16	1
HS22040016-01	MW-14A		30 Mar 2022 15:29			29 Apr 2022 10:16	1
HS22040016-02	MW-15A		30 Mar 2022 12:22			29 Apr 2022 10:16	1
HS22040016-02	MW-15A		30 Mar 2022 12:22			29 Apr 2022 10:16	1
HS22040016-03	MW-21		30 Mar 2022 17:33			29 Apr 2022 10:16	1
HS22040016-03	MW-21		30 Mar 2022 17:33			29 Apr 2022 10:16	1
HS22040016-04	MW-3		30 Mar 2022 15:51			29 Apr 2022 10:16	1
HS22040016-04	MW-3		30 Mar 2022 15:51			29 Apr 2022 10:16	1
HS22040016-05	MW-5S		31 Mar 2022 15:31			29 Apr 2022 10:16	1
HS22040016-05	MW-5S		31 Mar 2022 15:31			29 Apr 2022 10:16	1
HS22040016-06	MW-7S		01 Apr 2022 19:29			29 Apr 2022 10:16	1
HS22040016-06	MW-7S		01 Apr 2022 19:29			29 Apr 2022 10:16	1
HS22040016-07	MW-13		01 Apr 2022 11:54			29 Apr 2022 10:16	1
HS22040016-07	MW-13		01 Apr 2022 11:54			29 Apr 2022 10:16	1
HS22040016-08	MW-16		01 Apr 2022 13:31			29 Apr 2022 10:16	1
HS22040016-08	MW-16		01 Apr 2022 13:31			29 Apr 2022 10:16	1
HS22040016-09	MW-17		31 Mar 2022 17:22			29 Apr 2022 10:16	1
HS22040016-09	MW-17		31 Mar 2022 17:22			29 Apr 2022 10:16	1
HS22040016-10	MW-18		31 Mar 2022 17:08			29 Apr 2022 10:16	1
HS22040016-10	MW-18		31 Mar 2022 17:08			29 Apr 2022 10:16	1
HS22040016-11	MW-19S		01 Apr 2022 13:35			29 Apr 2022 10:16	1
HS22040016-11	MW-19S		01 Apr 2022 13:35			29 Apr 2022 10:16	1
HS22040016-12	MW-20		31 Mar 2022 19:20			29 Apr 2022 10:16	1
HS22040016-12	MW-20		31 Mar 2022 19:20			29 Apr 2022 10:16	1
HS22040016-13	DUP 3		31 Mar 2022 17:08			29 Apr 2022 10:16	1
HS22040016-13	DUP 3		31 Mar 2022 17:08			29 Apr 2022 10:16	1

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### Date: 22-Jun-22

**QC BATCH REPORT** 

# Client:AltamiraProject:WFEC CCR/LandfillWorkOrder:HS22040016

Batch ID:	177562(0)	In	strument:	ICPMS06	Ме	thod:	ICP-MS MET	ALS BY SW	6020A
MBLK Client ID:	Sample ID:	MBLK-177562	Run ID: ICI	Units: PMS06_406582	: <b>mg/L</b> SeqNo: <b>66</b>	An 6 <b>01705</b>	alysis Date: PrepDate:	15-Apr-2022 13-Apr-2022	2 <b>11:27</b> 2 DF: 1
Analyte		Result	PQI	_ SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Antimony		U	0.00200	D					
Arsenic		U	0.00200	)					
Barium		U	0.00400	D					
Beryllium		U	0.00200	)					
Boron		U	0.0200	D					
Cadmium		U	0.00200	)					
Calcium		U	0.500	D					
Chromium		U	0.00400	)					
Cobalt		U	0.00500	0					
Iron		U	0.200	)					
Lead		U	0.00200	D					
Lithium		U	0.00500	)					
Magnesium		U	0.200	D					
Molybdenum	า	U	0.00500	)					
Potassium		U	0.200	D					
Selenium		U	0.00200	)					
Sodium		U	0.200	)					
Thallium		U	0.00200	)					

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#### **QC BATCH REPORT**

Batch ID: 17756	62(0)	In	strument:	ICPMS06	M	ethod: I	ICP-MS MET	ALS BY SWE	6020A
LCS	Sample ID:	LCS-177562		Units:	mg/L	An	alysis Date:	15-Apr-2022	11:29
Client ID:			Run ID: ICP	MS06_406582	SeqNo: 6	601706	PrepDate:	13-Apr-2022	DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Antimony		0.05461	0.00200	0.05	0	109	80 - 120		
Arsenic		0.05663	0.00200	0.05	0	113	80 - 120		
Barium		0.05781	0.00400	0.05	0	116	80 - 120		
Beryllium		0.05509	0.00200	0.05	0	110	80 - 120		
Boron		0.5476	0.0200	0.5	0	110	80 - 120		
Cadmium		0.05888	0.00200	0.05	0	118	80 - 120		
Calcium		5.61	0.500	5	0	112	80 - 120		
Chromium		0.05701	0.00400	0.05	0	114	80 - 120		
Cobalt		0.05747	0.00500	0.05	0	115	80 - 120		
Iron		5.557	0.200	5	0	111	80 - 120		
Lead		0.05732	0.00200	0.05	0	115	80 - 120		
Lithium		0.1074	0.00500	0.1	0	107	80 - 120		
Magnesium		5.602	0.200	5	0	112	80 - 120		
Molybdenum		0.05534	0.00500	0.05	0	111	80 - 120		
Potassium		5.457	0.200	5	0	109	80 - 120		
Selenium		0.05661	0.00200	0.05	0	113	80 - 120		
Sodium		5.718	0.200	5	0	114	80 - 120		
Thallium		0.05418	0.00200	0.05	0	108	80 - 120		

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#### **QC BATCH REPORT**

Batch ID:	177562(0)	Instrument: ICPMS06			Method: ICP-MS METALS BY SW6020A				Method: ICP-MS METALS B				6020A
MS	Sample ID:	HS22040016-11M	<b>MS</b>	Units	mg/L	Ana	alysis Date:	15-Apr-2022	11:35				
Client ID:	MW-19S	I	Run ID: ICPI	MS06_406582	SeqNo: 6	601709	PrepDate:	13-Apr-2022	DF: <b>1</b>				
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual				
Antimony		0.05238	0.00200	0.05	0.00007	105	80 - 120						
Arsenic		0.06378	0.00200	0.05	0.00689	114	80 - 120						
Barium		0.07667	0.00400	0.05	0.01893	115	80 - 120						
Beryllium		0.05129	0.00200	0.05	0.000014	103	80 - 120						
Boron		8.491	0.0200	0.5	7.967	105	80 - 120		EO				
Cadmium		0.05753	0.00200	0.05	0.00038	114	80 - 120						
Calcium		49.82	0.500	5	44.25	112	80 - 120		0				
Chromium		0.05503	0.00400	0.05	0.000829	108	80 - 120						
Cobalt		0.05483	0.00500	0.05	0.000234	109	80 - 120						
Iron		5.418	0.200	5	0.0554	107	80 - 120						
Lead		0.05777	0.00200	0.05	0.00007	115	80 - 120						
Lithium		0.1019	0.00500	0.1	0.002491	99.4	80 - 120						
Magnesiun	ı	5.55	0.200	5	0.0836	109	80 - 120						
Molybdenu	m	0.5083	0.00500	0.05	0.4445	128	80 - 120		SO				
Potassium		42.55	0.200	5	36.99	111	80 - 120		0				
Selenium		0.06534	0.00200	0.05	0.01268	105	80 - 120						
Sodium		714	0.200	5	698.7	307	80 - 120		SEO				
Thallium		0.05448	0.00200	0.05	0.000105	109	80 - 120						

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#### **QC BATCH REPORT**

Batch ID:	177562(0)	In	strument:	ICPMS06	M	ethod:	ICP-MS MET	ALS BY SW6	020A		
MSD	Sample ID:	HS22040016-11M	MSD	Units:	mg/L	An	alysis Date:	15-Apr-2022	11:37		
Client ID:	MW-19S		Run ID: ICPI	MS06_406582	SeqNo: 6	601710	PrepDate:	13-Apr-2022	DF: <b>1</b>	I	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	R %RPD Li	PD mit (	Qual
Antimony		0.05277	0.00200	0.05	0.00007	105	80 - 120	0.05238	0.728	20	
Arsenic		0.06379	0.00200	0.05	0.00689	114	80 - 120	0.06378	0.0172	20	
Barium		0.0769	0.00400	0.05	0.01893	116	80 - 120	0.07667	0.309	20	
Beryllium		0.05294	0.00200	0.05	0.000014	106	80 - 120	0.05129	3.18	20	
Boron		8.676	0.0200	0.5	7.967	142	80 - 120	8.491	2.15	20	SEO
Cadmium		0.05862	0.00200	0.05	0.00038	116	80 - 120	0.05753	1.87	20	
Calcium		50.04	0.500	5	44.25	116	80 - 120	49.82	0.431	20	0
Chromium		0.05532	0.00400	0.05	0.000829	109	80 - 120	0.05503	0.526	20	
Cobalt		0.05582	0.00500	0.05	0.000234	111	80 - 120	0.05483	1.78	20	
Iron		5.453	0.200	5	0.0554	108	80 - 120	5.418	0.633	20	
Lead		0.05764	0.00200	0.05	0.00007	115	80 - 120	0.05777	0.236	20	
Lithium		0.1051	0.00500	0.1	0.002491	103	80 - 120	0.1019	3.17	20	
Magnesiun	n	5.606	0.200	5	0.0836	110	80 - 120	5.55	1.01	20	
Molybdenu	m	0.5137	0.00500	0.05	0.4445	138	80 - 120	0.5083	1.06	20	SO
Potassium		42.61	0.200	5	36.99	112	80 - 120	42.55	0.152	20	0
Selenium		0.06555	0.00200	0.05	0.01268	106	80 - 120	0.06534	0.318	20	
Sodium		724.5	0.200	5	698.7	516	80 - 120	714	1.46	20	SEO
Thallium		0.05456	0.00200	0.05	0.000105	109	80 - 120	0.05448	0.158	20	

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### QC BATCH REPORT

Batch ID:	177562(0)	Instr	ument: I	CPMS06	M	ethod: I	CP-MS MET	ALS BY SW	6020A
PDS	Sample ID:	HS22040016-11PD	S	Units:	mg/L	Ana	alysis Date:	15-Apr-2022	2 11:39
Client ID:	MW-19S	Ru	n ID: ICPM	S06_406582	SeqNo: 6	601711	PrepDate:	13-Apr-2022	2 DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Antimony		0.1045	0.00200	0.1	0.00007	104	75 - 125		
Arsenic		0.1246	0.00200	0.1	0.00689	118	75 - 125		
Barium		0.1344	0.00400	0.1	0.01893	115	75 - 125		
Beryllium		0.1063	0.00200	0.1	0.000014	106	75 - 125		
Cadmium		0.1156	0.00200	0.1	0.00038	115	75 - 125		
Calcium		55.31	0.500	10	44.25	111	75 - 125		0
Chromium		0.1137	0.00400	0.1	0.000829	113	75 - 125		
Cobalt		0.115	0.00500	0.1	0.000234	115	75 - 125		
Iron		11.21	0.200	10	0.0554	112	75 - 125		
Lead		0.1155	0.00200	0.1	0.00007	115	75 - 125		
Lithium		0.1021	0.00500	0.1	0.002491	99.6	70 - 125		
Magnesiun	n	11.55	0.200	10	0.0836	115	75 - 125		
Molybdenu	m	0.5555	0.00500	0.1	0.4445	111	75 - 125		0
Potassium		48.01	0.200	10	36.99	110	75 - 125		
Selenium		0.1298	0.00200	0.1	0.01268	117	75 - 125		
Thallium		0.1166	0.00200	0.1	0.000105	117	75 - 125		
PDS	Sample ID:	HS22040016-11PD	S	Units:	mg/L	Ana	alysis Date:	15-Apr-2022	2 13:48
Client ID:	MW-19S	Ru	n ID: ICPM	S06_406582	SeqNo: 6	602086	PrepDate:	13-Apr-2022	2 DF: 50
Analyte		Result	PQL	– SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Boron		37.33	1.00	25	9.733	110	75 - 125		
PDS	Sample ID:	HS22040016-11PD	S	Units:	mg/L	Ana	alysis Date:	15-Apr-2022	2 13:25
Client ID:	MW-19S	Ru	n ID: ICPM	S06_406582	SeqNo: 6	601951	PrepDate:	13-Apr-2022	2 DF: 20
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Sodium		909.3	4 00	200	722 7	93.3	75 - 125		

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#### **QC BATCH REPORT**

Batch ID:	177562(0)	Inst	rument:	ICPMS06	Meth	nod: I	CP-MS MET	ALS BY SW6	020A	
SD	Sample ID:	HS22040016-11SD	)	Units:	mg/L	An	alysis Date:	15-Apr-2022	11:33	
Client ID:	MW-19S	Ru	un ID: ICPN	/IS06_406582	SeqNo: 660	1708	PrepDate:	13-Apr-2022	DF	5
Analyte		Result	PQL	SPK Val	SPK Ref Value %	%REC	Control Limit	RPD Ref Value	%D	%D Limit Qual
Antimony		U	0.0100					0.00007		0 10
Arsenic		0.008546	0.0100					0.00689		010 J
Barium		0.01927	0.0200					0.01893		010 J
Beryllium		U	0.0100					0.000014		0 10
Cadmium		U	0.0100					0.00038		0 10
Calcium		45.55	2.50					44.25	2.9	5 10
Chromium		U	0.0200					0.000829		0 10
Cobalt		U	0.0250					0.000234		0 10
Iron		U	1.00					0.0554		0 10
Lead		U	0.0100					0.00007		0 10
Lithium		0.007801	0.0250					0.002491		010 J
Magnesium	n	0.09471	1.00					0.0836		0 10 J
Molybdenu	Im	0.4415	0.0250					0.4445	0.68	3 10
Potassium		36.8	1.00					36.99	0.49	7 10
Thallium		U	0.0100					0.000105		0 10
SD	Sample ID:	HS22040016-11SD	)	Units:	mg/L	An	alysis Date:	15-Apr-2022	13:46	
Client ID:	MW-19S	Ru	un ID: ICPN	/IS06_406582	SeqNo: 660	2085	PrepDate:	13-Apr-2022	DF	250
Analyte		Result	PQL	SPK Val	SPK Ref Value %	%REC	Control Limit	RPD Ref Value	%D	%D Limit Qual
Boron		10.11	5.00					9.733	3.	9 10
SD	Sample ID:	HS22040016-11SD	)	Units:	ma/L	An	alvsis Date:	15-Apr-2022	13:23	
Client ID:	MW-19S	R	un ID: ICPN	/S06 406582	SeaNo: 660	1950	PrepDate:	13-Apr-2022	DF	100
					SPK Ref		Control	RPD Ref		%D
Analyte		Result	PQL	SPK Val	Value %	%REC	Limit	Value	%D	Limit Qual
Sodium		752.6	20.0					722.7	4.1	3 10
The followin	g samples were analyze	ed in this batch: HS22 HS22 HS22 HS22 HS22	040016-01 040016-05 040016-09 040016-13	HS220400 HS220400 HS220400	16-02 HS 16-06 HS 16-10 HS	220400 220400 220400	016-03 016-07 016-11	HS22040016- HS22040016- HS22040016-	04 08 12	

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#### QC BATCH REPORT

Batch ID:	177564(0)	Ins	trument:	ICPMS06	Me	ethod:	DISSOLVED (DISSOLVED	METALS BY ))	SW6020A	
MBLK Client ID:	Sample ID:	<b>MBLKF1-177564</b> F	Run ID: ICPN	Units: <b>//S06_406386</b>	<b>mg/L</b> SeqNo: <b>6</b> SPK Ref	Ar 5 <b>97289</b>	nalysis Date: PrepDate: Control	13-Apr-2022 13-Apr-2022 RPD Ref	19:33 DF: 1 RPD	
Analyte		Result	PQL	SPK Val	Value	%REC	Limit	Value	%RPD Limit (	Qual
Iron		U	0.200							
Molybdenur	m	U	0.00500							
MBLK	Sample ID:	MBLK-177564		Units:	mg/L	Ar	nalysis Date:	13-Apr-2022	19:31	
Client ID:		F	Run ID: ICPN	/IS06_406386	SeqNo: 6	597288	PrepDate:	13-Apr-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-177564		Units:	mg/L	Ar	nalysis Date:	13-Apr-2022	19:35	
Client ID:		F	Run ID: ICPN	/S06_406386	SeqNo: 6	597290	PrepDate:	13-Apr-2022	DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control	RPD Ref Value	RPD %RPD Limit (	Qual
Iron		4.986	0.200	5	0	99.7	80 - 120			
Molybdenur	m	0.04944	0.00500	0.05	0	98.9	80 - 120			
MS	Sample ID:	HS22040016-11M	S	Units:	mg/L	Ar	nalysis Date:	13-Apr-2022	19:41	
Client ID:	MW-19S	F	Run ID: ICPN	/S06_406386	SeqNo: 6	597293	PrepDate:	13-Apr-2022	DF: <b>1</b>	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit (	Qual
Iron		4.804	0.200	5	0.003949	96.0	75 - 125			
Molybdenur	m	0.4547	0.00500	0.05	0.4058	97.8	75 - 125			0
MSD	Sample ID:	HS22040016-11M	SD	Units:	mg/L	Ar	nalysis Date:	13-Apr-2022	19:43	
Client ID:	MW-19S	F	Run ID: ICPN	/IS06_406386	SeqNo: 6	597294	PrepDate:	13-Apr-2022	DF: <b>1</b>	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit (	Qual
Iron		4.847	0.200	5	0.003949	96.9	75 - 125	4.804	0.886 20	
Molybdenur	m	0.4494	0.00500	0.05	0.4058	87.2	75 - 125	0.4547	1.17 20	0

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#### **QC BATCH REPORT**

Batch ID:	177564(0)	Instrun	nent:	ICPMS06	Μ	lethod: I		METALS BY D)	SW602	0A
PDS	Sample ID:	HS22040016-11PDS		Units:	mg/L	An	alysis Date:	13-Apr-2022	19:45	
Client ID:	MW-19S	Run I	ID: ICPI	MS06_406386	SeqNo:	6597295	PrepDate:	13-Apr-2022	DF	1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Iron		10.02	0.200	10	0.003949	100	75 - 125			
Molybdenu	ım	0.5021	0.00500	0.1	0.4058	96.2	75 - 125			C
SD	Sample ID:	HS22040016-11SD		Units:	mg/L	An	alysis Date:	13-Apr-2022	19:39	
Client ID:	MW-19S	Run	ID: ICPI	MS06_406386	SeqNo:	6597292	PrepDate:	13-Apr-2022	DF	5
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit Qual
Iron		U	1.00					0.003949		0 10
Molybdenu	ım	0.3954	0.0250					0.4058	2.5	8 10
The followin	g samples were analyze	d in this batch: HS22040 HS22040	0016-01	HS2204001 HS2204001	.6-02 .6-09	HS220400 HS220400	016-05 016-10	HS22040016 HS22040016	-06 -11	

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#### **QC BATCH REPORT**

Batch ID:	177568(0)	Instrumer	nt: HG03	Method: N	IERCURY BY SW7470A
MBLK Client ID:	Sample ID:	MBLK-177568 Run ID:	Units: HG03_406365	<b>mg/L</b> Ana SeqNo: <b>6596332</b>	alysis Date: <b>13-Apr-2022 14:01</b> PrepDate: <b>13-Apr-2022</b> DF: <b>1</b>
Analyte		Result	PQL SPK Val	Value %REC	Limit Value %RPD Limit Qua
Mercury		U 0.00	00200		
LCS Client ID:	Sample ID:	LCS-177568 Run ID:	Units: HG03_406365	mg/L Ana SeqNo: 6596361	alysis Date: <b>13-Apr-2022 14:09</b> PrepDate: <b>13-Apr-2022</b> DF: <b>1</b>
Analyte		Result	PQL SPK Val	Value %REC	Limit Value %RPD Limit Qua
Mercury		0.00508 0.00	0.005 0.005	0 102	80 - 120
MS	Sample ID:	HS22040016-11MS	Units:	<b>mg/L</b> Ana	alysis Date: 13-Apr-2022 14:13
Client ID:	MW-19S	Run ID:	HG03_406365	SeqNo: <b>6596363</b>	PrepDate: 13-Apr-2022 DF: 1
Analyte		Result	PQL SPK Val	SPK Ref Value %REC	Control RPD Ref RPD Limit Value %RPD Limit Qua
Mercury		0.00546 0.00	0.005	-0.000019 110	75 - 125
MSD	Sample ID:	HS22040016-11MSD	Units:	<b>mg/L</b> Ana	alysis Date: 13-Apr-2022 14:14
Client ID:	MW-19S	Run ID:	HG03_406365	SeqNo: <b>6596364</b>	PrepDate: 13-Apr-2022 DF: 1
Analyte		Result	PQL SPK Val	SPK Ref Value %REC	Control RPD Ref RPD Limit Value %RPD Limit Qua
Mercury		0.00587 0.00	0.005	-0.000019 118	75 - 125 0.00546 7.24 20
The followin	g samples were analyze	ed in this batch: HS2204001 HS2204001 HS2204001 HS2204001 HS2204001	6-01 HS2204001 6-05 HS2204001 6-09 HS2204001 6-13	6-02HS2204006-06HS2204006-10HS220400	16-03         HS22040016-04           16-07         HS22040016-08           16-11         HS22040016-12

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#### QC BATCH REPORT

Batch ID:	R405511(0)	Inst	trument:	UV-2450	M	ethod: F	ERROUS IF	RON BY SM3	500 FE B
MBLK	Sample ID:	MBLK-R405511		Units:	mg/L	Ana	alysis Date:	01-Apr-2022	2 12:05
Client ID:		R	un ID: UV-2	2450_405511	SeqNo: 6	575222	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Irc	n	U	0.0500				80 - 120		
LCS	Sample ID:	LCS-R405511		Units:	mg/L	Ana	alysis Date:	01-Apr-2022	2 12:05
Client ID:		R	un ID: UV-2	2450_405511	SeqNo: 6	575221	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Irc	n	0.252	0.0500	0.25	0	101	80 - 120		
MS	Sample ID:	HS22040016-01M	S	Units:	mg/L	Ana	alysis Date:	01-Apr-2022	2 12:05
Client ID:	MW-14A	R	un ID: UV-2	2450_405511	SeqNo: 6	575210	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Irc	n	0.377	0.0500	0.25	0.13	98.8	75 - 125		
MSD	Sample ID:	HS22040016-01M	SD	Units:	mg/L	Ana	alysis Date:	01-Apr-2022	2 12:05
Client ID:	MW-14A	R	un ID: UV-2	2450_405511	SeqNo: 6	575209	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Irc	n	0.376	0.0500	0.25	0.13	98.4	75 - 125	0.377	0.266 20
The followin	g samples were analyze	d in this batch: HS22	2040016-01	HS2204001	16-02				

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## Client:AltamiraProject:WFEC CCR/LandfillWorkOrder:HS22040016

#### **QC BATCH REPORT**

Batch ID:	R405513(0)	Ins	strument	::	UV-2450	Μ	lethod:	FERROUS IF	RON BY SM3 ))	500 FE [	)
MBLK	Sample ID:	MBLK-R405513			Units:	mg/L	Ai	nalysis Date:	01-Apr-2022	12:08	
Client ID:		I	Run ID:	UV-2	450_405513	SeqNo:	6575259	PrepDate:		DF	: 1
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Ferrous Iro	on, Dissolved	U	0.0	)500							
LCS	Sample ID:	LCS-R405513			Units:	mg/L	Aı	nalysis Date:	01-Apr-2022	12:08	
Client ID:		I	Run ID:	UV-2	450_405513	SeqNo:	6575258	PrepDate:		DF	: 1
Analyte		Result	I	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Ferrous Iro	on, Dissolved	0.254	0.0	)500	0.25	0	102	80 - 120			
MS	Sample ID:	HS22040016-01N	IS		Units:	mg/L	Aı	nalysis Date:	01-Apr-2022	12:08	
Client ID:	MW-14A	I	Run ID:	UV-2	450_405513	SeqNo:	6575248	PrepDate:		DF	: 1
Analyte		Result	I	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Ferrous Iro	on, Dissolved	0.391	0.0	)500	0.25	0.142	99.6	80 - 120			
MSD	Sample ID:	HS22040016-01N	ISD		Units:	mg/L	Aı	nalysis Date:	01-Apr-2022	12:08	
Client ID:	MW-14A	I	Run ID:	UV-2	450_405513	SeqNo:	6575247	PrepDate:		DF	: 1
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Ferrous Iro	on, Dissolved	0.386	0.0	)500	0.25	0.142	97.6	80 - 120	0.391	1.2	9 20
The followin	g samples were analyze	d in this batch: HS2	22040016-	-01	HS2204001	6-02					

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#### **Client:** Altamira QC BATCH REPORT **Project:** WFEC CCR/Landfill WorkOrder: HS22040016 Batch ID: R405587 (0) Instrument: **ICS-Integrion** Method: ANIONS BY E300.0, REV 2.1, 1993 MBLK Sample ID: MBLK Units: mg/L Analysis Date: 01-Apr-2022 14:12 Run ID: ICS-Integrion\_405587 SeqNo: 6577115 Client ID: PrepDate: DF·1 SPK Ref RPD Ref Control RPD Result PQL SPK Val %REC %RPD Limit Qual Analyte Value Limit Value Chloride U 0.500 Fluoride U 0.100 Nitrogen, Nitrate (As N) U 0.100 Sulfate U 0.500 LCS Sample ID: LCS Units: mg/L Analysis Date: 01-Apr-2022 14:17 Run ID: ICS-Integrion\_405587 SeqNo: 6577116 Client ID: PrepDate: DF-1 SPK Ref RPD Ref RPD Control Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual 0.500 0 Chloride 18.81 20 94.1 90 - 110 Fluoride 4.258 0.100 4 0 106 90 - 110 0.100 3.704 Nitrogen, Nitrate (As N) 4 0 92.6 90 - 110 Sulfate 20.12 0.500 20 0 101 90 - 110 MS Sample ID: HS22031669-03MS Units: mg/L Analysis Date: 01-Apr-2022 13:19 Run ID: ICS-Integrion\_405587 SeqNo: 6577108 DF: 5 Client ID: PrepDate: SPK Ref Control RPD Ref RPD Analyte Result PQL SPK Val Value %REC Limit %RPD Limit Qual Value Chloride 76.29 2.50 50 26.4 99.8 80 - 120 Fluoride 11.4 0.500 10 0.39 110 80 - 120 10.15 0.500 10 0.2935 80 - 120 Nitrogen, Nitrate (As N) 98 5 Sulfate 1711 2.50 50 1757 -92.1 80 - 120 SEO MS Sample ID: HS22031619-07MS Units: mg/L Analysis Date: 01-Apr-2022 11:40 Client ID: Run ID: ICS-Integrion\_405587 SeqNo: 6577093 PrepDate: DF: 50 SPK Ref RPD Control **RPD** Ref Analyte Result PQL SPK Val Value %REC I imit Value %RPD Limit Qual Chloride 516.3 25.0 500 9.05 101 80 - 120 Fluoride 120.9 5.00 100 0.74 120 80 - 120 S S Nitrogen, Nitrate (As N) 308.9 5.00 100 234.5 74.4 80 - 120 Sulfate 1590 25.0 500 1588 0.525 80 - 120 S

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#### **QC BATCH REPORT**

Batch ID:	R405587 ( 0 )	Instru	iment:	ICS-Integrion	M	ethod: A	ANIONS BY	E300.0, REV	2.1, 1993		
MSD	Sample ID:	HS22031669-03MSE	)	Units: <b>m</b>	ng/L	Ana	alysis Date:	01-Apr-2022	13:24		
Client ID:		Rur	ID: ICS-	Integrion_405587	SeqNo: 6	577109	PrepDate:		DF: <b>5</b>		
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RI %RPD Li	⊃D mit Qu	ual
Chloride		76.12	2.50	50	26.4	99.4	80 - 120	76.29	0.223	20	
Fluoride		11.92	0.500	10	0.39	115	80 - 120	11.4	4.47	20	
Nitrogen, N	litrate (As N)	10.11	0.500	10	0.2935	98.1	80 - 120	10.15	0.39	20	
Sulfate		1710	2.50	50	1757	-94.5	80 - 120	1711	0.0703	20 S	SEO
MSD	Sample ID:	HS22031619-07MSE	)	Units: <b>m</b>	ng/L	Ana	alysis Date:	01-Apr-2022	11:46		
Client ID:		Run	ID: ICS-	Integrion_405587	SeqNo: 6	577094	PrepDate:		DF: <b>5</b>	0	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RI %RPD Li	⊃D mit Qu	ıal
Chloride		514.4	25.0	500	9.05	101	80 - 120	516.3	0.359	20	
Fluoride		109.7	5.00	100	0.74	109	80 - 120	120.9	9.69	20	
Nitrogen, N	litrate (As N)	307.4	5.00	100	234.5	72.9	80 - 120	308.9	0.482	20	S
Sulfate		1567	25.0	500	1588	-4.10	80 - 120	1590	1.47	20	S
The following	g samples were analyze	ed in this batch: HS2204	40016-01	HS22040016-0	02	HS220400	16-03	HS22040016-	-04		

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Client:	Altamira								TCH REPORT
Project:	WFEC CCR/	Landfill							
WorkOrder:	HS22040016	5							
Batch ID: R405597 (0)		Instrum	ient:	ICS-Integrion	Me	ethod: A	ANIONS BY	E300.0, REV	2.1, 1993
MBLK Sampl	e ID: MBLK			Units: <b>n</b>	ng/L	Ana	alysis Date:	02-Apr-2022	12:21
Client ID:		Run II	D: ICS	Integrion_405597	SeqNo: 6	577340	PrepDate:		DF: <b>1</b>
Analyte	F	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						
LCS Sampl	e ID: LCS			Units: <b>n</b>	ıg/L	Ana	alysis Date:	02-Apr-2022	12:26
Client ID:		Run II	D: ICS	Integrion_405597	SeqNo: 6	577341	PrepDate:		DF: <b>1</b>
Analyte	F	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Chloride		18.94	0.500	20	0	94.7	90 - 110		
Fluoride		4.286	0.100	4	0	107	90 - 110		
Nitrogen, Nitrate (As N)		3.738	0.100	4	0	93.5	90 - 110		
MS Sampl	e ID: <b>HS22040</b>	016-11MS		Units: <b>n</b>	ng/L	Ana	alysis Date:	02-Apr-2022	14:33
Client ID: MW-19S		Run II	D: ICS	Integrion_405597	SeqNo: 6	577359	PrepDate:		DF: <b>2</b>
Analyte	F	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Chloride		35.33	1.00	20	14.58	104	80 - 120		
Fluoride		6	0.200	4	1.66	109	80 - 120		
Nitrogen, Nitrate (As N)		4.22	0.200	4	0.1016	103	80 - 120		
MS Sampl	e ID: <b>HS22031</b>	669-10MS		Units: <b>n</b>	ng/L	Ana	alysis Date:	02-Apr-2022	12:37
Client ID:		Run II	D: ICS	Integrion_405597	SeqNo: 6	577343	PrepDate:		DF: <b>1</b>
Analyte	F	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Chloride		12.74	0.500	10	2.871	98.7	80 - 120		
Fluoride		2.756	0.100	2	0.506	112	80 - 120		
Nitrogen, Nitrate (As N)		2.169	0.100	2	0.2562	95.6	80 - 120		

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Date: 22-Jun-22

### ALS Houston, US

#### **QC BATCH REPORT**

Batch ID:	R405597 ( 0 )	Instrur	nent:	ICS-Integrion	Μ	lethod: A	NIONS BY	E300.0, REV	2.1, 1993
MSD	Sample ID:	HS22040016-11MSD		Units: <b>r</b>	ng/L	Ana	alysis Date:	02-Apr-2022	14:38
Client ID:	MW-19S	Run	ID: ICS-	Integrion_405597	SeqNo:	6577360	PrepDate:		DF: <b>2</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Chloride		34.98	1.00	20	14.58	102	80 - 120	35.33	0.973 20
Fluoride		5.888	0.200	4	1.66	106	80 - 120	6	1.89 20
Nitrogen, N	Nitrate (As N)	4.176	0.200	4	0.1016	102	80 - 120	4.22	1.06 20
MSD	Sample ID:	HS22031669-10MSD		Units: <b>r</b>	ng/L	Ana	alysis Date:	02-Apr-2022	12:42
<b>MSD</b> Client ID:	Sample ID:	HS22031669-10MSD Run	ID: <b>ICS-</b> I	Units: m Integrion_405597	<b>ng/L</b> SeqNo: (	Ana 6577344	alysis Date: PrepDate:	02-Apr-2022	12:42 DF: 1
<b>MSD</b> Client ID: Analyte	Sample ID:	HS22031669-10MSD Run Result	ID: <b>ICS-</b> PQL	Units: <b>m</b> Integrion_405597 SPK Val	n <b>g/L</b> SeqNo: ( SPK Ref Value	Ana 6 <b>577344</b> %REC	alysis Date: PrepDate: Control Limit	<b>02-Apr-2022</b> RPD Ref Value	12:42 DF: 1 RPD %RPD Limit Qual
MSD Client ID: Analyte Chloride	Sample ID:	HS22031669-10MSD Run Result 12.98	ID: <b>ICS-</b> PQL 0.500	Units: m Integrion_405597 SPK Val 10	ng/L SeqNo: ( SPK Ref Value 2.871	Ana 6577344 %REC 101	alysis Date: PrepDate: Control Limit 80 - 120	02-Apr-2022 RPD Ref Value 12.74	12:42 DF: 1 %RPD Limit Qual 1.84 20
MSD Client ID: Analyte Chloride Fluoride	Sample ID:	HS22031669-10MSD Run Result 12.98 2.795	ID: <b>ICS-</b> PQL 0.500 0.100	Units: m Integrion_405597 SPK Val 10 2	ng/L SeqNo: ( SPK Ref Value 2.871 0.506	Ana 6577344 %REC 101 114	Alysis Date: PrepDate: Control Limit 80 - 120 80 - 120	02-Apr-2022 RPD Ref Value 12.74 2.756	12:42 DF: 1 %RPD Limit Qual 1.84 20 1.44 20
MSD Client ID: Analyte Chloride Fluoride Nitrogen, N	Sample ID:	HS22031669-10MSD Run Result 12.98 2.795 2.211	ID: <b>ICS</b> - PQL 0.500 0.100 0.100	Units: m Integrion_405597 SPK Val 10 2 2	ng/L SeqNo: 0 SPK Ref Value 2.871 0.506 0.2562	Ana 6577344 %REC 101 114 97.7	Alysis Date: PrepDate: Control Limit 80 - 120 80 - 120 80 - 120	02-Apr-2022 RPD Ref Value 12.74 2.756 2.169	12:42 DF: 1 %RPD Limit Qual 1.84 20 1.44 20 1.91 20

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Client: Project: WorkOrder:	Alta WFI HS2	mira EC CCF 2204001	R/Landfil 6	I					QC BA	TCH REPC	ORT
Batch ID: R40561	3(0)		Ins	strument:	ICS-Integrion	М	ethod: A	ANIONS BY	E300.0, REV	2.1, 1993	
MBLK	Sample ID:	MBLK			Units: <b>n</b>	ng/L	Ana	alysis Date:	04-Apr-2022	11:08	
Client ID:			F	Run ID: ICS	-Integrion_405613	SeqNo: 6	6577731	PrepDate:		DF: <b>1</b>	
Analyte			Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit	Qual
Nitrogen, Nitrate (As	; N)		U	0.100							
Sulfate			U	0.500							
LCS	Sample ID:	LCS			Units: <b>n</b>	ng/L	Ana	alysis Date:	04-Apr-2022	2 11:14	
Client ID:			F	Run ID: ICS	-Integrion_405613	SeqNo: 6	577732	PrepDate:		DF: <b>1</b>	
Analyte			Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit	Qual
Nitrogen, Nitrate (As	; N)		3.704	0.100	4	0	92.6	90 - 110			
Sulfate			18.53	0.500	20	0	92.7	90 - 110			
MS	Sample ID:	HS2204	0120-01N	IS	Units: n	ng/L	Ana	alysis Date:	04-Apr-2022	2 12:51	
Client ID:	·		F	Run ID: ICS	-Integrion_405613	SeqNo: 6	6577738	PrepDate:		DF: <b>1</b>	
Analyte			Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit	Qual
Nitrogen, Nitrate (As											
	5 N)		7.436	0.100	2	5.535	95.1	80 - 120			
Sulfate	; N)		7.436 150.2	0.100 0.500	2 10	5.535 143.5	95.1 66.7	80 - 120 80 - 120			SEO
Sulfate	Sample ID:	HS2203	7.436 150.2 <b>1336-03</b> N	0.100 0.500	2 10 Units: n	5.535 143.5 ng/L	95.1 66.7 Ana	80 - 120 80 - 120 alysis Date:	04-Apr-2022	2 19:54	SEO
Sulfate MS Client ID:	Sample ID:	HS2203	7.436 150.2 <b>1336-03</b> N F	0.100 0.500 IS Run ID: ICS	2 10 Units: n -Integrion_405613	5.535 143.5 ng/L SeqNo: 6	95.1 66.7 Ana 5 <b>578928</b>	80 - 120 80 - 120 alysis Date: PrepDate:	04-Apr-2022	2 <b>19:54</b> DF: <b>50</b>	SEO
Sulfate MS Client ID: Analyte	s N)	HS2203	7.436 150.2 <b>1336-03I</b> F Result	0.100 0.500 IS Run ID: ICS PQL	2 10 Units: n -Integrion_405613 SPK Val	5.535 143.5 ng/L SeqNo: <b>6</b> SPK Ref Value	95.1 66.7 Ana 5 <b>578928</b> %REC	80 - 120 80 - 120 alysis Date: PrepDate: Control Limit	<b>04-Apr-2022</b> RPD Ref Value	2 <b>19:54</b> DF: <b>50</b> %RPD Limit (	SEO Qual
Sulfate MS Client ID: Analyte Nitrogen, Nitrate (As	Sample ID:	HS2203	7.436 150.2 1336-03N F Result 99.69	0.100 0.500 IS Run ID: ICS PQL 5.00	2 10 Units: n -Integrion_405613 SPK Val 100	5.535 143.5 ng/L SeqNo: <b>6</b> SPK Ref Value 0.96	95.1 66.7 Ana <b>5578928</b> %REC 98.7	80 - 120 80 - 120 alysis Date: PrepDate: Control Limit 80 - 120	04-Apr-2022 RPD Ref Value	2 <b>19:54</b> DF: <b>50</b> %RPD Limit (	SEO Qual
Sulfate MS Client ID: Analyte Nitrogen, Nitrate (As Sulfate	Sample ID:	HS2203	7.436 150.2 <b>1336-03W</b> F Result 99.69 1153	0.100 0.500 IS Run ID: ICS PQL 5.00 25.0	2 10 Units: n -Integrion_405613 SPK Val 100 500	5.535 143.5 ng/L SeqNo: <b>6</b> SPK Ref Value 0.96 701.7	95.1 66.7 Ana 5578928 %REC 98.7 90.2	80 - 120 80 - 120 alysis Date: PrepDate: Control Limit 80 - 120 80 - 120	<b>04-Apr-2022</b> RPD Ref Value	2 <b>19:54</b> DF: <b>50</b> RPD %RPD Limit (	SEO Qual
Sulfate MS Client ID: Analyte Nitrogen, Nitrate (As Sulfate MSD	Sample ID:	HS2203	7.436 150.2 1336-03W F Result 99.69 1153 0120-01W	0.100 0.500 IS Run ID: ICS PQL 5.00 25.0	2 10 Units: n -Integrion_405613 SPK Val 100 500 Units: n	5.535 143.5 ng/L SeqNo: <b>6</b> SPK Ref Value 0.96 701.7 ng/L	95.1 66.7 Ana 5578928 %REC 98.7 90.2 Ana	80 - 120 80 - 120 alysis Date: PrepDate: Control Limit 80 - 120 80 - 120 alysis Date:	04-Apr-2022 RPD Ref Value 04-Apr-2022	2 <b>19:54</b> DF: <b>50</b> %RPD Limit ( 2 <b>12:56</b>	SEO
Sulfate MS Client ID: Analyte Nitrogen, Nitrate (As Sulfate MSD Client ID:	Sample ID:	HS2203	7.436 150.2 1336-03M F Result 99.69 1153 0120-01M	0.100 0.500 IS Run ID: ICS PQL 5.00 25.0 ISD Run ID: ICS	2 10 Units: n -Integrion_405613 SPK Val 100 500 Units: n -Integrion_405613	5.535 143.5 ng/L SeqNo: <b>6</b> SPK Ref Value 0.96 701.7 ng/L SeqNo: <b>6</b>	95.1 66.7 Ana 5578928 %REC 98.7 90.2 Ana 5577739	80 - 120 80 - 120 alysis Date: PrepDate: Control Limit 80 - 120 80 - 120 alysis Date: PrepDate:	04-Apr-2022 RPD Ref Value 04-Apr-2022	2 19:54 DF: 50 %RPD Limit ( 2 12:56 DF: 1	SEO
Sulfate          MS         Client ID:         Analyte         Nitrogen, Nitrate (As         Sulfate         MSD         Client ID:         Analyte	Sample ID:	HS2203 HS2204	7.436 150.2 1336-03W F Result 99.69 1153 0120-01W F Result	0.100 0.500 IS Run ID: ICS PQL 5.00 25.0 ISD Run ID: ICS PQL	2 10 Units: n -Integrion_405613 SPK Val 100 500 Units: n -Integrion_405613 SPK Val	5.535 143.5 ng/L SeqNo: <b>6</b> SPK Ref Value 0.96 701.7 ng/L SeqNo: <b>6</b> SPK Ref Value	95.1 66.7 Ana 5578928 %REC 98.7 90.2 Ana 5577739 %REC	80 - 120 80 - 120 alysis Date: PrepDate: Control Limit 80 - 120 80 - 120 alysis Date: PrepDate: Control Limit	04-Apr-2022 RPD Ref Value 04-Apr-2022 RPD Ref Value	2 19:54 DF: 50 %RPD Limit ( 2 12:56 DF: 1 RPD %RPD Limit (	Qual
Sulfate MS Client ID: Analyte Nitrogen, Nitrate (As Sulfate MSD Client ID: Analyte Nitrogen, Nitrate (As	Sample ID:	HS2203	7.436 150.2 1336-03W F Result 99.69 1153 0120-01W F Result 7.441	0.100 0.500 IS Run ID: ICS PQL 5.00 25.0 ISD Run ID: ICS PQL 0.100	2 10 Units: n -Integrion_405613 SPK Val 100 500 Units: n -Integrion_405613 SPK Val 2	5.535 143.5 ng/L SeqNo: 6 SPK Ref Value 0.96 701.7 ng/L SeqNo: 6 SPK Ref Value 5.535	95.1 66.7 Ana 5578928 %REC 98.7 90.2 Ana 5577739 %REC 95.3	80 - 120 80 - 120 alysis Date: PrepDate: Control Limit 80 - 120 80 - 120 alysis Date: PrepDate: Control Limit 80 - 120	04-Apr-2022 RPD Ref Value 04-Apr-2022 RPD Ref Value 7.436	2 19:54 DF: 50 %RPD Limit ( 2 12:56 DF: 1 %RPD Limit ( 0.0618 20	Qual

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### ALS Houston, US

#### Date: 22-Jun-22

# Client:AltamiraProject:WFEC CCR/LandfillWorkOrder:HS22040016

#### **QC BATCH REPORT**

Batch ID:	R405613 ( 0 )	Instrume	nt:	ICS-Integrion	N	lethod:	ANIONS BY	E300.0, REV	2.1, 1993
MSD	Sample ID:	HS22031336-03MSD		Units: <b>r</b>	ng/L	An	alysis Date:	04-Apr-2022	19:59
Client ID:		Run ID	ICS-	Integrion_405613	SeqNo:	6578929	PrepDate:		DF: <b>50</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Nitrogen, N	litrate (As N)	99.14	5.00	100	0.96	98.2	80 - 120	99.69	0.558 20
Sulfate		1149	25.0	500	701.7	89.5	80 - 120	1153	0.292 20
The followin	g samples were analyze	d in this batch: HS220400	6-05	HS22040016-	08	HS220400	16-09	HS22040016-	-12

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#### **QC BATCH REPORT**

Batch ID:	R405615 ( 0 )	Ins	strument:	UV-2450	М	ethod: F	ERROUS IF	RON BY SM3	500 FE B
MBLK	Sample ID:	MBLK-R405615		Units:	mg/L	Ana	alysis Date:	02-Apr-2022	13:08
Client ID:		I	Run ID: UV-	2450_405615	SeqNo: 6	6577826	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Iro	on	U	0.0500				80 - 120		
LCS	Sample ID:	LCS-R405615		Units:	mg/L	Ana	alysis Date:	02-Apr-2022	13:08
Client ID:		I	Run ID: UV-	2450_405615	SeqNo: 6	6577825	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Iro	on	0.256	0.0500	0.25	0	102	80 - 120		
MS	Comple ID:	US22040046 44M	19	Units:	ma/l	Ana	alysis Date:	02-Apr-2022	13:08
-	Sample ID.	H322040010-11W	10	ernte.	ing/∟	7	,	•	
Client ID:	Sample ID. MW-19S	H322040010-11N	Run ID: UV-	2450_405615	SeqNo: 6	6577804	PrepDate:	•	DF: <b>1</b>
Client ID: Analyte	Sample ID. MW-19S	Result	Run ID: UV- PQL	2450_405615 SPK Val	SeqNo: 6 SPK Ref Value	6577804 %REC	PrepDate: Control Limit	RPD Ref Value	DF: <b>1</b> RPD %RPD Limit Qual
Client ID: Analyte Ferrous Iro	Sample ID. MW-19S	Result 0.276	Run ID: UV- PQL	2450_405615 SPK Val	SeqNo: 6 SPK Ref Value	5577804 %REC 98.4	PrepDate: Control Limit 75 - 125	RPD Ref Value	DF: <b>1</b> RPD %RPD Limit Qual
Client ID: Analyte Ferrous Iro	Sample ID. MW-19S	Result 0.276	Run ID: UV- PQL 0.0500	2450_405615 SPK Val 0.25 Units:	SeqNo: 6 SPK Ref Value 0.03 mg/L	5577804 %REC 98.4 Ana	PrepDate: Control Limit 75 - 125 alysis Date:	RPD Ref Value 02-Apr-2022	DF: 1 RPD %RPD Limit Qual
Client ID: Analyte Ferrous Iro MSD Client ID:	Sample ID. MW-19S Sample ID: MW-19S	Result 0.276 HS22040016-11N	Run ID: UV- PQL 0.0500 ISD Run ID: UV-	2450_405615 SPK Val 0.25 Units: 2450_405615	SeqNo: 6 SPK Ref Value 0.03 mg/L SeqNo: 6	98.4 95577804 98.4 Ana	PrepDate: Control Limit 75 - 125 alysis Date: PrepDate:	RPD Ref Value	DF: 1 RPD %RPD Limit Qual
Client ID: Analyte Ferrous Irc MSD Client ID: Analyte	Sample ID. MW-19S	Result 0.276 HS22040016-11N Result	Run ID: UV- PQL 0.0500 ISD Run ID: UV- PQL	2450_405615 SPK Val 0.25 Units: 2450_405615 SPK Val	SeqNo: 6 SPK Ref Value 0.03 mg/L SeqNo: 6 SPK Ref Value	5577804 %REC 98.4 Ana 5577803 %REC	PrepDate: Control Limit 75 - 125 alysis Date: PrepDate: Control Limit	RPD Ref Value	DF: 1 RPD %RPD Limit Qual
Client ID: Analyte Ferrous Iro MSD Client ID: Analyte Ferrous Iro	MW-19S on Sample ID: MW-19S	Result 0.276 HS22040016-11M Result 0.278	Run ID: UV- PQL 0.0500 ISD Run ID: UV- PQL 0.0500	2450_405615 SPK Val 0.25 Units: 2450_405615 SPK Val 0.25	SeqNo: 6 SPK Ref Value 0.03 mg/L SeqNo: 6 SPK Ref Value 0.03	5577804 %REC 98.4 Ana 5577803 %REC 99.2	PrepDate: Control Limit 75 - 125 alysis Date: PrepDate: Control Limit 75 - 125	RPD Ref Value 02-Apr-2022 RPD Ref Value 0.276	DF: 1 RPD %RPD Limit Qual 2:13:08 DF: 1 %RPD Limit Qual 0.722 20

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#### QC BATCH REPORT

Batch ID:	R405619 ( 0 )	Ins	strument:	UV-2450	Me	ethod:	FERROUS IF	RON BY SM3 ))	500 FE D
MBLK	Sample ID:	MBLK-R405619		Units:	mg/L	Ar	nalysis Date:	02-Apr-2022	2 13:14
Client ID:			Run ID: UV-	2450_405619	SeqNo: 6	577938	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Irc	on, Dissolved	U	0.0500						
LCS	Sample ID:	LCS-R405619		Units:	mg/L	Ar	nalysis Date:	02-Apr-2022	2 13:14
Client ID:			Run ID: UV-	2450_405619	SeqNo: <b>6</b>	577937	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Irc	on, Dissolved	0.259	0.0500	0.25	0	104	80 - 120		
MS	Sample ID:	HS22040016-11M	MS	Units:	mg/L	Ar	nalysis Date:	02-Apr-2022	2 13:14
<b>MS</b> Client ID:	Sample ID: <b>MW-19S</b>	HS22040016-11M	<b>NS</b> Run ID: UV-	Units: 2450_405619	mg/L SeqNo: 6	Ar 577928	nalysis Date: PrepDate:	02-Apr-2022	2 <b>13:14</b> DF: 1
<b>MS</b> Client ID: Analyte	Sample ID: MW-19S	HS22040016-11M Result	<b>MS</b> Run ID: UV- PQL	Units: <b>2450_405619</b> SPK Val	<b>mg/L</b> SeqNo: <b>6</b> SPK Ref Value	Ar 577928 %REC	nalysis Date: PrepDate: Control Limit	<b>02-Apr-2022</b> RPD Ref Value	2 <b>13:14</b> DF: <b>1</b> RPD %RPD Limit Qual
MS Client ID: Analyte Ferrous Irc	Sample ID: MW-19S	HS22040016-11M Result 0.28	<b>VIS</b> Run ID: UV- PQL 0.0500	Units: <b>2450_405619</b> SPK Val 0.25	<b>mg/L</b> SeqNo: <b>6</b> SPK Ref Value 0.029	Ar 5 <b>777928</b> %REC 100	nalysis Date: PrepDate: Control Limit 80 - 120	02-Apr-2022 RPD Ref Value	2 <b>13:14</b> DF: <b>1</b> RPD %RPD Limit Qual
MS Client ID: Analyte Ferrous Irc	Sample ID: MW-19S	HS22040016-11M Result 0.28 HS22040016-11M	<b>VIS</b> Run ID: UV- PQL 0.0500 <b>VISD</b>	Units: <b>2450_405619</b> SPK Val 0.25 Units:	mg/L SeqNo: 6 SPK Ref Value 0.029 mg/L	Ar 5 <b>577928</b> %REC 100 Ar	nalysis Date: PrepDate: Control Limit 80 - 120 nalysis Date:	02-Apr-2022 RPD Ref Value 02-Apr-2022	2 13:14 DF: 1 RPD %RPD Limit Qual
MS Client ID: Analyte Ferrous Irc MSD Client ID:	Sample ID: MW-19S on, Dissolved Sample ID: MW-19S	HS22040016-11M Result 0.28 HS22040016-11M	<b>VIS</b> Run ID: UV- PQL 0.0500 <b>VISD</b> Run ID: UV-	Units: 2450_405619 SPK Val 0.25 Units: 2450_405619	mg/L SeqNo: 6 SPK Ref Value 0.029 mg/L SeqNo: 6	Ar 577928 %REC 100 Ar 577927	nalysis Date: PrepDate: Control Limit 80 - 120 nalysis Date: PrepDate:	02-Apr-2022 RPD Ref Value 02-Apr-2022	2 13:14 DF: 1 RPD %RPD Limit Qual
MS Client ID: Analyte Ferrous Irc MSD Client ID: Analyte	Sample ID: MW-19S on, Dissolved Sample ID: MW-19S	HS22040016-11M Result 0.28 HS22040016-11M Result	<b>VIS</b> Run ID: UV- PQL 0.0500 <b>VISD</b> Run ID: UV- PQL	Units: 2450_405619 SPK Val 0.25 Units: 2450_405619 SPK Val	mg/L SeqNo: 6 SPK Ref Value 0.029 mg/L SeqNo: 6 SPK Ref Value	Ar 5777928 %REC 100 Ar 5777927 %REC	nalysis Date: PrepDate: Control Limit 80 - 120 nalysis Date: PrepDate: Control Limit	02-Apr-2022 RPD Ref Value 02-Apr-2022 RPD Ref Value	2 13:14 DF: 1 RPD %RPD Limit Qual 2 13:14 DF: 1 %RPD Limit Qual
MS Client ID: Analyte Ferrous Irc MSD Client ID: Analyte Ferrous Irc	Sample ID: MW-19S on, Dissolved Sample ID: MW-19S	HS22040016-11M Result 0.28 HS22040016-11M Result 0.271	<b>VIS</b> Run ID: UV- PQL 0.0500 <b>VISD</b> Run ID: UV- PQL 0.0500	Units: 2450_405619 SPK Val 0.25 Units: 2450_405619 SPK Val 0.25	mg/L SeqNo: 6 SPK Ref Value 0.029 mg/L SeqNo: 6 SPK Ref Value 0.029	Ar 5777928 %REC 100 Ar 577927 %REC 96.8	nalysis Date: PrepDate: Control Limit 80 - 120 nalysis Date: PrepDate: Control Limit 80 - 120	02-Apr-2022 RPD Ref Value 02-Apr-2022 RPD Ref Value 0.28	2 13:14 DF: 1 RPD %RPD Limit Qual 2 13:14 DF: 1 RPD %RPD Limit Qual 3.27 20

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#### QC BATCH REPORT

Batch ID: R40	05818(0)	Instrum	ent:	Balance1	Μ	lethod:	TOTAL DISS 2011	OLVED SOL	IDS BY SM2540C-
MBLK	Sample ID:	WBLK-040522		Units:	mg/L	Ar	nalysis Date:	05-Apr-2022	15:25
Client ID:		Run II	D: Bala	nce1_405818	SeqNo:	6582474	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Total Dissolved Filterable)	Solids (Residue,	U	10.0						
LCS	Sample ID:	WLCS-040522		Units:	mg/L	Ar	nalysis Date:	05-Apr-2022	15:25
Client ID:		Run II	D: Bala	nce1_405818	SeqNo:	6582475	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Total Dissolved Filterable)	Solids (Residue,	1070	10.0	1000	0	107	85 - 115		
DUP	Sample ID:	HS22040009-02DUP		Units:	mg/L	Ar	nalysis Date:	05-Apr-2022	15:25
Client ID:		Run II	D: Bala	nce1_405818	SeqNo:	6582464	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Total Dissolved Filterable)	Solids (Residue,	2720	10.0					2700	0.738 5
DUP	Sample ID:	HS22031671-01DUP		Units:	mg/L	Ar	nalysis Date:	05-Apr-2022	15:25
Client ID:		Run II	D: Bala	nce1_405818	SeqNo:	6582459	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Total Dissolved Filterable)	Solids (Residue,	860	10.0					858	0.233 5
The following sam	nnles were analyze	d in this batch: HS220400	)16-01	H\$2204001	6.02	H\$22040	016-03	HS22040016	-04

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**QC BATCH REPORT** 

# Client:AltamiraProject:WFEC CCR/LandfillWorkOrder:HS22040016

Batch ID:	R405864 ( 0 )	Instrume	nt: N	WetChem_HS	М	ethod:	SPECIFIC CO 2011	ONDUCTANO	CE BY SM 2510B-
MBLK	Sample ID:	MBLK-R405864		Units:	umhos/cm 25.0 °C	@Ar	alysis Date:	07-Apr-2022	2 10:00
Client ID:		Run ID:	WetC	hem_HS_4058	64 SeqNo: 6	584015	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Specific Co	nductivity	U	5.00						
LCS	Sample ID:	LCS-R405864		Units:	umhos/cm 25.0 °C	@Ar	alysis Date:	07-Apr-2022	2 10:00
Client ID:		Run ID:	WetC	hem_HS_4058	64 SeqNo: 6	584014	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Specific Co	nductivity	1436	5.00	1413	0	102	80 - 120		
DUP	Sample ID:	HS22031619-07DUP		Units:	umhos/cm 25.0 °C	<b>@</b> Ar	alysis Date:	07-Apr-2022	2 10:00
Client ID:		Run ID:	WetC	hem_HS_4058	64 SeqNo: 6	584016	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Specific Co	nductivity	4960	5.00					4980	0.402 20
The following	g samples were analyze	ed in this batch: HS2204001 HS2204001	6-01 6-05	HS2204001	6-02	HS22040	016-03	HS22040016	-04

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**QC BATCH REPORT** 

# Client:AltamiraProject:WFEC CCR/LandfillWorkOrder:HS22040016

Batch ID:	R405967 ( 0 )	Instrume	nt: V	/etChem_HS	Me	ethod: 8	SPECIFIC CO	ONDUCTANO	CE BY SM 2510B-
MBLK	Sample ID:	MBLK-R405967		Units:	umhos/cm ( 25.0 °C	@ Ana	alysis Date:	07-Apr-2022	2 15:00
Client ID:		Run ID:	WetCh	nem_HS_4059	67 SeqNo: 6	586926	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Specific Co	onductivity	U	5.00						
LCS	Sample ID:	LCS-R405967		Units:	umhos/cm( 25.0 °C	@ Ana	alysis Date:	07-Apr-2022	2 15:00
Client ID:		Run ID:	WetCh	nem_HS_4059	67 SeqNo: 6	586925	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Specific Co	onductivity	1436	5.00	1413	0	102	80 - 120		
DUP	Sample ID:	HS22040334-01DUP		Units:	umhos/cm( 25.0 °C	@ Ana	alysis Date:	07-Apr-2022	2 15:00
Client ID:		Run ID:	WetCh	nem_HS_4059	67 SeqNo: 6	586922	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Specific Co	onductivity	1381	5.00					1382	0.0724 20
DUP	Sample ID:	HS22040016-11DUP		Units:	umhos/cm ( 25.0 °C	@ Ana	alysis Date:	07-Apr-2022	2 15:00
Client ID:	MW-19S	Run ID:	WetCh	nem_HS_4059	67 SeqNo: 6	586921	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Specific Co	onductivity	3550	5.00					3570	0.562 20
The followin	g samples were analyze	ed in this batch: HS2204001 HS2204001	6-06 6-10	HS2204001 HS2204001	.6-07 1 .6-11 1	HS220400 HS220400	16-08 16-12	HS22040016 HS22040016	-09 -13

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#### QC BATCH REPORT

Batch ID:	R406135(0)	Instrume	nt:	WetChem_HS	М	ethod: \$	SULFIDE BY	SM4500 S2-	F-2011
MBLK	Sample ID:	MBLK-R406135		Units:	mg/L	Ana	alysis Date:	06-Apr-2022	2 17:00
Client ID:		Run ID:	Wet	Chem_HS_4061	35 SeqNo: 6	591006	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-R406135		Units:	mg/L	Ana	alysis Date:	06-Apr-2022	2 17:00
Client ID:		Run ID:	Wet	Chem_HS_4061	35 SeqNo: 6	6591005	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Sulfide		24.32	1.00	25	0	97.3	85 - 115		
LCSD	Sample ID:	LCSD-R406135		Units:	mg/L	Ana	alysis Date:	06-Apr-2022	2 17:00
Client ID:		Run ID:	Wet	Chem_HS_4061	35 SeqNo: 6	591004	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Sulfide		24.12	1.00	25	0	96.5	85 - 115	24.32	0.826 20
MS	Sample ID:	HS22031669-10MS		Units:	mg/L	Ana	alysis Date:	06-Apr-2022	2 17:00
Client ID:		Run ID:	Wet	Chem_HS_4061	35 SeqNo: 6	6591007	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Sulfide		23.92	1.00	25	-0.28	96.8	80 - 120		
The followin	g samples were analyze	d in this batch: HS2204001 HS2204001	6-01 6-10	HS2204001 HS2204001	6-02 6-13	HS220400	16-05	HS22040016	-09

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#### **QC BATCH REPORT**

Batch ID:	R406136 ( 0 )	Instrumer	nt: N	WetChem_HS	Me	ethod: \$	SULFIDE BY	SM4500 S2-	-F-2011
MBLK	Sample ID:	MBLK-R406136		Units:	mg/L	Ana	alysis Date:	08-Apr-2022	2 17:00
Client ID:		Run ID:	WetC	hem_HS_40613	36 SeqNo: 6	591033	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-R406136		Units:	mg/L	Ana	alysis Date:	08-Apr-2022	2 17:00
Client ID:		Run ID:	WetC	hem_HS_40613	36 SeqNo: 6	591032	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Sulfide		24.2	1.00	25	0	96.8	85 - 115		
LCSD	Sample ID:	LCSD-R406136		Units:	mg/L	Ana	alysis Date:	08-Apr-2022	2 17:00
Client ID:		Run ID:	WetC	hem_HS_40613	36 SeqNo: 6	591031	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Sulfide		24.4	1.00	25	0	97.6	85 - 115	24.2	2 0.823 20
MS	Sample ID:	HS22040016-11MS		Units:	mg/L	Ana	alysis Date:	08-Apr-2022	2 17:00
Client ID:	MW-19S	Run ID:	WetC	hem_HS_40613	36 SeqNo: 6	591034	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Sulfide		24	1.00	25	-0.2	96.8	80 - 120		
The followin	g samples were analyze	ed in this batch: HS22040010	5-06	HS22040010	5-08	HS220400	16-11		

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#### QC BATCH REPORT

Batch ID: R40	06177(0)	Ins	strumen	t: Ba	alance1	М	ethod:	TOTAL DISS 2011	OLVED SOL	IDS BY S	SM2540C-
MBLK	Sample ID:	WBLK-040822			Units:	mg/L	An	alysis Date:	08-Apr-2022	14:43	
Client ID:		l	Run ID:	Balanc	e1_406177	SeqNo: 6	6591663	PrepDate:		DF:	1
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Total Dissolved Filterable)	Solids (Residue,	U		10.0							
LCS	Sample ID:	WLCS-040822			Units:	mg/L	An	alysis Date:	08-Apr-2022	14:43	
Client ID:		l	Run ID:	Balanc	e1_406177	SeqNo: 6	6591664	PrepDate:		DF:	1
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Total Dissolved Filterable)	Solids (Residue,	1050		10.0	1000	0	105	85 - 115			
DUP	Sample ID:	HS22040016-110	DUP		Units:	mg/L	An	alysis Date:	08-Apr-2022	14:43	
Client ID: MV	V-19S	I	Run ID:	Balanc	e1_406177	SeqNo: 6	6591662	PrepDate:		DF:	1
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Total Dissolved Filterable)	Solids (Residue,	2168		10.0					2176	0.36	8 5
The following san	nples were analyze	d in this batch: HS2	22040016	-06	HS2204001	6-07	HS22040	016-08	HS22040016	-11	

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#### **QC BATCH REPORT**

Batch ID: R406334 (0)	Instrumer	nt:	ManTech01	М	ethod: /	ALKALINITY	BY SM 2320	B-2011
MBLK Sample ID:	WBLKW1-041222		Units:	mg/L	Ana	alysis Date:	12-Apr-2022	13:36
Client ID:	Run ID:	Man	Гech01_406334	SeqNo: 6	595225	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:	LCS1-041222		Units:	mg/L	Ana	alysis Date:	12-Apr-2022	13:45
Client ID:	Run ID:	Man	Fech01_406334	SeqNo: 6	595226	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)	998	5.00	1000	0	99.8	85 - 115		
Alkalinity, Total (As CaCO3)	1027	5.00	1000	0	103	85 - 115		
LCSD Sample ID:	LCSD1-041222		Units:	mg/L	Ana	alysis Date:	12-Apr-2022	13:53
Client ID:	Run ID:	Man	Fech01_406334	SeqNo: 6	595227	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)	987.3	5.00	1000	0	98.7	85 - 115	998	1.08 20
Alkalinity, Total (As CaCO3)	1014	5.00	1000	-				4 00 00
		0.00	1000	0	101	85 - 115	1027	1.23 20
Sample ID:	HS22040016-11DUP	0.00	Units:	0 <b>mg/L</b>	101 Ana	85 - 115 alysis Date:	1027 12-Apr-2022	1.23 20
טטי Sample ID: Client ID: <b>MW-19S</b>	HS22040016-11DUP Run ID:	Man	Units:	0 <b>mg/L</b> SeqNo: <b>6</b>	101 An: 5 <b>595229</b>	85 - 115 alysis Date: PrepDate:	1027 12-Apr-2022	1.23 20 14:10 DF: 1
Client ID: MW-19S	HS22040016-11DUP Run ID: Result	Man <sup>-</sup> PQL	Units: Tech01_406334 SPK Val	0 <b>mg/L</b> SeqNo: <b>6</b> SPK Ref Value	101 An: 5595229 %REC	85 - 115 alysis Date: PrepDate: Control Limit	1027 <b>12-Apr-2022</b> RPD Ref Value	1.23 20 14:10 DF: 1 RPD %RPD Limit Qual
Client ID: MW-19S Analyte Alkalinity, Bicarbonate (As CaCO3	HS22040016-11DUP Run ID: Result	<b>Man</b> <sup>-</sup> PQL 5.00	Units: Tech01_406334 SPK Val	0 <b>mg/L</b> SeqNo: <b>6</b> SPK Ref Value	101 An: 5595229 %REC	85 - 115 alysis Date: PrepDate: Control Limit	1027 12-Apr-2022 RPD Ref Value	1.23 20 14:10 DF: 1 %RPD Limit Qual 0 20
Client ID: MW-19S Analyte Alkalinity, Bicarbonate (As CaCO3 Alkalinity, Carbonate (As CaCO3)	HS22040016-11DUP Run ID: Result 3) U 52.17	Man <sup>-</sup> PQL 5.00 5.00	Units: Fech01_406334	0 <b>mg/L</b> SeqNo: <b>6</b> SPK Ref Value	101 An: 5595229 %REC	85 - 115 alysis Date: PrepDate: Control Limit	1027 <b>12-Apr-2022</b> RPD Ref Value 0 53.58	1.23 20 14:10 DF: 1 %RPD Limit Qual 0 20 2.67 20
DUP       Sample ID:         Client ID:       MW-19S         Analyte       Analyte         Alkalinity, Bicarbonate (As CaCO3)         Alkalinity, Carbonate (As CaCO3)         Alkalinity, Hydroxide (As CaCO3)	HS22040016-11DUP Run ID: Result 3) U 52.17 82.97	Man <sup>-</sup> PQL 5.00 5.00	Units: Tech01_406334 SPK Val	0 <b>mg/L</b> SeqNo: <b>6</b> SPK Ref Value	101 An: 5595229 %REC	85 - 115 alysis Date: PrepDate: Control Limit	1027 <b>12-Apr-2022</b> RPD Ref Value 0 53.58 82.4	1.23 20 14:10 DF: 1 %RPD Limit Qual 0 20 2.67 20 0.689 20
DUP       Sample ID:         Client ID:       MW-19S         Analyte       Alkalinity, Bicarbonate (As CaCO3)         Alkalinity, Carbonate (As CaCO3)       Alkalinity, Hydroxide (As CaCO3)         Alkalinity, Total (As CaCO3)	HS22040016-11DUP Run ID: Result 3) U 52.17 82.97 135.2	Man <sup>-</sup> PQL 5.00 5.00 5.00	Units: Fech01_406334	0 mg/L SeqNo: 6 SPK Ref Value	101 An: 5595229 %REC	85 - 115 alysis Date: PrepDate: Control Limit	1027 <b>12-Apr-2022</b> RPD Ref Value 0 53.58 82.4 136	1.23 20 14:10 DF: 1 %RPD Limit Qual 0 20 2.67 20 0.689 20 0.612 20

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#### Batch ID: R406347 (0) Instrument: **ICS-Integrion** Method: ANIONS BY E300.0, REV 2.1, 1993 MBLK Sample ID: MBLK Units: mg/L Analysis Date: 12-Apr-2022 15:09 Run ID: ICS-Integrion\_406347 SeqNo: 6595485 Client ID: PrepDate: DF·1 SPK Ref Control RPD Ref RPD PQL SPK Val %REC %RPD Limit Qual Analyte Result Value Limit Value Sulfate U 0 500 LCS Sample ID: LCS Analysis Date: 12-Apr-2022 15:14 Units: mg/L Run ID: ICS-Integrion\_406347 SeqNo: 6595486 Client ID: PrepDate: DF: 1 SPK Ref Control RPD Ref RPD SPK Val %RPD Limit Qual Analyte Result PQL Value %REC Limit Value Sulfate 19.54 0.500 20 0 97.7 90 - 110 HS22040585-02MS MS Sample ID: Units: mg/L Analysis Date: 12-Apr-2022 15:30 Run ID: ICS-Integrion 406347 SeqNo: 6595489 Client ID: PrepDate: DF: 5 SPK Ref Control **RPD** Ref RPD %RPD Limit Qual PQL SPK Val %REC Analyte Result Value Limit Value Sulfate 789.5 2.50 50 756.1 66.8 80 - 120 SEO MS Sample ID: HS22031669-01MS Units: mg/L Analysis Date: 12-Apr-2022 19:33 Run ID: ICS-Integrion\_406347 SeqNo: 6595512 DF: 20 Client ID: PrepDate: SPK Ref Control RPD Ref RPD PQL SPK Val %REC %RPD Limit Qual Analyte Result Value Limit Value Sulfate 861.7 10.0 200 677.2 92.3 80 - 120 MSD HS22040585-02MSD Units: mg/L Sample ID: Analysis Date: 12-Apr-2022 15:35 Client ID: Run ID: ICS-Integrion\_406347 SeqNo: 6595490 PrepDate: DF: 5 SPK Ref RPD Ref RPD Control Analyte Result PQL SPK Val Value %REC %RPD Limit Qual Limit Value Sulfate 787.5 2.50 50 756.1 80 - 120 789.5 0.245 20 SEO 62.9 MSD Sample ID: HS22031669-01MSD Units: mg/L Analysis Date: 12-Apr-2022 19:38 Client ID: Run ID: ICS-Integrion\_406347 SeqNo: 6595513 PrepDate: DF: 20 SPK Ref Control **RPD** Ref RPD PQL SPK Val %RPD Limit Qual Analyte Result Value %RFC Limit Value Sulfate 862.2 10.0 200 677.2 92.5 80 - 120 861.7 0.0673 20 The following samples were analyzed in this batch: HS22040016-01 HS22040016-02

### Client:AltamiraProject:WFEC CCR/LandfillWorkOrder:HS22040016

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Client: Project: WorkOre	Alta WF der: HS:	amira EC CCR/Landf 22040016	ill					QC BA	TCH REPOI	RT
Batch ID:	R406349 ( 0 )	In	strument:	ICS-Integrion	M	ethod:	ANIONS BY	E300.0, REV	2.1, 1993	
MBLK	Sample ID:	MBLK		Units: r	ng/L	An	alysis Date:	12-Apr-2022	18:30	
Client ID:			Run ID: ICS	-Integrion_406349	SeqNo: 6	595613	PrepDate:		DF: <b>1</b>	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Q	ual
Chloride		U	0.500							
Fluoride		U	0.100							
Sulfate		U	0.500							
LCS	Sample ID:	LCS		Units: r	ng/L	An	alysis Date:	12-Apr-2022	18:35	
Client ID:			Run ID: ICS	-Integrion_406349	SeqNo: 6	595614	PrepDate:		DF: <b>1</b>	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Q	ual
Chloride		19.67	0.500	20	0	98.3	90 - 110			
Fluoride		4.382	0.100	4	0	110	90 - 110			
Sulfate		19.59	0.500	20	0	97.9	90 - 110			
MS	Sample ID:	HS22040016-03	MS	Units: r	ng/L	An	alysis Date:	12-Apr-2022	22:01	
Client ID:	MW-21		Run ID: ICS	-Integrion_406349	SeqNo: 6	595638	PrepDate:		DF: <b>5</b>	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Q	ual
Chloride		72.82	2.50	50	22.98	99.7	80 - 120			
Fluoride		16.88	0.500	10	0.683	162	80 - 120			S
Sulfate		1635	2.50	50	1683	-95.5	80 - 120			SEO
MS	Sample ID:	HS22031669-10	MS	Units: r	ng/L	An	alysis Date:	12-Apr-2022	21:03	
Client ID:			Run ID: ICS	-Integrion_406349	SeqNo: 6	595628	PrepDate:		DF: 20	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Q	ual
Chloride		200.5	10.0	200	2.76	98.9	80 - 120			
Fluoride		45.22	2.00	40	0	113	80 - 120			
Sulfate		1173	10.0	200	1011	81.0	80 - 120			0

Revision: 1

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Date: 22-Jun-22

### ALS Houston, US

#### **QC BATCH REPORT**

Batch ID:	R406349 ( 0 )	Instrum	ent:	ICS-Integrion	N	lethod:	ANIONS BY	E300.0, REV	2.1, 1993		
MSD	Sample ID:	HS22040016-03MSD		Units: <b>m</b>	ng/L	Ana	alysis Date:	12-Apr-2022	22:06		
Client ID:	MW-21	Run IE	): ICS	-Integrion_406349	SeqNo:	6595639	PrepDate:		DF: 5	5	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	R %RPD Li	PD imit Qu	al
Chloride		72.67	2.50	50	22.98	99.4	80 - 120	72.82	0.206	20	
Fluoride		18.19	0.500	10	0.683	175	80 - 120	16.88	7.46	20	S
Sulfate		1634	2.50	50	1683	-96.9	80 - 120	1635	0.0443	20 S	εO
MSD	Sample ID:	HS22031669-10MSD		Units: <b>r</b>	ng/L	Ana	alysis Date:	12-Apr-2022	21:08		
Client ID:		Run IE	): ICS	-Integrion_406349	SeqNo:	6595629	PrepDate:		DF: <b>2</b>	20	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	R %RPD Li	PD imit Qu	al
Chloride		200.9	10.0	200	2.76	99.1	80 - 120	200.5	0.169	20	
Fluoride		43.32	2.00	40	0	108	80 - 120	45.22	4.3	20	
Sulfate		1171	10.0	200	1011	80.4	80 - 120	1173	0.104	20	0
The followin	g samples were analyze	ed in this batch: HS220400 HS220400	16-03	HS22040016-0 HS22040016-0	04 08	HS220400 HS220400	16-05 16-10	HS22040016- HS22040016-	-06 -11		٦

Revision: 1

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#### **QC BATCH REPORT**

Batch ID:	R406426 ( 0 )	Instrumer	nt: Wei	tChem_HS	M	ethod:	CHEMICAL C REV 2.0, 199	OXYGEN DE	MAND BY E410.4,
MBLK	Sample ID:	MBLK-R406426		Units:	mg/L	A	nalysis Date:	13-Apr-2022	2 17:00
Client ID:		Run ID:	WetChe	m_HS_40642	26 SeqNo: 6	597070	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Chemical C	Oxygen Demand	U	15.0						
LCS	Sample ID:	LCS-R406426		Units:	mg/L	A	nalysis Date:	13-Apr-2022	2 17:00
Client ID:		Run ID:	WetChe	m_HS_40642	26 SeqNo: 6	597069	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Chemical C	Oxygen Demand	98	15.0	100	0	98.0	) 85 - 115		
мѕ	Sample ID:	HS22040016-11MS		Units:	mg/L	A	nalysis Date:	13-Apr-2022	2 17:00
Client ID:	MW-19S	Run ID:	WetChe	m_HS_40642	26 SeqNo: 6	597072	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Chemical C	Dxygen Demand	68	15.0	50	21	94.0	) 80 - 120		
MSD	Sample ID:	HS22040016-11MSD		Units:	mg/L	A	nalysis Date:	13-Apr-2022	2 17:00
Client ID:	MW-19S	Run ID:	WetChe	m_HS_40642	26 SeqNo: 6	597071	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Chemical C	Dxygen Demand	70	15.0	50	21	98.0	80 - 120	68	2.9 20
The followin	g samples were analyze	ed in this batch: HS22040010 HS22040010 HS22040010 HS22040010	6-01 6-05 6-09 6-13	HS22040016 HS22040016 HS22040016	5-02 5-06 5-10	HS22040 HS22040 HS22040	0016-03 0016-07 0016-11	HS22040016 HS22040016 HS22040016	-04 -08 -12

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Client:	Altamira
Project:	WFEC CCR/Landfill
WorkOrder:	HS22040016

QC BATCH I	REPORT
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Batch ID:	R406522 ( 0 )	Instrumer	nt:	WetChem_HS	Ν	Method: F	PH BY SM45	00H+ B-2011		
DUP	Sample ID:	HS22040016-11DUP		Units:	pH Units	Ana	alysis Date:	14-Apr-2022	14:15	
Client ID:	MW-19S	Run ID:	Wet	Chem_HS_4065	22 SeqNo:	6599273	PrepDate:		DF: 1	l
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	R %RPD L	PD imit Qual
pН		10.78	0.100					10.81	0.278	10
Temp Deg	C @pH	21.3	0					21.2	0.471	10
The following	g samples were analyzed	d in this batch: HS22040010 HS22040010 HS22040010 HS22040010	6-01 6-05 6-09 6-13	HS2204001 HS2204001 HS2204001	6-02 6-06 6-10	HS220400 HS220400 HS220400	016-03 016-07 016-11	HS22040016- HS22040016- HS22040016-	-04 -08 -12	

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### ALS Houston, US

Client: Project: WorkOrder:	Altamira WFEC CCR/Landfill HS22040016	QUALIFIERS, ACRONYMS, UNITS
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	
Μ	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	

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### CERTIFICATIONS, ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-34	30-Jun-2022
Illinois	2000322022-9	09-May-2023
Kansas	E-10352 2021-2022	31-Jul-2022
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2021-2022	30-Jun-2022
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2022	31-Dec-2022
Oklahoma	2021-080	31-Aug-2022
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932021-12	30-Jul-2022

#### Work Order ID: HS22040016 Date/Time Received: 01-Apr-2022 09:40 **Client Name:** Enviro Clean Services-Tulsa Received by: Paresh M. Giga Completed By: /S/ Nelson D. Dusara 01-Apr-2022 11:54 04-Apr-2022 18:47 Reviewed by: /S/ Ragen Giga Date/Time Date/Time eSignature eSignature Matrices: W Carrier name: FedEx Not Present Shipping container/cooler in good condition? Yes ~ No Not Present Custody seals intact on shipping container/cooler? Yes 5 No Not Present Custody seals intact on sample bottles? Yes No Not Present VOA/TX1005/TX1006 Solids in hermetically sealed vials? No Yes 1 Page(s) Chain of custody present? Yes No Chain of custody signed when relinquished and received? Yes No Yes No Samplers name present on COC? Yes No Chain of custody agrees with sample labels? Yes No Samples in proper container/bottle? Yes No Sample containers intact? Yes No Sufficient sample volume for indicated test? Yes 5 No All samples received within holding time? Yes 🔽 No Container/Temp Blank temperature in compliance? Temperature(s)/Thermometer(s): 1.6/1.4/1.2/1.5c IR31 47970,48021,Lg Red,47791 Cooler(s)/Kit(s): Date/Time sample(s) sent to storage: 4/1/2022 Yes Water - VOA vials have zero headspace? No VOA vials submitted No ~ Water - pH acceptable upon receipt? Yes No N/A ~ pH adjusted? No N/A Yes ~ pH adjusted by: Login Notes: Client Contacted: Date Contacted: Person Contacted: Contacted By: Regarding: Comments: Corrective Action:

Sample Receipt Checklist

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					Sample Receipt Checklist
Work Order ID:	HS22040016		Date/	Time Received:	01-Apr-2022 09:40
Client Name:	Enviro Clean Services-Tulsa		Recei	ived by:	<u>Paresh M. Giga</u>
Completed By	: /S/ Nilesh D. Ranchod	02-Apr-2022 12:57	Reviewed by: /S/	Ragen Giga	02-Jun-2022 08:18
	eSignature	Date/Time		eSignature	Date/Time
Matrices:	Water		Carrier name:	<u>FedEx Prio</u>	rity Overnight
Shipping contai	iner/cooler in good condition?		Yes 🔽	No 📃	Not Present
Custody seals i	intact on shipping container/coole	er?	Yes 🗹	No 📃	Not Present
Custody seals i	intact on sample bottles?		Yes 📃	No 🗌	Not Present
VOA/TX1005/T	X1006 Solids in hermetically sea	led vials?	Yes 📃	No 📃	Not Present
Chain of custoo	dy present?		Yes 🔽	No 📃	1 Page(s)
Chain of custoo	dy signed when relinquished and	received?	Yes 🔽	No 🔲	
Samplers name	e present on COC?		Yes 🗹	No 🔲	
Chain of custoo	dy agrees with sample labels?		Yes 🗹	No 🗌	
Samples in pro	per container/bottle?		Yes 🗹	No 🗌	
Sample contair	ners intact?		Yes 🔽	No 🔲	
Sufficient samp	ble volume for indicated test?		Yes 🗹	No 🔲	
All samples rec	eived within holding time?		Yes 🗹	No 🗌	
Container/Tem	p Blank temperature in compliand	ce?	Yes 🗹	No 🗌	
Temperature(s)	)/Thermometer(s):		1.2C/1.7C,0.4C/0.	9C,0.1C/0.6C,0.	6C/1.1C,0.5C/1.0 IR #31
Cooler(s)/Kit(s)	:		C,0.8C/1.3C UC/C 48469/46688/4859	2 95/43207/48469/	/RED
Date/Time sam	ple(s) sent to storage:		04/02/2022 13:00		
Water - VOA vi	als have zero headspace?		Yes 🔽	No	No VOA vials submitted
Water - pH acc	eptable upon receipt?		Yes	No 🔽	N/A
pH adjusted?			Yes 🔽	No 🔲	N/A
pH adjusted by	:		Si Ma		
Login Notes:	SX MW-5S, MW-16, MW-17 & N 318173210 By Sima After prese	MW-20 Radium 226 Met ervation pH (1)	als pH>2 (7) Preserve	ed with 4ml HNO3	on 4/2/2022 @12:00pm Lot #
Client Contacte	ed:	Date Contacted:		Person Con	tacted:
Contacted By:		Regarding:			
Comments:					
Corrective Action	on:				

		CHAIN OF C	CUSTODY REC	CORD								Printers, Williams				
	PROJECT NUMBER:	alappi		PROJE	CT NAI	ME:(A	HL V	VEUG	ONS	SAN	IE F	20)	606		)	$\mathbf{v}$
	WFEE 160022	2/0004		WF	EC	10	CR,	LAN	DFI	U			LUL	:b	OT	$\rightarrow$
	CLIENT CONTACT:	•				1 L:					CLIENT		E:			
formerly known as Enviro Clean Cardinal	HT-ATTINO T	TIFEANH		HEA	THE	Ř.TI	FFAr	J/AC	TAMI	RA	Z	ING	6	8.1	202	2]
	I TEATRER I	, (( / /////		LA	BD	+TA		07	<u>ns.</u> C	ON		102	. @`	<u>،</u>		-1
LABORATORY / LAB PM:	CLIENT ADDRESS:	ARK DR #1	500	TAT:	STr	JD					01000/090000000000		the state of the s			
ALS/RAGENIGIGA	OKCOK	72106				T			PAR	AMET	ERS				<u> </u>	
LAB ADDRESS:	UNU, UN	1910-2														3.100
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SHIPMENT METHOD: TRACKING:				ц С	EREI	17	IT.	4	Q	10	RH	RHS	カラ	5	に	3 1
TEDEX				BER	EILT	图	Å.	m D		Γ,	ШЩ	18.	2	2	3	07
			PRES	W <sub>D</sub>	IELD	A	¥	Z S	5	12	P	ä	此	Z	G	草仁之
NO. SAMPLE DESCRIPTION	DAIL		1-2-0-			×	×	x v	$\overline{\mathbf{v}}$							
			12, 5, 1		N		$\Delta T$						$\overline{}$	$\overline{\mathbf{x}}$	$\overline{}$	
2 <u>MW-09</u>			1,23,9,9		Z		$\Sigma$	$\times$ $\land$		<u>~</u>	$\rightarrow$	- <del>X</del> +		$\times$	$\sim$	*
3 <u>MW-</u> 5			1,2,3,4,9		$\times$	$\times$	$\times$	$\times \mid \times$	$+\times$	$\overline{\mathbf{X}}$	$\mathbf{x}$	$\times$	X	$\times \uparrow$	XT	X
4			2,3,9-		14	$\times$	$\times$ +·	$\times \times$	$+ \times +$							
5 MIN-14A	2/30 22 15	529 W	1,2,3A.9		X	$\times$	X	xX	X	X	$\times$	X	$\times$	X	X	$\times$
	3/30m 10	177 IN	1		1	X	X	XX	×	X	X	X.	×ĺ	X	X	$\mathbf{X}^{\circ}$
	7-1416						X	XX	1×	~	X	$\overline{\mathbf{x}}$	X	÷,	×	¥
						$\overline{\mathbf{x}}$				$\frac{1}{2}$	$\sum_{n=1}^{n}$	$\frac{2}{2}$	$\overline{\mathbf{x}}$	$\stackrel{\frown}{\ominus}$	$\frac{1}{2}$	
8 <del>NN-1/</del>						<u>×</u>	<u>A</u>			$\overline{\ }$	へ		74	$\rightarrow$	<u> </u>	<u>×</u>
9 MW-18						X	$\times \uparrow$	$\times \mid \times$		×	X	$\times$	$\times \uparrow$	$\mathbf{X}$	X	*
10 MN-195-			L V			$\times$	$\times$	$\times   \times$	X	<del>X.</del>	¥.	$\sim$	$\times$	$\times$	$\times$	X
$11 - \lambda NN - 20$			2,3,9		P-	$\times$	X	XX	X			in	เรา.	0 4	1.19	
12 NNN-21	3/30/2211	733 W	2,3	ar an	N	X	X	XX	X			j.	200	1	0.9	0
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	DATE: 2 217	7	<u> </u>	-	SAMP	I F By SI	SCALL		1-4	Λ	1			DATE:	275	177
Breakley UNA Claring Del		Total # of	Containers:		7/4	df	WL	_/	VN	¥ (	PL	and the second division of the		TIME:	귀개	40
RELINGUISHER BY A DATE 3	RECEIVED BY:	p primer and a second	DATE: 411	2027			D BY:		1	ana kana kana kana kana kana kana kana	DATE:		ana		COOLER	TEMP:
TIME: T	1900 7	-	TIME: 09	2.40	<u>،</u>			(		0000000000	TIME:		al al an			
PRESERVATION KEY: 1-HCL 2-HNO3	3-H2SO4 4-NaOH	5-Na252O3 6-Na		4 Degre	es C	8-9 bachi	035 9	-Otner :	er.							
	W Oklaholina City	L		onder ingenetisken		i diana	epiterzy i e o o o o o		0.2012020200	A SAME AND A	ekasztó kezete	455653400567978	eresser from			

ALTAMIRA-US, LLC

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		CHAIN OF CUSTOR	Y RECORD												CONTRACTOR OF T	
	PROJECT NUMBER:	1	PROJ	CT NA	ME: (	AU W	als c	NS	ANE	PO		00	<u>с</u> .	~*	V	
	WFEE160022	10004	WF	EC	$ \alpha$	R,L	AND	行し	_			0	L	0	-/~	-
ALIAMIRA formerly known as Enviro Clean Cardinal	CLIENT CONTACT:		CLIEN	TEMA		= 1	) MITI	110	A	CLIEN	T PHO	NE:				
	HEATHER TIF	FANY	FIE/	LAB	DAT	A	)-119	cours	μ Μ	4	·B	61	8. ·	202	21	
LABORATORY / LAB PM:	CLIENT ADDRESS: DA DAR	K DR #500	TAT:	STI	JD		<u> </u>									
ALGI RAGEN GIGA	OKC. OK. 73	ING			1			PAR	AMET	ERS				r T	.11	
LAB ADDRESS:	HS22040	016		-		~ ~	*			Xin	JE	у́) У		5	対	
10450 STANGULFF RU	Altomic		NERS	ON /	A		1			Nº U	M.	v.			2 1	
HOUSTON, TX 77099	WFEC CCR/L	a andfill	NTAI	( YES	ŝ	Ň	2		A	32	Br	2 L	9	11	<u>`</u> 9	
SHIPMENT METHOD: TRACKING:			С Ц	RED	Z	ZY	202	Z	5	36	33	30	6	-2ª	રંઈ	
FEDEX			BER C	FILTE	E	E,	0 0	3	F,	P	38	RZ	$\leq$	5	~Q	_
NO. SAMPLE DESCRIPTION				IELD	¥	A s	2 S	B	T C	P	5H	兆民	X	B	四	1 P
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2 MW-59	3 31 22 1531	1 1,23	4,9 10	7	X	X	s X	X	X	X	X	X	X	X	$\overline{\mathbf{X}}$	
3 MW-75	4/122 1925	1,2,3	49 10	7	$\mathbf{x}$	XX	$\langle \times \rangle$	X	X	X	X	X	X	X	X	
4 NW-13	4/1/22 1154	2,3	96	N	X	XX	XX	X	Х	X	X	X	X	$ \chi $	X	
5 - MW=14A	алин алин алин алин алин алин алин алин	1,2,3,	4,9	4	X	XX		X	X	X	X	X	X	X	X	
6 MW-15A	an andre 1 - San	1,2,3	4,9		X	$\overline{X}$		X	X	X.	$\times$	X	X	X	X	
7 NNV-16	4122 1331		10		$\left  \mathbf{X} \right $	$\times$ $\times$		X	Х	X	$\times$	$\times$	X	X	X	
8 MW -17	3 31/22 1722		10		$\left  \right\rangle$	$\times$ >	$\langle \times \rangle$	$\left \times\right $	X	X	$\times$	$\times$	X	X	X	
9 MW-18	3 31/22 1708		10		$\times$	$\times$ >	< X	$\left \times\right $	X	$\times$	$\times$	$\times$	$\times$	X	X	
10 MW-195	4122 1335		0	V	$\left  X \right $	$\times$ >	くメ	$\left  \times \right $	Х	$\times$	X	$\times$	$\times$	$ \times $	X	
11 MW-20	3/51/22 1920	2,3	29 0	N	$\left  X \right $	X >	$\langle X \rangle$	$\times$								
12		2,3	9	N	X	$\times$	$\langle   X  $	$  \times  $	en tentation en lind tationale	софинствоннацияся	CLEAR OF STATE BOARD AND THE OPENING	1				
13 MW-195 MS	4/1/22 1335		61													
14 MW-195 MSD	4/1/22 1335		10													
15 Dup 3,	3/3/22 1708		<u>GI</u>					Ļ							2	
Brad Van Olevel Seth Bro	When TIME: 700	<u>Total # of Contair</u>	<u>ers:</u>	SAMP	LER(S)	SIGNATL	Del 1	/Se A	h f	Zand	br		TIME:	7911	0	
RELINQUISHED BY	22 RECEIVED BY:	DATE:	64.2.2	2	LOGGE	EV:	<del>ses</del> (			DATE:				COOLER	TEMP:	
PRESERVATION KEY: 1-HCL 2-HNO3	3-H2SO4 4-NaOH 5-Na2S	TIME: 203 6-NaHSO4	0℃. C.	ees C	8-90	)35 9-(	)ther :	2010-00-00-00-00-00-00-00-00-00-00-00-00-		TIME:				L	<u>99888</u>	
POINT OF ORIGIN: Norman	Oklahoma City	isa 🗌 Yuko	n	М	lidland		Oth	er :								
	/	ΔΙΤΔΜΙΒΔ-Η	SILC					,								

ALTAMIRA-US, LLC

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48595 APR 0 2 2022

ALS 10450 Stancliff Rd., Suite 210 Houston, Texas 77099		Seal Broken By:
Tel. +1 281 530 5656         Cl 8 54 3           Fax. +1 281 530 5837         Cl 8 54 3	Name:	01/02/22



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47503 APR 0 2 2022





\*5262182 04/01 56DJ1/1E3B/F Page 76 of 107



43207 APR 0 2 2022

ALS 10450 Stancliff Rd., Suite 216 Houston, Texas 77099 Tel. +1 281 530 5656 Eav. +1 281 530 5687	CUSTODY SEAL	Seal Broken By: SM SM SM Date: Date: Date: Date:
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\*5262182 04/01 56DJ1/1E3B/FE4A Page 77 of 107

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48469 APR 0 2 2022





#5262182 04/01 56DJ1/1E3B/FE4A

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RIGHT SOLUTIONS | RIGHT PARTNER



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HEDEDIG AAJA1 ECHIIJIEDE JEEA Page 80 of 107

LIMS Version: 7.031

Friday, May 20, 2022

Ragen Giga ALS Environmental 10450 Stancliff Rd, Suite 210 Houston, TX 77099

Re: ALS Workorder: 2204070 Project Name: Project Number: HS22040016

Dear Mr. Giga:

Thirteen water samples were received from ALS Environmental, on 4/5/2022. The samples were scheduled for the following analysis:

Radium-226

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental Janice Winn-Shilling Project Manager

ADDRESS 225 Commerce Drive, Fort Collins, Colorado, USA 80524 | PHONE +1 970 490 1511 | FAX +1 970 490 1522 ALS GROUP USA, CORP. Part of the ALS Laboratory Group An ALS Limited Company



www.alsglobal.com

<u>Accreditations</u>: ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins							
Accreditation Body	License or Certification Number						
Arizona	AZ0828						
California (CA)	2926						
Colorado (CO)	CO01099						
Florida (FL)	E87914						
Idaho (ID)	CO01099						
Kansas (KS)	E-10381						
Kentucky (KY)	90137						
Oklahoma	1301						
Maryland (MD)	285						
Missouri (MO)	175						
Nebraska(NE)	NE-OS-24-13						
Nevada (NV)	CO010992018-1						
New York (NY)	12036						
North Dakota (ND)	R-057						
Oklahoma (OK)	1301						
Pennsylvania (PA)	68-03116						
Tennessee (TN)	TN02976						
Texas (TX)	T104704241						
Utah (UT)	CO01099						
Washington (WA)	C1280						
Virginia	460305						

<u>40 CFR Part 136</u>: All\_analyses for Clean Water Act samples are analyzed using the 40 CFR Part 136 specified method and include all the QC requirements.



## 2204070

#### Radium-228:

The samples were analyzed for the presence of <sup>228</sup>Ra by low background gas flow proportional counting of <sup>228</sup>Ac, which is the ingrown progeny of <sup>228</sup>Ra, according to the current revision of EPA 904.0, with procedure modifications outlined on QASS #452599.

All acceptance criteria were met.

#### Radium-226:

The samples were prepared and analyzed according to the current revision of EPA 903.1.

All acceptance criteria were met.

## Sample Number(s) Cross-Reference Table

OrderNum: 2204070 Client Name: ALS Environmental Client Project Name: Client Project Number: HS22040016 Client PO Number: HS22040016

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
MW-14A	2204070-1		WATER	30-Mar-22	15:29
MW-15A	2204070-2		WATER	30-Mar-22	12:22
MW-21	2204070-3		WATER	30-Mar-22	17:33
MW-3	2204070-4		WATER	30-Mar-22	15:51
MW-5S	2204070-5		WATER	31-Mar-22	15:31
MW-7S	2204070-6		WATER	01-Apr-22	19:29
MW-13	2204070-7		WATER	01-Apr-22	11:54
MW-16	2204070-8		WATER	01-Apr-22	13:31
MW-17	2204070-9		WATER	31-Mar-22	17:22
MW-18	2204070-10		WATER	31-Mar-22	17:08
MW-19S	2204070-11		WATER	01-Apr-22	13:35
MW-20	2204070-12		WATER	31-Mar-22	19:20
DUP 3	2204070-13		WATER	31-Mar-22	17:08

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# # 2204070



10450 Stancliff Rd, Ste 210 Houston, TX 77099 T: +1 281 530 5656 F: +1 281 530 5887 www.alsglobal.com

## **Subcontract Chain of Custody**

#### SAMPLING STATE: Oklahoma

COC ID: 18470

#### SUBCONTRACT TO:

ALS Environmental, Fort Collins 225 Commerce Drive Fort Collins, CO 80524

#### CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Ragen Giga
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	RagenP.Giga@ALSGlobal.com
Alternate Contact: Email:	Jumoke M. Lawal jumoke.lawal@alsglobal.com

Phone: +1 970 490 1511

#### INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS22040016
TSR:	Sonia West

	LAB SAMPLE ID ANALYSIS F	CLIENT SAMPLE ID	MATRIX	COLLECT DATE DUE DATE
1.	HS22040016-01	MW-14A	Water	30 Mar 2022 15:29
	Report as com	bined 226 & 228		15 Apr 2022
	Report as com	bined 226 & 228		15 Apr 2022
2.	HS22040016-02	MW-15A	Water	30 Mar 2022 12:22
	Report as com	bined 226 & 228		15 Apr 2022
	Report as com	bined 226 & 228		15 Apr 2022
з.	HS22040016-03	MW-21	Water	30 Mar 2022 17:33
	Report as com	bined 226 & 228		15 Apr 2022
	Report as com	bined 226 & 228		15 Apr 2022
4.	HS22040016-04	MW-3	Water	30 Mar 2022 15:51
	Report as com	pined 226 & 228		15 Apr 2022
	Report as com	pined 226 & 228		15 Apr 2022
5.	HS22040016-05	MW-5S	Water	31 Mar 2022 15:31
	Report as com	pined 226 & 228		15 Apr 2022
	Report as com	pined 226 & 228		15 Apr 2022
6.	HS22040016-06	MW-7S	Water	01 Apr 2022 19:29
	Report as com	pined 226 & 228		15 Apr 2022
cite de Las este	Report as com	pined 226 & 228		15 Apr 2022

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02 Apr 2022

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## **Subcontract Chain of Custody**

SAM	PLING STATE: (	Oklahoma		COC ID: 18470
1	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
1945	ANALYSIS	REQUESTED		DUE DATE
7.	HS22040016-07	MW-13	Water	01 Apr 2022 11:54
	Report as con	nbined 226 & 228		15 Apr 2022
	Report as con	nbined 226 & 228		15 Apr 2022
8.	HS22040016-08	MW-16	Water	01 Apr 2022 13:31
	Report as con	nbined 226 & 228		15 Apr 2022
	Report as con	nbined 226 & 228		15 Apr 2022
9.	HS22040016-09	MW-17	Water	31 Mar 2022 17:22
	Report as con	nbined 226 & 228		15 Apr 2022
	Report as con	nbined 226 & 228		15 Apr 2022
10.	HS22040016-10	MW-18	Water	31 Mar 2022 17:08
	Report as con	nbined 226 & 228		15 Apr 2022
	Report as con	nbined 226 & 228		15 Apr 2022
11.	HS22040016-11	MW-19S	Water	01 Apr 2022 13:35
	Report as con	nbined 226 & 228		15 Apr 2022
	Report as con	nbined 226 & 228		15 Apr 2022
12.	HS22040016-12	MW-20	Water	31 Mar 2022 19:20
	Report as con	nbined 226 & 228		15 Apr 2022
	Report as con	nbined 226 & 228		15 Apr 2022
13.	HS22040016-13	DUP 3	Water	31 Mar 2022 17:08
	Report as com	nbined 226 & 228		15 Apr 2022
	Report as com	nbined 226 & 228		15 Apr 2022

**Comments:** Please analyze for the analysis listed above. Send report to the emails shown above. HS22040016-11 MS/MSD.

QC Level: STD (Laboratory Standard QC: method blank and LCS required)

Relinquished By	· A NN	Date/Time:	4.4.22	18.00
Received By:	Mullenda	Date/Time:	4/5/22	1507
Cooler ID(s):		Temperature(s):		
And an experimental second s second second s second second sec			and a second	allowed in the matching or allocating to an about

02 Apr 2022

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# ALS)

#### ALS Environmental - Fort Collins CONDITION OF SAMPLE UPON RECEIPT FORM

Client:		ALS	ТХ		Workor	der No:	2	204070		
Project Manager:		JM	/S		Initials:	СХТ	Date:	04,	/052022	
								N/A	YES	NO
<sup>1.</sup> Are airbills / shipping	docume	nts prese	nt and/or	<sup>.</sup> removabl	e?				v	
Tracking number: <sup>5</sup>	300 5229 9 <sup>.</sup>	678/ 5300 !	5229 9689/	5300 5229 9	690/ 5300 5	229 9704			~	
2. Are custody seals on	shipping	containe	rs intact?						Х	
3. Are custody seals on	sample c	ontainers	s intact?					х		
<sup>4.</sup> Is there a COC (chain	-of-custo	dy) prese	nt?						Х	
<ul> <li>Is the COC in agreem</li> <li>containers, matrix, re</li> </ul>	ent with sequested	samples i analyses,	received? etc.)	(IDs, dates	, times, # 0	f sample:	s, # of		х	
6. Are short-hold sampl	es preser	<u>י י</u> וt?	,							х
7 Are all samples within	n holding	times for	r the reau	lested ana	vses?				х	
<ol> <li>Were all sample cont</li> </ol>	ainers re	ceived in	tact? (no	t broken o	r leaking)				Х	
9. Is there sufficient sar	nple for t	he reque	, sted anal	vses?	0,				Х	
Are samples in prope Guidelines )	r contain	ers for re	quested	analyses? (	form 250, Sc	ample Hand	lling		x	
<sup>11.</sup> Are all aqueous samp	les prese	erved cori	rectly, if r	equired? (	excluding	volatiles)			Х	
Are all samples requi	ring no h	eadspace	(VOC, GF	RO, RSK/M	EE, radon)	free of b	ubbles			
<sup>12.</sup> > 6 mm (1/4 inch) dia	imeter? (	i.e. size o	f green p	ea)	, ,			Х		
<sup>13.</sup> Were the samples sh	ipped on	ice?								Х
<sup>14.</sup> Were cooler temperatu	ires measu	ured at 0.1	-6.0°C?	IR gun used*:	#5			RAD ONLY		Х
Cooler #:	1	2	3	4						
Temperature (°C):	AMB	AMB	AMB	AMB						
# of custody seals on cooler:	1	1	1	1						
External µR/hr reading:	10	9	10	9						
Background µR/hr reading:	11									
Were external µR/hr reading	s ≤ two times	s background	l and within [	DOT acceptanc	e criteria? YI	S				
* Please provide details her	e for NO r	esponses t	o boxes ab	oove - for 2 t	hru 5 & 7 th	iru 12, not	ify PM &	continue	w/ login.	
Were unpreserved bo	ttles pH ch	necked?	NA	All cli	ent bottle I	D's vs ALS	lab ID's d	double-ch	ecked by	CT
If applicable, was the client co	ontacted? Y	'ES / NO / N	NA Contact		$\supset$			Date/T	ime:	
Project Manager Signatur	e / Date:	4	¢	Shu	X				4/06	6/22
Form 201r29.xls (10/15/2019)			*IR Gun # Page *IR Gun #	#3, VWR SN 17 87 of 107 ≢5, VWR SN 19	0647571 2272629					7 -



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Client:	ALS Environmental					<b>Date:</b> 20-M	1ay-22
Project:	HS22040016				1	Work Order: 2204	070
Sample ID:	MW-14A					Lab ID: 2204	070-1
Legal Location:						Matrix: WA	ΓER
<b>Collection Date:</b>	3/30/2022 15:29				Perce	ent Moisture:	
Analyses		Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by F	Radon Emanation - Me	ethod 903.1	SOP	783	Prep	Date: 4/13/2022	PrepBy: <b>EJE</b>
Ra-226		0.19 (+/- 0.18)	U	0.26	pCi/l	NA	4/26/2022 11:03
Carr: BARIUM		99.2		40-110	%REC	DL = NA	4/26/2022 11:03
Radium-228 Ana	alysis by GFPC		SOP	724	Prep	Date: 4/21/2022	PrepBy: MMS
COMBINED RADI	UM (226+228)	1.33 (+/- 0)		0.83	pCi/l	NA	4/26/2022 08:33
Ra-228		1.33 (+/- 0.53)		0.83	pCi/l	NA	4/25/2022 08:33
Carr: BARIUM		93.5		40-110	%REC	DL = NA	4/25/2022 08:33

Client:	ALS Environmental					<b>Date:</b> 20-M	1ay-22	
Project:	HS22040016				١	Work Order: 2204	1070	
Sample ID:	MW-15A					Lab ID: 2204	4070-2	
Legal Location:						Matrix: WA	ΓER	
<b>Collection Date:</b>	3/30/2022 12:22				Perce	ent Moisture:		
Analyses		Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed	_
Radium-226 by F	Radon Emanation - N	lethod 903.1	SOP	783	Prep	Date: 4/13/2022	PrepBy: <b>EJE</b>	
Ra-226		0.08 (+/- 0.16)	U	0.29	pCi/l	NA	4/26/2022 11:03	
Carr: BARIUM		97.6		40-110	%REC	DL = NA	4/26/2022 11:03	
Radium-228 Ana	alysis by GFPC		SOP	724	Prep	Date: 4/21/2022	PrepBy: MMS	
COMBINED RADI	UM (226+228)	1.61 (+/- 0)		0.75	pCi/l	NA	4/26/2022 08:33	
	- ()				-			
Ra-228		1.61 (+/- 0.56)		0.75	pCi/l	NA	4/25/2022 08:33	

## SAMPLE SUMMARY REPORT

Client:	ALS Environmental					<b>Date:</b> 20-M	1ay-22
Project:	HS22040016				1	Work Order: 2204	070
Sample ID:	MW-21					Lab ID: 2204	070-3
Legal Location:						Matrix: WA	ΓER
<b>Collection Date:</b>	3/30/2022 17:33				Perce	ent Moisture:	
Analyses		Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by I	Radon Emanation - Me	ethod 903.1	SOP	783	Prep	Date: 4/13/2022	PrepBy: <b>EJE</b>
Ra-226		0.23 (+/- 0.21)	U	0.3	pCi/l	NA	4/26/2022 11:03
Carr: BARIUM		99.6		40-110	%REC	DL = NA	4/26/2022 11:03
Radium-228 Ana	alysis by GFPC		SOP	724	Prep	Date: 4/21/2022	PrepBy: MMS
COMBINED RADI	UM (226+228)	2.58 (+/- 0)		0.85	pCi/l	NA	4/26/2022 08:33
Ra-228		2.58 (+/- 0.77)		0.85	pCi/l	NA	4/25/2022 08:33
Carr: BARIUM		95.9		40-110	%REC	DL = NA	4/25/2022 08:33

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Client:	ALS Environmental					<b>Date:</b> 20-M	1ay-22
Project:	HS22040016					Work Order: 2204	1070
Sample ID:	MW-3					Lab ID: 2204	4070-4
Legal Location:						Matrix: WA	TER
<b>Collection Date:</b>	3/30/2022 15:51				Perce	ent Moisture:	
Analyses		Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by I	Radon Emanation - N	lethod 903.1	SOF	P 783	Prep	Date: 4/13/2022	PrepBy: <b>EJE</b>
Ra-226		0.61 (+/- 0.33)		0.28	pCi/l	NA	4/26/2022 11:03
Carr: BARIUM		98.9		40-110	%REC	DL = NA	4/26/2022 11:03
Radium-228 Ana	alysis by GFPC		SOF	P 724	Prep	Date: 4/21/2022	PrepBy: MMS
COMBINED RADI	UM (226+228)	0 (+/- 0)	U	0.81	pCi/l	NA	4/26/2022 08:45
Ra-228		0.8 (+/- 0.44)	U	0.81	pCi/l	NA	4/25/2022 08:45
Carr: BARIUM		90.7		40-110	%REC	DL = NA	4/25/2022 08:45

Client:	ALS Environmental					<b>Date:</b> 20-M	1ay-22
Project:	HS22040016					Work Order: 2204	070
Sample ID:	MW-5S					Lab ID: 2204	070-5
Legal Location:						Matrix: WA	ΓER
<b>Collection Date:</b>	3/31/2022 15:31				Perc	ent Moisture:	
Analyses		Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by R	Radon Emanation - Met	hod 903.1	SOP	783	Pre	p Date: <b>4/13/2022</b>	PrepBy: <b>EJE</b>
Ra-226		0.23 (+/- 0.18)		0.22	pCi/l	NA	4/26/2022 11:03
Carr: BARIUM		96.5		40-110	%REC	DL = NA	4/26/2022 11:03
Radium-228 Ana	lysis by GFPC		SOP	724	Pre	p Date: <b>4/21/2022</b>	PrepBy: MMS
COMBINED RADIL	JM (226+228)	0 (+/- 0)	U	0.79	pCi/l	NA	4/26/2022 08:45
Ra-228		0.61 (+/- 0.41)	U	0.79	pCi/l	NA	4/25/2022 08:45
Carr: BARIUM		93.5		40-110	%REC	DL = NA	4/25/2022 08:45

Client:	ALS Environmental					<b>Date:</b> 20-M	1ay-22	
Project:	HS22040016				V	Work Order: 2204	1070	
Sample ID:	MW-7S					Lab ID: 2204	4070-6	
Legal Location:						Matrix: WA	ΓER	
<b>Collection Date:</b>	4/1/2022 19:29				Perce	nt Moisture:		
Analyses		Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed	
Radium-226 by I	Radon Emanation - Me	ethod 903.1	SOP	783	Prep	Date: 4/13/2022	PrepBy: <b>EJE</b>	
Ra-226		0.19 (+/- 0.19)	U	0.26	pCi/l	NA	4/26/2022 11:03	
Carr: BARIUM		98.1		40-110	%REC	DL = NA	4/26/2022 11:03	
Radium-228 Ana	alvsis by GFPC		SOP	724	Prep	Date: 4/21/2022	PrepBy: MMS	
							1 2	
COMBINED RADI	UM (226+228)	1.11 (+/- 0)		0.78	pCi/l	NA	4/26/2022 08:45	
COMBINED RADI Ra-228	UM (226+228)	1.11 (+/- 0) 1.11 (+/- 0.48)		0.78 0.78	pCi/l pCi/l	NA NA	4/26/2022 08:45 4/25/2022 08:45	

## SAMPLE SUMMARY REPORT

Client:	ALS Environmental					<b>Date:</b> 20-M	1ay-22
Project:	HS22040016				V	Work Order: 2204	4070
Sample ID:	MW-13					Lab ID: 2204	4070-7
Legal Location:						Matrix: WA	TER
<b>Collection Date:</b>	4/1/2022 11:54				Perce	ent Moisture:	
Analyses		Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by I	Radon Emanation - M	ethod 903.1	SOP	783	Prep	Date: 4/13/2022	PrepBy: <b>EJE</b>
Ra-226		0.3 (+/- 0.25)	U	0.31	pCi/l	NA	4/26/2022 11:03
Carr: BARIUM		94.9		40-110	%REC	DL = NA	4/26/2022 11:03
Radium-228 Ana	alysis by GFPC		SOP	724	Prep	Date: 4/21/2022	PrepBy: MMS
COMBINED RADI	UM (226+228)	1.46 (+/- 0)		0.81	pCi/l	NA	4/26/2022 11:22
Ra-228		1.46 (+/- 0.55)		0.81	pCi/l	NA	4/25/2022 11:22

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## SAMPLE SUMMARY REPORT

Client:	ALS Environmental					<b>Date:</b> 20-M	1ay-22
Project:	HS22040016					Work Order: 2204	070
Sample ID:	MW-16					Lab ID: 2204	070-8
Legal Location:						Matrix: WA	ΓER
<b>Collection Date:</b>	4/1/2022 13:31				Perc	ent Moisture:	
Analyses		Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by F	Radon Emanation - Mo	ethod 903.1	SOP	783	Prep	Date: 4/13/2022	PrepBy: <b>EJE</b>
Ra-226		0.05 (+/- 0.19)	U	0.36	pCi/l	NA	4/26/2022 11:26
Carr: BARIUM		97.7		40-110	%REC	DL = NA	4/26/2022 11:26
Radium-228 Ana	alysis by GFPC		SOP	724	Prep	Date: 4/21/2022	PrepBy: MMS
COMBINED RADI	UM (226+228)	0 (+/- 0)	U	0.78	pCi/l	NA	4/26/2022 11:22
Ra-228		0.5 (+/- 0.39)	U	0.78	pCi/l	NA	4/25/2022 11:22
Carr: BARIUM		95.9		40-110	%REC	DL = NA	4/25/2022 11:22

ALSe-9Foft1Collins

## SAMPLE SUMMARY REPORT

Client:	ALS Environmental					<b>Date:</b> 20-M	1ay-22
Project:	HS22040016					Work Order: 2204	1070
Sample ID:	MW-17					Lab ID: 2204	4070-9
Legal Location:						Matrix: WA	ΓER
<b>Collection Date:</b>	3/31/2022 17:22				Perc	ent Moisture:	
Analyses		Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by R	Radon Emanation - Me	thod 903.1	SOP	783	Pre	p Date: <b>4/13/2022</b>	PrepBy: <b>EJE</b>
Ra-226		0.09 (+/- 0.15)	U	0.26	pCi/l	NA	4/26/2022 11:26
Carr: BARIUM		95.8		40-110	%REC	DL = NA	4/26/2022 11:26
Radium-228 Ana	lysis by GFPC		SOP	724	Pre	p Date: <b>4/21/2022</b>	PrepBy: MMS
COMBINED RADIL	JM (226+228)	0 (+/- 0)	U	0.79	pCi/l	NA	4/26/2022 11:22
Ra-228		0.11 (+/- 0.36)	U	0.79	pCi/l	NA	4/25/2022 11:22
Carr: BARIUM		93.5		40-110	%REC	DL = NA	4/25/2022 11:22

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## SAMPLE SUMMARY REPORT

Client:	ALS Environmental					<b>Date:</b> 20-M	1ay-22
Project:	HS22040016				,	Work Order: 2204	1070
Sample ID:	MW-18					Lab ID: 2204	4070-10
Legal Location:						Matrix: WA	ΓER
<b>Collection Date:</b>	3/31/2022 17:08				Perce	ent Moisture:	
Analyses		Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by F	Radon Emanation - Me	thod 903.1	SOP	783	Prep	Date: 4/13/2022	PrepBy: <b>EJE</b>
Ra-226		0.02 (+/- 0.14)	U	0.28	pCi/l	NA	4/26/2022 11:26
Carr: BARIUM		95.9		40-110	%REC	DL = NA	4/26/2022 11:26
Radium-228 Ana	lysis by GFPC		SOP	724	Prep	Date: 4/21/2022	PrepBy: MMS
COMBINED RADIU	JM (226+228)	0 (+/- 0)	U	0.79	pCi/l	NA	4/26/2022 11:22
Ra-228		-0.2 (+/- 0.34)	U	0.79	pCi/l	NA	4/25/2022 11:22
Carr: BARIUM		93.3		40-110	%REC	DL = NA	4/25/2022 11:22

AlaSe-10Fort Collins

## SAMPLE SUMMARY REPORT

Client:	ALS Environmental					<b>Date:</b> 20-M	1ay-22
Project:	HS22040016					Work Order: 2204	4070
Sample ID:	MW-19S					Lab ID: 2204	4070-11
Legal Location:						Matrix: WA	TER
<b>Collection Date:</b>	4/1/2022 13:35				Perc	ent Moisture:	
Analyses		Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by F	Radon Emanation - Me	thod 903.1	SOP	783	Pre	p Date: <b>4/13/2022</b>	PrepBy: <b>EJE</b>
Ra-226		0.17 (+/- 0.18)	U	0.26	pCi/l	NA	4/26/2022 11:26
Carr: BARIUM		95.4		40-110	%REC	DL = NA	4/26/2022 11:26
Radium-228 Ana	lysis by GFPC		SOP	724	Pre	p Date: <b>4/21/2022</b>	PrepBy: MMS
COMBINED RADI	JM (226+228)	0 (+/- 0)	U	0.82	pCi/l	NA	4/26/2022 11:22
Ra-228		0.04 (+/- 0.37)	U	0.82	pCi/l	NA	4/25/2022 11:22
Carr: BARIUM		93.4		40-110	%REC	DL = NA	4/25/2022 11:22

AlaSe-10Fort Collins

## SAMPLE SUMMARY REPORT

Client:	ALS Environmental		<b>Date:</b> 20-May-22							
Project:	HS22040016	<b>Work Order: 2204070</b>								
Sample ID:	MW-20 Lab ID: 2204070-12									
Legal Location: Matrix: WATER										
<b>Collection Date:</b>	3/31/2022 19:20				Perc	ent Moisture:				
Analyses		Result	Qual	Report Dilutio Qual Limit Units Factor		Dilution Factor	Date Analyzed			
Radium-226 by Radon Emanation - Method 903.1		SOP 783		Prep Date: 4/13/2022		PrepBy: <b>EJE</b>				
Ra-226		0.16 (+/- 0.19)	U	0.29	pCi/l	NA	4/26/2022 11:26			
Carr: BARIUM		98.1		40-110	%REC	DL = NA	4/26/2022 11:26			
Radium-228 Analysis by GFPC		SOP 724		Pre	Date: 4/21/2022	PrepBy: MMS				
COMBINED RADIL	JM (226+228)	0 (+/- 0)	U	0.87	pCi/l	NA	4/26/2022 11:22			
Ra-228		0.65 (+/- 0.45)	U	0.87	pCi/l	NA	4/25/2022 11:22			
Carr: BARIUM		89.5		40-110	%REC	DL = NA	4/25/2022 11:22			

AlaSe-1020nt Collins

## SAMPLE SUMMARY REPORT

Client:	ALS Environmental			<b>Date:</b> 20-May-22								
Project:	HS22040016		<b>Work Order: 2204070</b>									
Sample ID:	DUP 3 Lab ID: 2204070-13											
Legal Location:			Matrix: WATER									
<b>Collection Date:</b>	3/31/2022 17:08				Perc	ent Moisture:						
Analyses		Result	Qual	Report Dilution Qual Limit Units Factor		Dilution Factor	Date Analyzed					
Radium-226 by Radon Emanation - Method 903.1		SOP 783		Prep Date: 4/13/2022		PrepBy: <b>EJE</b>						
Ra-226		0.08 (+/- 0.19)	U	0.35	pCi/l	NA	4/26/2022 11:26					
Carr: BARIUM		97.9		40-110	%REC	DL = NA	4/26/2022 11:26					
Radium-228 Analysis by GFPC		SOP 724		Prep	Date: 4/21/2022	PrepBy: MMS						
COMBINED RADI	UM (226+228)	0 (+/- 0)	U	0.8	pCi/l	NA	4/26/2022 11:22					
Ra-228		0 (+/- 0.36)	U	0.8	pCi/l	NA	4/25/2022 11:22					
Carr: BARIUM		93.6		40-110	%REC	DL = NA	4/25/2022 11:22					

Alage-10Bont Collins

#### SAMPLE SUMMARY REPORT

Client:	ALS Environmental	<b>Date:</b> 20-May-22								
Project:	HS22040016		<b>Work Order: 2204070</b>							
Sample ID:	DUP 3					Lab ID:	2204070-13			
Legal Location:	:					Matrix:	WATER			
Collection Date	: 3/31/2022 17:08				Perc	cent Moisture:				
Analyses	R	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed			
Explanation of	Qualifiers									
Radiochemistry:										
<ul> <li>"Report Limit" is the MDC</li> <li>U or ND - Result is less than the sample specific MDC.</li> <li>Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.</li> <li>Y2 - Chemical Yield outside default limits.</li> <li>W - DER is greater than Warning Limit of 1.42</li> <li>* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.</li> <li># - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.</li> <li>G - Sample density differs by more than 15% of LCS density.</li> <li>D - DER is greater than Control Limit</li> <li>M - Requested MDC not met.</li> </ul>		<ul> <li>M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.</li> <li>L - LCS Recovery below lower control limit.</li> <li>H - LCS Recovery above upper control limit.</li> <li>P - LCS, Matrix Spike Recovery within control limits.</li> <li>N - Matrix Spike Recovery outside control limits</li> <li>NC - Not Calculated for duplicate results less than 5 times MDC</li> <li>B - Analyte concentration greater than MDC but less than Requested MDC.</li> </ul>								
Inorganics:										
B - Result is less that U or ND - Indicates t E - The reported value	an the requested reporting limit but gre that the compound was analyzed for bu- ue is estimated because of the present	ater than the instrum ut not detected. ce of interference. A	nent method	detection limit	(MDL).	he narrative.				
M - Duplicate inject	tion precision was not met.			.,						
N - Spiked sample re duplicate fail and the	ecovery not within control limits. A pose e native sample concentration is less th	st spike is analyzed f nan four times the sp	or all ICP an bike added c	alyses when the oncentration.	ne matrix spik	e and or spike				
<ul> <li>Spiked recovery i</li> </ul>	not within control limits. An explanatory	y note may be includ	ea in the na	rrative.						

- \* Duplicate analysis (relative percent difference) not within control limits.
- S SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

#### Organics:

U or ND - Indicates that the compound was analyzed for but not detected.

- B Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
- E Analyte concentration exceeds the upper level of the calibration range.
- J Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
- A A tentatively identified compound is a suspected aldol-condensation product.
- X The analyte was diluted below an accurate quantitation level.
- \* The spike recovery is equal to or outside the control criteria used.
- + The relative percent difference (RPD) equals or exceeds the control criteria.
- G A pattern resembling gasoline was detected in this sample.
- D A pattern resembling diesel was detected in this sample.
- M A pattern resembling motor oil was detected in this sample.
- C A pattern resembling crude oil was detected in this sample.
- 4 A pattern resembling JP-4 was detected in this sample.
- 5 A pattern resembling JP-5 was detected in this sample.
- H Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
- L Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
- Z This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- dieselmineral spirits
- motor oil
- Stoddard solvent
- bunker C

Arla Se-1(Fort Collins

Client:ALS EnvironmentalWork Order:2204070Project:HS22040016

## **QC BATCH REPORT**

Batch ID:	RE220413-1-2	Instrument ID Alp	oha Scin		Method:	Radium-226	by Rado	n Emanation				
DUP	Sample ID: 2204070-11		Units: <b>pCi/l</b>			Analysis Date: 4/26/2022 11:26						
Client ID:	MW-19S	Run ID: <b>RE220413-1A</b>						Prep Date: 4/13	/2022	DF: <b>NA</b>		
Analyte		Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226		0.08 (+/- 0.21)	0.37						0.17	7 0.3	2.1	U
Carr: BA	RIUM	15120		15870		95.2	40-110		15140	)		
LCS Sample ID: RE220413-1					Units: <b>pCi/I</b>			Analysis Date: 4/26/2022 11:52				
Client ID:		Run ID: RE220413-1A			Pre			Prep Date: 4/13	ep Date: 4/13/2022 DF: NA			
Analyte		Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226		46 (+/- 11)	0	46.77		97.3	67-120					Р
Carr: BA	RIUM	15710		15860		99.1	40-110					
МВ	Sample ID: RE220413-1			Units: <b>pCi/l</b> Analysis Date			s Date:	e: 4/26/2022 11:52				
Client ID: Run			un ID: RE220413-1A				F	Prep Date: 4/13	/2022	DF	NA	
Analyte		Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226		0.055 (+/- 0.091)	0.155									U
Carr: BA	RIUM	15770		15860		99.4	40-110					
The foll	owing samples were analyze	ed in this batch:	2204 2204 2204 2204 2204	070-1 070-4 070-7 070-10 070-13	2204 2204 2204 2204	070-2 070-5 070-8 070-11	2204 2204 2204 2204	4070-3 4070-6 4070-9 4070-12				
# **QC BATCH REPORT**

Batch ID: RA220421-3-1 Instrument ID GA			GASI	PROP		Method: F	Aethod: Radium-228 Analysis by GFPC						
LCSD	Sample ID:	RA220421-3				ι	Units: <b>ug</b> An			s Date:	4/25/202	2 08:45	
Client ID: Run ID: RA220421-3/				A		Prep Date: 4/21/2022				DF: <b>NA</b>			
Analyte		Res	ult F	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Carr: BAR	RIUM	31	690		34630		91.5	40-110					
Ra-228		15.9 (+/	3.8)	0.8	21.82		73	70-130			1.4	2.1	Р
The follo	wing samples	were analyzed in this bate	ch:	22040 <sup>°</sup> 22040 <sup>°</sup>	70-1 70-4	22040 22040	)70-2 )70-5	220 220	4070-3 4070-6				

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 Batch ID: RA220421-4-1
 Instrument ID GASPROP

 DUP
 Sample ID: 2204070-11

Method: Radium-228 Analysis by GFPC

DUP	Sample ID: 2204070-11				Ui	nits: <b>ug</b>		Analys	is Date:	4/25/202	2 11:22		
Client ID: I	MW-19S	Run II	): RA220421-4A					Prep Date: 4/21	/2022	DF: <b>NA</b>			
Analyte		Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual	
Carr: BAR	RIUM	33270		35310		94.2	40-110		3298	0			
COMBINED	RADIUM (226+228)	0 (+/- 0)	0.83							0		U	
Ra-228		-0.42 (+/- 0.36)	0.83						0.0	4 0.9	2.1	U	
LCS	Sample ID: RA220421-4				U	nits: <b>ug</b>		Analys	is Date:	4/28/202	2 11:39		
Client ID:		Run ID: RA220421-4A					Prep Date: 4/21/2022			DF: NA			
Analyte		Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual	
Carr: BAR	RIUM	33620		35310		95.2	40-110						
Ra-228		21.7 (+/- 5.1)	0.8	21.79		99.5	70-130					Р	
МВ	Sample ID: RA220421-4				U	nits: <b>ug</b>		Analysis Date:			4/25/2022 11:22		
Client ID:		Run II	D: RA220421-	4A				Prep Date: 4/21	/2022	DF:	NA		
Analyte		Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual	
Carr: BAR	RIUM	33690		35310		95.4	40-110						
Ra-228		-0.28 (+/- 0.38)	0.86									U	
The following samples were analyzed in this batch:		2204070-7 2204070-10 2204070-13		2204070-8 2 2204070-11 2		220 220	204070-9 204070-12						



10450 Stancliff Rd. Suite 210 Houston, TX 77099 T: +1 281 530 5656 F: +1 281 530 5887

June 16, 2022

Bert Smith Altamira 525 central park Dr Suite 500 Oklahoma City, OK 73013

Work Order: HS22060384

Laboratory Results for: WFEC CCR/Landfill

Dear Bert Smith,

ALS Environmental received 7 sample(s) on Jun 08, 2022 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Ima M. Kinchen

Generated By: JUMOKE.LAWAL Anna Kinchen Project Manager

alsglobal.com

# SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22060384-01	MW-3	Water		06-Jun-2022 17:06	08-Jun-2022 10:00	
HS22060384-02	MW-5S	Water		07-Jun-2022 11:20	09-Jun-2022 14:52	
HS22060384-03	MW-16	Water		07-Jun-2022 12:22	09-Jun-2022 14:52	
HS22060384-04	MW-17	Water		07-Jun-2022 13:27	09-Jun-2022 14:52	
HS22060384-05	MW-20	Water		06-Jun-2022 18:00	08-Jun-2022 10:00	
HS22060384-06	MW-21	Water		06-Jun-2022 16:17	08-Jun-2022 10:00	
HS22060384-07	DUP 2	Water		07-Jun-2022 11:20	08-Jun-2022 10:00	

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### **ALS Houston, US**

Client: Altamira Project: WFEC CCR/Landfill Work Order: HS22060384

• 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.

## Metals by Method SM3500FED

### Batch ID: R410723,R410725,R410248,R410339

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

# Metals by Method SW6020A

### Batch ID: 179808,179857

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

## WetChemistry by Method SM4500 S2-F

#### Batch ID: R410618

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

### WetChemistry by Method E410.4

# Batch ID: R410708

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

### WetChemistry by Method SM4500H+ B

### Batch ID: R410712,R410716

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

#### WetChemistry by Method M2540C

### Batch ID: R410620

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

## WetChemistry by Method SM3500FED

### Batch ID: R410423

#### Sample ID: MW-16 (HS22060384-03)

• Sample holding time expired prior to sample receipt. It was analyzed at the request of the client. Results should be considered estimated.

#### Sample ID: MW-17 (HS22060384-04)

• Sample holding time expired prior to sample receipt. It was analyzed at the request of the client. Results should be considered estimated.

#### Sample ID: MW-5S (HS22060384-02)

• Sample holding time expired prior to sample receipt. It was analyzed at the request of the client. Results should be considered estimated.

**CASE NARRATIVE** 

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# **CASE NARRATIVE**

### WetChemistry by Method SM3500FED

### Batch ID: R410421

#### Sample ID: MW-16 (HS22060384-03)

• Sample holding time expired prior to sample receipt. It was analyzed at the request of the client. Results should be considered estimated.

### Sample ID: MW-17 (HS22060384-04)

• Sample holding time expired prior to sample receipt. It was analyzed at the request of the client. Results should be considered estimated.

#### Sample ID: MW-5S (HS22060384-02)

• Sample holding time expired prior to sample receipt. It was analyzed at the request of the client. Results should be considered estimated.

# WetChemistry by Method SM2320B

#### Batch ID: R410419

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

# WetChemistry by Method M2510 B

## Batch ID: R410397

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

## WetChemistry by Method E300

#### Batch ID: R410439

#### Sample ID: HS22060495-01MS

• MS and MSD are for an unrelated sample (Sulfate)

#### Sample ID: HS22060501-07MS

• MS and MSD are for an unrelated sample (Sulfate)

### Batch ID: R410286

### Sample ID: HS22060426-04MS

• MS and MSD are for an unrelated sample (Chloride)

### Sample ID: MW-16 (HS22060384-03)

• Sample was received out of holding time. Run at client request out of holding time.

### Sample ID: MW-17 (HS22060384-04)

• Sample was received out of holding time. Run at client request out of holding time.

## Sample ID: MW-5S (HS22060384-02)

• Sample was received out of holding time. Run at client request out of holding time.

# **ALS Houston, US**

**CASE NARRATIVE** 

Client:AltamiraProject:WFEC CCR/LandfillWork Order:HS22060384

# WetChemistry by Method E300

# Batch ID: R410254

Sample ID: DUP 2 (HS22060384-07MS)

• 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)

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Client:	Altamira	ANALYTICAL REPORT
Project:	WFEC CCR/Landfill	WorkOrder:HS22060384
Sample ID:	MW-3	Lab ID:HS22060384-01
Collection Date:	06-Jun-2022 17:06	Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		Metho	d:E300				Analyst: TH
Chloride	12.1		0.200	0.500	mg/L	1	08-Jun-2022 13:44
Fluoride	0.360		0.0500	0.100	mg/L	1	08-Jun-2022 13:44
Nitrogen, Nitrate (As N)	0.137		0.0300	0.100	mg/L	1	08-Jun-2022 13:44
Sulfate	1,090		4.00	10.0	mg/L	20	08-Jun-2022 13:49
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Method	:E410.4				Analyst: TH
Chemical Oxygen Demand	15.0		5.00	15.0	mg/L	1	15-Jun-2022 15:30
SPECIFIC CONDUCTANCE BY SM 2 2011	510B-	Method:	M2510 B				Analyst: MZD
Specific Conductivity	3,030		5.00	5.00	umhos/cm @ 25.0 °C	1	10-Jun-2022 12:33
TOTAL DISSOLVED SOLIDS BY SM2 -2011	2540C	Method:	M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	1,860		5.00	10.0	mg/L	1	13-Jun-2022 16:37
PH BY SM4500H+ B-2011	I	Method:SN	14500H+ B				Analyst: SB
рН	7.51	Н	0.100	0.100	pH Units	1	15-Jun-2022 16:36
Temp Deg C @pH	20.6	Н	0	0	°C	1	15-Jun-2022 16:36

Sample ID:	MW-5S				Lab	ID:HS22	060384-02
Collection Date:	07-Jun-2022 ´	11:20			Ма	trix:Water	
ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULAT SM3500FED	ION BY	Method:	SM3500FED				Analyst: JHD
Ferric Iron	0.0311	J	0.0200	0.0500	mg/L	1	15-Jun-2022 17:39
FERRIC IRON (DISS)- BY CALC BY SM3500FED	CULATION	Method: (dis:	SM3500FED solved)				Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	15-Jun-2022 17:40
ICP-MS METALS BY SW6020A		Method	:SW6020A		Prep:SW3010A /	10-Jun-2022	Analyst: JHD
Iron	0.0311	J	0.0120	0.200	mg/L	1	14-Jun-2022 16:49
DISSOLVED METALS BY SW6	020A Meth	od:SW6	020A (dissolved)		Prep:SW3010A /	13-Jun-2022	Analyst: JHD
Iron	0.0138	J	0.0120	0.200	mg/L	1	14-Jun-2022 21:27
ANIONS BY E300.0, REV 2.1, 1	993	Meth	od:E300				Analyst: TH
Chloride	24.1		0.200	0.500	mg/L	1	09-Jun-2022 18:32
Fluoride	1.41		0.0500	0.100	mg/L	1	09-Jun-2022 18:32
Nitrogen, Nitrate (As N)	0.0996	JH	0.0300	0.100	mg/L	1	09-Jun-2022 18:32
Sulfate	503		2.00	5.00	mg/L	10	10-Jun-2022 20:27
CHEMICAL OXYGEN DEMAND E410.4, REV 2.0, 1993	BY	Metho	od:E410.4				Analyst: TH
Chemical Oxygen Demand	17.0		5.00	15.0	mg/L	1	15-Jun-2022 15:30
SPECIFIC CONDUCTANCE BY 2011	SM 2510B-	Method	1:M2510 B				Analyst: MZD
Specific Conductivity	2,280		5.00	5.00	umhos/cm @ 25.0 °C	1	10-Jun-2022 12:33
TOTAL DISSOLVED SOLIDS B -2011	Y SM2540C	Metho	d:M2540C				Analyst: CWG
Total Dissolved Solids (Residu Filterable)	ie, 1,170		5.00	10.0	mg/L	1	13-Jun-2022 16:37
ALKALINITY BY SM 2320B-201	1	Method	:SM2320B				Analyst: JAC
Alkalinity, Bicarbonate (As CaCO3)	419		5.00	5.00	mg/L	1	09-Jun-2022 17:40
Alkalinity, Carbonate (As CaCO3	i) U		5.00	5.00	mg/L	1	09-Jun-2022 17:40
Alkalinity, Hydroxide (As CaCO3	) U		5.00	5.00	mg/L	1	09-Jun-2022 17:40
Alkalinity, Total (As CaCO3)	419		5.00	5.00	mg/L	1	09-Jun-2022 17:40
FERROUS IRON BY SM3500 FI	ЕВ	Method:	SM3500FED				Analyst: AP
Ferrous Iron	U	Н	0.0200	0.0500	mg/L	1	10-Jun-2022 13:02
FERROUS IRON BY SM3500 F	E D	Method: (dis:	SM3500FED solved)				Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	10-Jun-2022 13:11
SULFIDE BY SM4500 S2-F-201	1	Method:S	SM4500 S2-F				Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	14-Jun-2022 16:32

Altamira

WFEC CCR/Landfill

Client:

Project:

Analyst: SB

15-Jun-2022 16:36

15-Jun-2022 16:36

ANALYTICAL REPORT

WorkOrder:HS22060384

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

PH BY SM4500H+ B-2011

Temp Deg C @pH

pН

Method:SM4500H+ B

0.100

0

Н

Н

8.19

20.4

0.100

0

pH Units

°C

1

1

Client:	Altamira
Project:	WFEC CCR/Landfill
Sample ID:	MW-16
Collection Date:	07-Jun-2022 12:22

ANALYTICAL REPORT

WorkOrder:HS22060384 Lab ID:HS22060384-03 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION SM3500FED	BY N	Method:S	M3500FED				Analyst: JHD
Ferric Iron	U		0.0200	0.0500	mg/L	1	15-Jun-2022 17:39
FERRIC IRON (DISS)- BY CALCULA BY SM3500FED	ATION N	Nethod:S (diss)	M3500FED olved)				Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	15-Jun-2022 17:40
ICP-MS METALS BY SW6020A		Method:	SW6020A		Prep:SW3010A /	10-Jun-2022	Analyst: JHD
Iron	0.0145	J	0.0120	0.200	mg/L	1	14-Jun-2022 17:33
DISSOLVED METALS BY SW6020A	Metho	od:SW60	20A (dissolved)		Prep:SW3010A /	13-Jun-2022	Analyst: JHD
Iron	U		0.0120	0.200	mg/L	1	14-Jun-2022 21:31
ANIONS BY E300.0, REV 2.1, 1993		Metho	od:E300				Analyst: TH
Chloride	15.0		0.200	0.500	mg/L	1	09-Jun-2022 18:37
Fluoride	1.01		0.0500	0.100	mg/L	1	09-Jun-2022 18:37
Nitrogen, Nitrate (As N)	0.0630	JH	0.0300	0.100	mg/L	1	09-Jun-2022 18:37
Sulfate	1,090		4.00	10.0	mg/L	20	09-Jun-2022 18:42
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Metho	d:E410.4				Analyst: TH
Chemical Oxygen Demand	U		5.00	15.0	mg/L	1	15-Jun-2022 15:30
SPECIFIC CONDUCTANCE BY SM 2011	2510B-	Method	:M2510 B				Analyst: MZD
Specific Conductivity	2,910		5.00	5.00	umhos/cm @ 25.0 °C	1	10-Jun-2022 12:33
TOTAL DISSOLVED SOLIDS BY SN -2011	12540C	Method	:M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	1,700		5.00	10.0	mg/L	1	13-Jun-2022 16:37
ALKALINITY BY SM 2320B-2011		Method:	SM2320B				Analyst: JAC
Alkalinity, Bicarbonate (As CaCO3)	258		5.00	5.00	mg/L	1	09-Jun-2022 17:40
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	09-Jun-2022 17:40
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	09-Jun-2022 17:40
Alkalinity, Total (As CaCO3)	258		5.00	5.00	mg/L	1	09-Jun-2022 17:40
FERROUS IRON BY SM3500 FE B	N	Method:S	M3500FED				Analyst: AP
Ferrous Iron	U	Н	0.0200	0.0500	mg/L	1	10-Jun-2022 13:02
FERROUS IRON BY SM3500 FE D	Ν	Method:S (diss)	M3500FED olved)				Analyst: AP
Ferrous Iron, Dissolved	U	Н	0.0200	0.0500	mg/L	1	10-Jun-2022 13:11
SULFIDE BY SM4500 S2-F-2011	Μ	lethod:S	M4500 S2-F				Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	14-Jun-2022 16:32
PH BY SM4500H+ B-2011	N	lethod:S	M4500H+ B				Analyst: SB
рН	7.92	Н	0.100	0.100	pH Units	1	15-Jun-2022 16:47
Temp Deg C @pH	20.1	Н	0	0	°C	1	15-Jun-2022 16:47

Client:	Altamira
Project:	WFEC CCR/Landfill
Sample ID:	MW-17
Collection Date:	07-Jun-2022 13:27

ANALYTICAL REPORT

WorkOrder:HS22060384 Lab ID:HS22060384-04 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION I SM3500FED	BY N	Aethod:S	M3500FED				Analyst: JHD
Ferric Iron	U		0.0200	0.0500	mg/L	1	15-Jun-2022 17:39
FERRIC IRON (DISS)- BY CALCULA BY SM3500FED	TION N	/lethod:S (diss	M3500FED olved)				Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	15-Jun-2022 17:40
ICP-MS METALS BY SW6020A		Method	SW6020A		Prep:SW3010A /	10-Jun-2022	Analyst: JHD
Iron	U		0.0120	0.200	mg/L	1	14-Jun-2022 17:35
DISSOLVED METALS BY SW6020A	Metho	od:SW60	20A (dissolved)		Prep:SW3010A /	13-Jun-2022	Analyst: JHD
Iron	U		0.0120	0.200	mg/L	1	14-Jun-2022 21:33
ANIONS BY E300.0, REV 2.1, 1993		Metho	od:E300				Analyst: TH
Chloride	4.16		0.200	0.500	mg/L	1	09-Jun-2022 19:14
Fluoride	0.371		0.0500	0.100	mg/L	1	09-Jun-2022 19:14
Nitrogen, Nitrate (As N)	0.0834	JH	0.0300	0.100	mg/L	1	09-Jun-2022 19:14
Sulfate	1,460		4.00	10.0	mg/L	20	09-Jun-2022 19:19
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Metho	d:E410.4				Analyst: TH
Chemical Oxygen Demand	U		5.00	15.0	mg/L	1	15-Jun-2022 15:30
SPECIFIC CONDUCTANCE BY SM 2 2011	2510B-	Method	:M2510 B				Analyst: MZD
Specific Conductivity	2,920		5.00	5.00	umhos/cm @ 25.0 °C	1	10-Jun-2022 12:33
TOTAL DISSOLVED SOLIDS BY SM -2011	2540C	Method	:M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	2,220		5.00	10.0	mg/L	1	13-Jun-2022 16:37
ALKALINITY BY SM 2320B-2011		Method	SM2320B				Analyst: JAC
Alkalinity, Bicarbonate (As CaCO3)	269		5.00	5.00	mg/L	1	09-Jun-2022 17:40
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	09-Jun-2022 17:40
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	09-Jun-2022 17:40
Alkalinity, Total (As CaCO3)	269		5.00	5.00	mg/L	1	09-Jun-2022 17:40
FERROUS IRON BY SM3500 FE B	N	lethod:S	M3500FED				Analyst: AP
Ferrous Iron	0.0220	JH	0.0200	0.0500	mg/L	1	10-Jun-2022 13:02
FERROUS IRON BY SM3500 FE D	N	/lethod:S (diss	M3500FED olved)				Analyst: AP
Ferrous Iron, Dissolved	U	Н	0.0200	0.0500	mg/L	1	10-Jun-2022 13:11
SULFIDE BY SM4500 S2-F-2011	м	lethod:S	M4500 S2-F				Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	14-Jun-2022 16:32
PH BY SM4500H+ B-2011	М	lethod:S	M4500H+ B				Analyst: SB
рН	7.67	Н	0.100	0.100	pH Units	1	15-Jun-2022 16:47
Temp Deg C @pH	20.1	Н	0	0	°C	1	15-Jun-2022 16:47

Client:	Altamira	ANALYTICAL REPORT
Project:	WFEC CCR/Landfill	WorkOrder:HS22060384
Sample ID:	MW-20	Lab ID:HS22060384-05
Collection Date:	06-Jun-2022 18:00	Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		Metho	od:E300				Analyst: TH
Chloride	5.34		0.200	0.500	mg/L	1	08-Jun-2022 13:54
Fluoride	0.289		0.0500	0.100	mg/L	1	08-Jun-2022 13:54
Nitrogen, Nitrate (As N)	0.0769	J	0.0300	0.100	mg/L	1	08-Jun-2022 13:54
Sulfate	732		4.00	10.0	mg/L	20	08-Jun-2022 14:00
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		Metho	d:E410.4				Analyst: TH
Chemical Oxygen Demand	U		5.00	15.0	mg/L	1	15-Jun-2022 15:30
SPECIFIC CONDUCTANCE BY SM 2 2011	2510B-	Method	:M2510 B				Analyst: MZD
Specific Conductivity	2,170		5.00	5.00	umhos/cm @ 25.0 °C	1	10-Jun-2022 12:33
TOTAL DISSOLVED SOLIDS BY SM -2011	2540C	Method	:M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	1,440		5.00	10.0	mg/L	1	13-Jun-2022 16:37
PH BY SM4500H+ B-2011	I	Method:S	M4500H+ B				Analyst: SB
рН	7.60	Н	0.100	0.100	pH Units	1	15-Jun-2022 16:36
Temp Deg C @pH	20.8	Н	0	0	°C	1	15-Jun-2022 16:36

Client:	Altamira	ANALYTICAL REPORT
Project:	WFEC CCR/Landfill	WorkOrder:HS22060384
Sample ID:	MW-21	Lab ID:HS22060384-06
Collection Date:	06-Jun-2022 16:17	Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS BY E300.0, REV 2.1, 1993		Metho	1:E300				Analyst: TH
Chloride	22.4		0.200	0.500	mg/L	1	08-Jun-2022 14:05
Fluoride	0.543		0.0500	0.100	mg/L	1	08-Jun-2022 14:05
Nitrogen, Nitrate (As N)	0.399		0.0300	0.100	mg/L	1	08-Jun-2022 14:05
Sulfate	1,610		4.00	10.0	mg/L	20	08-Jun-2022 14:10
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	15-Jun-2022 15:30
SPECIFIC CONDUCTANCE BY SM 2 2011	2510B-	Method:	M2510 B				Analyst: MZD
Specific Conductivity	9,390		5.00	5.00	umhos/cm @ 25.0 °C	1	10-Jun-2022 12:33
TOTAL DISSOLVED SOLIDS BY SM -2011	12540C	Method:	M2540C				Analyst: CWG
Total Dissolved Solids (Residue, Filterable)	2,660		5.00	10.0	mg/L	1	13-Jun-2022 16:37
PH BY SM4500H+ B-2011	r	Method:SN	14500H+ B				Analyst: SB
рН	7.57	Н	0.100	0.100	pH Units	1	15-Jun-2022 16:36
Temp Deg C @pH	20.3	Н	0	0	°C	1	15-Jun-2022 16:36

Collection Date: 0	7-Jun-2022 1	1:20			Ma	trix:Wate	r
ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATI	ON BY	Method:S	M3500FED				Analyst: JHD
Ferric Iron	0.0223	J	0.0200	0.0500	mg/L	1	15-Jun-2022 17:39
FERRIC IRON (DISS)- BY CALC BY SM3500FED	ULATION	Method:S (diss	M3500FED olved)				Analyst: JHD
Ferric Iron, Dissolved	0.0285	J	0.0200	0.0500	mg/L	1	15-Jun-2022 17:40
ICP-MS METALS BY SW6020A		Method:	SW6020A		Prep:SW3010A /	10-Jun-2022	Analyst: JHD
Iron	0.0223	J	0.0120	0.200	mg/L	1	14-Jun-2022 17:37
DISSOLVED METALS BY SW60	20A Meth	od:SW60	20A (dissolved)		Prep:SW3010A /	13-Jun-2022	Analyst: JHD
Iron	0.0285	J	0.0120	0.200	mg/L	1	14-Jun-2022 21:35
ANIONS BY E300.0, REV 2.1, 19	93	Metho	od:E300				Analyst: TH
Chloride	24.1		0.200	0.500	mg/L	1	08-Jun-2022 13:23
Fluoride	1.41		0.0500	0.100	mg/L	1	08-Jun-2022 13:23
Nitrogen, Nitrate (As N)	0.0952	J	0.0300	0.100	mg/L	1	08-Jun-2022 13:23
Sulfate	485		2.00	5.00	mg/L	10	08-Jun-2022 13:38
CHEMICAL OXYGEN DEMAND E410.4, REV 2.0, 1993	ВҮ	Metho	d:E410.4				Analyst: TH
Chemical Oxygen Demand	U		5.00	15.0	mg/L	1	15-Jun-2022 15:30
SPECIFIC CONDUCTANCE BY S 2011	SM 2510B-	Method	:M2510 B				Analyst: MZD
Specific Conductivity	2,260		5.00	5.00	umhos/cm @ 25.0 °C	1	10-Jun-2022 12:33
TOTAL DISSOLVED SOLIDS BY -2011	SM2540C	Method	:M2540C		@ 20.0 °C		Analyst: CWG
Total Dissolved Solids (Residue Filterable)	e, 1,180		5.00	10.0	mg/L	1	13-Jun-2022 16:37
ALKALINITY BY SM 2320B-2011	l	Method:	SM2320B				Analyst: JAC
Alkalinity, Bicarbonate (As CaCO3)	415		5.00	5.00	mg/L	1	09-Jun-2022 17:40
Alkalinity, Carbonate (As CaCO	3) 5.19		5.00	5.00	mg/L	1	09-Jun-2022 17:40
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	09-Jun-2022 17:40
Alkalinity, Total (As CaCO3)	421		5.00	5.00	mg/L	1	09-Jun-2022 17:40
FERROUS IRON BY SM3500 FE	B	Method:S	M3500FED				Analyst: AP
Ferrous Iron	U		0.0200	0.0500	mg/L	1	08-Jun-2022 13:12
FERROUS IRON BY SM3500 FE	D	Method:S (diss)	M3500FED olved)				Analyst: AP
Ferrous Iron, Dissolved	U		0.0200	0.0500	mg/L	1	08-Jun-2022 13:20
SULFIDE BY SM4500 S2-F-2011	N	lethod:S	M4500 S2-F				Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	14-Jun-2022 16:32
PH BY SM4500H+ B-2011	Γ	Method:S	M4500H+ B				Analyst: SB
рН	8.40	Н	0.100	0.100	pH Units	1	15-Jun-2022 16:47
Temp Deg C @pH	21.6	Н	0	0	°C	1	15-Jun-2022 16:47

# **ALS Houston, US**

Altamira

DUP 2

WFEC CCR/Landfill

Client:

Project:

Sample ID:

ANALYTICAL REPORT

WorkOrder:HS22060384

Lab ID:HS22060384-07

Batch ID: 179808		Start Date:	10 Jun 2022	09:30	End Date:	10 Jun 2022 13:30
Method: WATER - SW3010	A				Prep Code:	3010A
Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor		
HS22060384-02		10 (mL)	10 (mL)	1	120 plastic HNO3	
HS22060384-03		10 (mL)	10 (mL)	1	120 plastic HNO3	
HS22060384-04		10 (mL)	10 (mL)	1	120 plastic HNO3	
HS22060384-07		10 (mL)	10 (mL)	1	120 plastic HNO3	
Batch ID: 179857		Start Date:	13 Jun 2022	10:00	End Date:	13 Jun 2022 14:00
Method: DISS METALS PR	EP - WATER -	SW3010A			Prep Code:	3010A DISS
Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor		
HS22060384-02		10 (mL)	10 (mL)	1	120 plastic HNO3	
HS22060384-03		10 (mL)	10 (mL)	1	120 plastic HNO3	
HS22060384-04		10 (mL)	10 (mL)	1	120 plastic HNO3	
HS22060384-07		10 (mL)	10 (mL)	1	120 plastic HNO3	

Date: 16-Jun-22

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Client: Project: WorkOrder:	Altamira WFEC C HS22060	CR/Landfill 0384				DATES RE	PORT
Sample ID	Client Samp	DID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 179808	6(0)	Test Name :	CP-MS METALS BY SV	V6020A		Matrix: Water	
HS22060384-02	MW-5S		07 Jun 2022 11:20		10 Jun 2022 09:30	14 Jun 2022 16:49	1
HS22060384-03	MW-16		07 Jun 2022 12:22		10 Jun 2022 09:30	14 Jun 2022 17:33	1
HS22060384-04	MW-17		07 Jun 2022 13:27		10 Jun 2022 09:30	14 Jun 2022 17:35	1
HS22060384-07	DUP 2		07 Jun 2022 11:20		10 Jun 2022 09:30	14 Jun 2022 17:37	1
Batch ID: 179857	(0)	Test Name :	DISSOLVED METALS E	8Y SW6020A		Matrix: Water	
HS22060384-02	MW-5S		07 Jun 2022 11:20		13 Jun 2022 10:00	14 Jun 2022 21:27	1
HS22060384-03	MW-16		07 Jun 2022 12:22		13 Jun 2022 10:00	14 Jun 2022 21:31	1
HS22060384-04	MW-17		07 Jun 2022 13:27		13 Jun 2022 10:00	14 Jun 2022 21:33	1
HS22060384-07	DUP 2		07 Jun 2022 11:20		13 Jun 2022 10:00	14 Jun 2022 21:35	1
Batch ID: R41024	48(0)	Test Name :	FERROUS IRON BY SM	13500 FE B		Matrix: Water	
HS22060384-07	DUP 2		07 Jun 2022 11:20			08 Jun 2022 13:12	1
Batch ID: R41025	54(0)	Test Name : /	ANIONS BY E300.0, RE	V 2.1, 1993		Matrix: Water	
HS22060384-01	MW-3		06 Jun 2022 17:06			08 Jun 2022 13:49	20
HS22060384-01	MW-3		06 Jun 2022 17:06			08 Jun 2022 13:44	1
HS22060384-05	MW-20		06 Jun 2022 18:00			08 Jun 2022 14:00	20
HS22060384-05	MW-20		06 Jun 2022 18:00			08 Jun 2022 13:54	1
HS22060384-06	MW-21		06 Jun 2022 16:17			08 Jun 2022 14:10	20
HS22060384-06	MW-21		06 Jun 2022 16:17			08 Jun 2022 14:05	1
HS22060384-07	DUP 2		07 Jun 2022 11:20			08 Jun 2022 13:38	10
HS22060384-07	DUP 2		07 Jun 2022 11:20			08 Jun 2022 13:23	1
Batch ID: R41028	36(0)	Test Name : /	ANIONS BY E300.0, RE	V 2.1, 1993		Matrix: Water	
HS22060384-02	MW-5S		07 Jun 2022 11:20			09 Jun 2022 18:32	1
HS22060384-03	MW-16		07 Jun 2022 12:22			09 Jun 2022 18:42	20
HS22060384-03	MW-16		07 Jun 2022 12:22			09 Jun 2022 18:37	1
HS22060384-04	MW-17		07 Jun 2022 13:27			09 Jun 2022 19:19	20
HS22060384-04	MW-17		07 Jun 2022 13:27			09 Jun 2022 19:14	1
Batch ID: R41033	39(0)	Test Name :	FERROUS IRON BY SM	13500 FE D		Matrix: Water	
HS22060384-07	DUP 2		07 Jun 2022 11:20			08 Jun 2022 13:20	1
Batch ID: R41039	97(0)	Test Name :	SPECIFIC CONDUCTA	NCE BY SM 2510B-2	2011	Matrix: Water	
HS22060384-01	MW-3		06 Jun 2022 17:06			10 Jun 2022 12:33	1
HS22060384-02	MW-5S		07 Jun 2022 11:20			10 Jun 2022 12:33	1
HS22060384-03	MW-16		07 Jun 2022 12:22			10 Jun 2022 12:33	1
HS22060384-04	MW-17		07 Jun 2022 13:27			10 Jun 2022 12:33	1
HS22060384-05	MW-20		06 Jun 2022 18:00			10 Jun 2022 12:33	1
HS22060384-06	MW-21		06 Jun 2022 16:17			10 Jun 2022 12:33	1
HS22060384-07	DUP 2		07 Jun 2022 11:20			10 Jun 2022 12:33	1

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Client:	Altamir	а					
Project:	WFEC	CCR/Landfill				DATES RE	PORT
WorkOrder:	HS220	60384					
Sample ID	Client San	np ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R4104	19(0)	Test Name :	ALKALINITY BY SM 232	20B-2011		Matrix: Water	
HS22060384-02	MW-5S		07 Jun 2022 11:20			09 Jun 2022 17:40	1
HS22060384-03	MW-16		07 Jun 2022 12:22			09 Jun 2022 17:40	1
HS22060384-04	MW-17		07 Jun 2022 13:27			09 Jun 2022 17:40	1
HS22060384-07	DUP 2		07 Jun 2022 11:20			09 Jun 2022 17:40	1
Batch ID: R41042	21(0)	Test Name :	FERROUS IRON BY SM	13500 FE B		Matrix: Water	
HS22060384-02	MW-5S		07 Jun 2022 11:20			10 Jun 2022 13:02	1
HS22060384-03	MW-16		07 Jun 2022 12:22			10 Jun 2022 13:02	1
HS22060384-04	MW-17		07 Jun 2022 13:27			10 Jun 2022 13:02	1
Batch ID: R41042	23 ( 0 )	Test Name :	FERROUS IRON BY SM	13500 FE D		Matrix: Water	
HS22060384-02	MW-5S		07 Jun 2022 11:20			10 Jun 2022 13:11	1
HS22060384-03	MW-16		07 Jun 2022 12:22			10 Jun 2022 13:11	1
HS22060384-04	MW-17		07 Jun 2022 13:27			10 Jun 2022 13:11	1
Batch ID: R41043	39(0)	Test Name :	ANIONS BY E300.0, RE	V 2.1, 1993		Matrix: Water	
HS22060384-02	MW-5S		07 Jun 2022 11:20			10 Jun 2022 20:27	10
Batch ID: R41067	18(0)	Test Name :	SULFIDE BY SM4500 S	2-F-2011		Matrix: Water	
HS22060384-02	MW-5S		07 Jun 2022 11:20			14 Jun 2022 16:32	1
HS22060384-03	MW-16		07 Jun 2022 12:22			14 Jun 2022 16:32	1
HS22060384-04	MW-17		07 Jun 2022 13:27			14 Jun 2022 16:32	1
HS22060384-07	DUP 2		07 Jun 2022 11:20			14 Jun 2022 16:32	1
Batch ID: R41062	20(0)	Test Name :	TOTAL DISSOLVED SC	LIDS BY SM2540C-	2011	Matrix: Water	
HS22060384-01	MW-3		06 Jun 2022 17:06			13 Jun 2022 16:37	1
HS22060384-02	MW-5S		07 Jun 2022 11:20			13 Jun 2022 16:37	1
HS22060384-03	MW-16		07 Jun 2022 12:22			13 Jun 2022 16:37	1
HS22060384-04	MW-17		07 Jun 2022 13:27			13 Jun 2022 16:37	1
HS22060384-05	MW-20		06 Jun 2022 18:00			13 Jun 2022 16:37	1
HS22060384-06	MW-21		06 Jun 2022 16:17			13 Jun 2022 16:37	1
HS22060384-07	DUP 2		07 Jun 2022 11:20			13 Jun 2022 16:37	1
Batch ID: R41070	08(0)	Test Name :	CHEMICAL OXYGEN D	EMAND BY E410.4,	REV 2.0, 1993	Matrix: Water	
HS22060384-01	MW-3		06 Jun 2022 17:06			15 Jun 2022 15:30	1
HS22060384-02	MW-5S		07 Jun 2022 11:20			15 Jun 2022 15:30	1
HS22060384-03	MW-16		07 Jun 2022 12:22			15 Jun 2022 15:30	1
HS22060384-04	MW-17		07 Jun 2022 13:27			15 Jun 2022 15:30	1
HS22060384-05	MW-20		06 Jun 2022 18:00			15 Jun 2022 15:30	1
HS22060384-06	MW-21		06 Jun 2022 16:17			15 Jun 2022 15:30	1
HS22060384-07	DUP 2		07 Jun 2022 11:20			15 Jun 2022 15:30	1

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Client:	Altami	ra					
Project:	WFEC	CCR/Landfill				DATES RE	PORT
WorkOrder:	HS220	60384					
Sample ID	Client Sa	mp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R4107	/12(0)	Test Name : F	PH BY SM4500H+ B-20	011		Matrix: Water	
HS22060384-01	MW-3		06 Jun 2022 17:06			15 Jun 2022 16:36	1
HS22060384-02	MW-5S		07 Jun 2022 11:20			15 Jun 2022 16:36	1
HS22060384-05	MW-20		06 Jun 2022 18:00			15 Jun 2022 16:36	1
HS22060384-06	MW-21		06 Jun 2022 16:17			15 Jun 2022 16:36	1
Batch ID: R4107	'16(0)	Test Name: F	PH BY SM4500H+ B-20	011		Matrix: Water	
HS22060384-03	MW-16		07 Jun 2022 12:22			15 Jun 2022 16:47	1
HS22060384-04	MW-17		07 Jun 2022 13:27			15 Jun 2022 16:47	1
HS22060384-07	DUP 2		07 Jun 2022 11:20			15 Jun 2022 16:47	1
Batch ID: R4107	23 ( 0 )	Test Name : F	FERRIC IRON - BY CA	LCULATION BY SM	3500FED	Matrix: Water	
HS22060384-02	MW-5S		07 Jun 2022 11:20			15 Jun 2022 17:39	1
HS22060384-03	MW-16		07 Jun 2022 12:22			15 Jun 2022 17:39	1
HS22060384-04	MW-17		07 Jun 2022 13:27			15 Jun 2022 17:39	1
HS22060384-07	DUP 2		07 Jun 2022 11:20			15 Jun 2022 17:39	1
Batch ID: R4107	25(0)	Test Name : F	FERRIC IRON (DISS)-	BY CALCULATION I	BY SM3500FED	Matrix: Water	
HS22060384-02	MW-5S		07 Jun 2022 11:20			15 Jun 2022 17:40	1
HS22060384-03	MW-16		07 Jun 2022 12:22			15 Jun 2022 17:40	1
HS22060384-04	MW-17		07 Jun 2022 13:27			15 Jun 2022 17:40	1
HS22060384-07	DUP 2		07 Jun 2022 11:20			15 Jun 2022 17:40	1

#### Batch ID: 179808 (0) Instrument: ICPMS07 Method: ICP-MS METALS BY SW6020A MBLK Sample ID: MBLK-179808 Units: mg/L Analysis Date: 14-Jun-2022 16:45 Run ID: ICPMS07\_410605 PrepDate: 10-Jun-2022 Client ID: SeqNo: 6692282 DF·1 SPK Ref Control **RPD** Ref Result PQL SPK Val %REC %RPD Limit Qual Analyte Value Limit Value Iron U 0.200 LCS Sample ID: LCS-179808 Analysis Date: 14-Jun-2022 16:47 Units: mg/L Client ID: Run ID: ICPMS07 410605 SeqNo: 6692283 PrepDate: 10-Jun-2022 DF: 1 SPK Ref Control **RPD** Ref SPK Val %RPD Limit Qual Analyte Result PQL Value %REC Limit Value 4.948 0.200 5 0 99.0 80 - 120 Iron HS22060487-01MS Analysis Date: 14-Jun-2022 17:03 MS Sample ID: Units: mg/L Run ID: ICPMS07 410605 Client ID: SeqNo: 6692544 PrepDate: 10-Jun-2022 DF: 1 SPK Ref Control **RPD** Ref %RPD Limit Qual Result PQL SPK Val %REC Analyte Value Limit Value 5.222 0.200 5 0.122 102 80 - 120 Iron MSD Sample ID: HS22060487-01MSD Units: mg/L Analysis Date: 14-Jun-2022 17:05 Run ID: ICPMS07\_410605 SeqNo: 6692545 PrepDate: 10-Jun-2022 Client ID: DF·1 SPK Ref Control RPD Ref PQL SPK Val Value %REC Limit %RPD Limit Qual Analyte Result Value Iron 5.111 0.200 5 0.122 99.8 80 - 120 5.222 2.16 20 PDS Sample ID: HS22060487-01PDS Units: mg/L Analysis Date: 14-Jun-2022 17:07 Run ID: ICPMS07\_410605 Client ID: SeqNo: 6692546 PrepDate: 10-Jun-2022 DF: 1 SPK Ref Control **RPD** Ref Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual 0.200 10 0.122 117 75 - 125 Iron 11 81 Sample ID: HS22060487-01SD SD Units: mg/L Analysis Date: 14-Jun-2022 17:02 Client ID: Run ID: ICPMS07\_410605 SeqNo: 6692543 PrepDate: 10-Jun-2022 DF: 5 SPK Ref Control RPD Ref PQL SPK Val %REC Analyte Result Value I imit Value %D 0.1302 1.00 0.122 Iron

Altamira

The following samples were analyzed in this batch: HS22060384-02

HS22060384

WFEC CCR/Landfill

**Client:** 

**Project:** 

WorkOrder:

RPD

RPD

RPD

RPD

RPD

%D

0 10

HS22060384-07

Limit Qual

J

HS22060384-03

HS22060384-04

Batch ID:	179857(0)	Instrument	t: ICPMS07	Method:	DISSOLVED METALS BY SW6020A DISSOLVED)
MBLK Client ID:	Sample ID:	<b>MBLK-179857</b> Run ID:	Units: ICPMS07_410605	<b>mg/L</b> An SeqNo: <b>6692606</b>	alysis Date: <b>14-Jun-2022 19:41</b> PrepDate: <b>13-Jun-2022</b> DF: <b>1</b>
Analyte		Result	PQL SPK Val	SPK Ref Value %REC	Control RPD Ref RPD Limit Value %RPD Limit Qual
Iron		U 0	.200		
LCS	Sample ID:	LCS-179857	Units:	<b>mg/L</b> An	alysis Date: 14-Jun-2022 19:43
Client ID:		Run ID:	ICPMS07_410605	SeqNo: 6692607	PrepDate: <b>13-Jun-2022</b> DF: <b>1</b>
Analyte		Result	PQL SPK Val	SPK Ref Value %REC	Control RPD Ref RPD Limit Value %RPD Limit Qual
Iron		4.479 0	.200 5	0 89.6	80 - 120
MS	Sample ID:	HS22060083-01MS	Units:	<b>mg/L</b> An	alysis Date: 14-Jun-2022 19:49
Client ID:		Run ID:	ICPMS07_410605	SeqNo: 6692610	PrepDate: <b>13-Jun-2022</b> DF: <b>5</b>
Analyte		Result	PQL SPK Val	SPK Ref Value %REC	Control RPD Ref RPD Limit Value %RPD Limit Qual
Iron		4.594	1.00 5	0.02332 91.4	75 - 125
MSD	Sample ID:	HS22060083-01MSD	Units:	<b>mg/L</b> An	alysis Date: 14-Jun-2022 19:51
			1001007 440005		Dran Data: 42 Jun 2022 DE E
Client ID:		Run ID:	ICPMS07_410605	SeqNo: 6692611	Prepuale. <b>13-Jun-2022</b> DF. <b>5</b>
Client ID: Analyte		Run ID: Result	PQL SPK Val	SeqNo: <b>6692611</b> SPK Ref Value %REC	Control RPD Ref RPD Limit Value %RPD Limit Qual
Client ID: Analyte Iron		Run ID: Result 5.028	PQL SPK Val 1.00 5	SeqNo: <b>6692611</b> SPK Ref Value %REC 0.02332 100	Control RPD Ref RPD Limit Value %RPD Limit Qual 75 - 125 4.594 9.02 20
Client ID: Analyte Iron PDS	Sample ID:	Run ID: Result 5.028 HS22060083-01PDS	PQL SPK Val 1.00 5 Units:	SeqNo:         6692611           SPK Ref         %REC           0.02332         100           mg/L         An	Control RPD Ref RPD Limit Value %RPD Limit Qual 75 - 125 4.594 9.02 20 alysis Date: <b>14-Jun-2022 19:53</b>
Client ID: Analyte Iron PDS Client ID:	Sample ID:	Run ID: Result 5.028 HS22060083-01PDS Run ID:	PQL SPK Val 1.00 5 Units: ICPMS07_410605	SeqNo: 6692611 SPK Ref Value %REC 0.02332 100 mg/L An SeqNo: 6692612	PrepDate:         13-Jun-2022         DF. 5           Control         RPD Ref         RPD           Limit         Value         %RPD Limit Qual           75 - 125         4.594         9.02         20           alysis Date:         14-Jun-2022         19:53           PrepDate:         13-Jun-2022         DF: 5
Client ID: Analyte Iron PDS Client ID: Analyte	Sample ID:	Run ID: Result 5.028 HS22060083-01PDS Run ID: Result	PQL SPK Val 1.00 5 Units: ICPMS07_410605 PQL SPK Val	SeqNo: 6692611 SPK Ref Value %REC 0.02332 100 mg/L An SeqNo: 6692612 SPK Ref Value %REC	PrepDate:       13-Jun-2022       DF. 5         Control       RPD Ref       RPD         Limit       Value       %RPD Limit Qual         75 - 125       4.594       9.02       20         alysis Date:       14-Jun-2022       19:53         PrepDate:       13-Jun-2022       DF: 5         Control       RPD Ref       RPD         Limit       Value       %RPD Limit Qual
Client ID: Analyte Iron PDS Client ID: Analyte Iron	Sample ID:	Run ID: Result 5.028 HS22060083-01PDS Run ID: Result 47.97	PQL SPK Val 1.00 5 Units: ICPMS07_410605 PQL SPK Val 1.00 50	SeqNo: 6692611 SPK Ref Value %REC 0.02332 100 mg/L An SeqNo: 6692612 SPK Ref Value %REC 0 95.9	PrepDate:       13-Jun-2022       DF. 5         Control Limit       RPD Ref Value       %RPD Limit Qual         75 - 125       4.594       9.02       20         alysis Date:       14-Jun-2022       19:53         PrepDate:       13-Jun-2022       DF: 5         Control       RPD Ref       RPD Limit         Value       %RPD Limit Qual         75 - 125
Client ID: Analyte Iron PDS Client ID: Analyte Iron SD	Sample ID:	Run ID: Result 5.028 HS22060083-01PDS Run ID: Result 47.97 HS22060083-01SD	PQL SPK Val 1.00 5 Units: ICPMS07_410605 PQL SPK Val 1.00 50 Units:	SeqNo: 6692611 SPK Ref Value %REC 0.02332 100 mg/L An SeqNo: 6692612 SPK Ref Value %REC 0 95.9 mg/L An	Prepbate:       13-Jun-2022       DF. 5         Control Limit       RPD Ref Value       %RPD Limit Qual         75 - 125       4.594       9.02       20         alysis Date:       14-Jun-2022       19:53         PrepDate:       13-Jun-2022       DF: 5         Control Limit       RPD Ref Value       RPD kRPD Limit Qual         75 - 125       4.594       9.02       20         alysis Date:       14-Jun-2022       19:53
Client ID: Analyte Iron PDS Client ID: Analyte Iron SD Client ID:	Sample ID:	Run ID: Result 5.028 HS22060083-01PDS Run ID: Result 47.97 HS22060083-01SD Run ID:	PQL SPK Val 1.00 5 Units: ICPMS07_410605 PQL SPK Val 1.00 50 Units: ICPMS07_410605	SeqNo: 6692611           SPK Ref Value         %REC           0.02332         100           mg/L         An           SPK Ref Value         %REC           SPK Ref Value         %REC           0         95.9           mg/L         An           SeqNo: 6692602         An           SPK Ref Value         %REC           0         95.9           mg/L         An           SeqNo: 6692602         SeqNo:	PrepDate:       13-Jun-2022       DF. 5         Control Limit       RPD Ref Value       %RPD Limit Qual         75 - 125       4.594       9.02       20         alysis Date:       14-Jun-2022       19:53         PrepDate:       13-Jun-2022       DF: 5         Control Limit       RPD Ref Value       %RPD Limit Qual         75 - 125       4.594       9.02       20         alysis Date:       14-Jun-2022       DF: 5         alysis Date:       14-Jun-2022       DF: 25
Client ID: Analyte Iron PDS Client ID: Analyte Iron SD Client ID: Analyte	Sample ID:	Run ID: Result 5.028 HS22060083-01PDS Run ID: 47.97 HS22060083-01SD Run ID: Result	PQL SPK Val 1.00 5 Units: ICPMS07_410605 PQL SPK Val 1.00 50 Units: ICPMS07_410605 PQL SPK Val	SeqNo: 6692611 SPK Ref Value %REC 0.02332 100 mg/L An SeqNo: 6692612 SPK Ref Value %REC 0 95.9 mg/L An SeqNo: 6692609 SPK Ref Value %REC	PrepDate:       13-Jun-2022       DF. 5         Control Limit       RPD Ref Value       %RPD Limit Qual         75 - 125       4.594       9.02       20         alysis Date:       14-Jun-2022       19:53         PrepDate:       13-Jun-2022       DF: 5         Control Limit       RPD Ref Value       RPD %RPD Limit Qual         75 - 125       .125         alysis Date:       14-Jun-2022       19:47         PrepDate:       13-Jun-2022       DF: 25         Control Limit       RPD Ref %D       %D         Limit       Value       %D       Limit Qual
Client ID: Analyte Iron PDS Client ID: Analyte Iron SD Client ID: Analyte Iron	Sample ID:	Run ID: Result 5.028 HS22060083-01PDS Run ID: Result HS22060083-01SD Run ID: Run ID: U	PQL SPK Val 1.00 5 Units: ICPMS07_410605 PQL SPK Val 1.00 50 Units: ICPMS07_410605 PQL SPK Val 5.00	SeqNo: 6692611 SPK Ref Value %REC 0.02332 100 mg/L An SeqNo: 6692612 SPK Ref Value %REC 0 95.9 mg/L An SeqNo: 6692609 SPK Ref Value %REC	PrepDate:       13-Jun-2022       DF. 5         Control Limit       RPD Ref Value       %RPD Limit Qual         75 - 125       4.594       9.02       20         alysis Date:       14-Jun-2022       19:53         PrepDate:       13-Jun-2022       DF: 5         Control Limit       RPD Ref Value       RPD %RPD Limit Qual         75 - 125

Batch ID: R410	0248(0)	Inst	rument:	UV-2450	Me	ethod: F	ERROUS IF	RON BY SM3	500 FE B
MBLK	Sample ID:	MBLK-R410248		Units:	mg/L	Ana	alysis Date:	08-Jun-2022	2 13:12
Client ID:		R	un ID: UV-2	450_410248	SeqNo: <b>6</b>	685730	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Iron		U	0.0500				80 - 120		
LCS	Sample ID:	LCS-R410248		Units:	mg/L	Ana	alysis Date:	08-Jun-2022	2 13:12
Client ID:		R	un ID: UV-2	450_410248	SeqNo: <b>6</b>	685729	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Iron		0.248	0.0500	0.25	0	99.2	80 - 120		
MS	Sample ID:	HS22060381-03M	6	Units:	mg/L	Ana	alysis Date:	08-Jun-2022	2 13:12
Client ID:		R	un ID: UV-2	450_410248	SeqNo: 6	685732	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Iron		0.359	0.0500	0.25	0.118	96.4	75 - 125		
MSD	Sample ID:	HS22060381-03M	SD	Units:	mg/L	Ana	alysis Date:	08-Jun-2022	2 13:12
Client ID:		R	un ID: UV-2	450_410248	SeqNo: <b>6</b>	685731	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Iron		0.359	0.0500	0.25	0.118	96.4	75 - 125	0.359	0 20
The following samp	oles were analyze	ed in this batch: HS22	060384-07						

Batch ID:	R410254 ( 0 )	lı	nstrument:	ICS-Integrion	M	ethod:	ANIONS BY I	E300.0, REV	2.1, 1993
MBLK	Sample ID:	MBLK		Units:	mg/L	Ana	alysis Date:	08-Jun-2022	11:37
Client ID:			Run ID: ICS-	Integrion_41025	4 SeqNo: 6	683949	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Chloride		L	0.500						
Fluoride		L	0.100						
Nitrogen, N	Nitrate (As N)	L	0.100						
Nitrogen, N	Nitrite (As N)	L	0.100						
Nitrate/Nitr	rite (as N)	L	0.200						
Sulfate		L	0.500						
LCS	Sample ID:	LCS		Units:	mg/L	Ana	alysis Date:	08-Jun-2022	2 11:42
Client ID:			Run ID: ICS-	Integrion_41025	4 SeqNo: 6	683950	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Chloride		19.44	0.500	20	0	97.2	90 - 110		
Chloride Fluoride		19.44 4.305	0.500	20 4	0	97.2 108	90 - 110 90 - 110		
Chloride Fluoride Nitrogen, N	Nitrate (As N)	19.44 4.305 4.09	0.500 0.100 0.100	20 4 4	0 0 0	97.2 108 102	90 - 110 90 - 110 90 - 110		
Chloride Fluoride Nitrogen, N	Nitrate (As N) Nitrite (As N)	19.44 4.305 4.09 4.391	0.500 0.100 0.100 0.100	20 4 4 4	0 0 0 0	97.2 108 102 110	90 - 110 90 - 110 90 - 110 90 - 110		
Chloride Fluoride Nitrogen, N Nitrogen, N	Vitrate (As N) Vitrite (As N) rite (as N)	19.44 4.305 4.09 4.391 8.481	0.500 0.100 0.100 0.100 0.200	20 4 4 4 8	0 0 0 0	97.2 108 102 110 106	90 - 110 90 - 110 90 - 110 90 - 110 90 - 110		
Chloride Fluoride Nitrogen, N Nitrogen, N Nitrate/Nitr Sulfate	Nitrate (As N) Nitrite (As N) rite (as N)	19.44 4.305 4.09 4.391 8.481 19.37	0.500 0.100 0.100 0.100 0.200	20 4 4 4 8 20	0 0 0 0 0	97.2 108 102 110 106 96.8	90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110		
Chloride Fluoride Nitrogen, N Nitrogen, N Nitrate/Nitr Sulfate MS	Nitrate (As N) Nitrite (As N) rite (as N) Sample ID:	19.44 4.305 4.09 4.391 8.481 19.37 HS22060384-07	0.500 0.100 0.100 0.100 0.200 0.500	20 4 4 4 8 20 Units:	0 0 0 0 0 0	97.2 108 102 110 106 96.8 Ana	90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 alysis Date:	08-Jun-2022	2 13:28
Chloride Fluoride Nitrogen, N Nitrogen, N Nitrate/Nitr Sulfate MS Client ID:	Vitrate (As N) Vitrite (As N) Fite (as N) Sample ID: DUP 2	19.44 4.305 4.09 4.391 8.481 19.37 HS22060384-07	0.500 0.100 0.100 0.200 0.500 <b>MS</b> Run ID: <b>ICS-</b>	20 4 4 4 20 Units: Integrion_41025	0 0 0 0 0 <b>mg/L</b> 4 SeqNo: 6	97.2 108 102 110 106 96.8 96.8 6683966	90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 alysis Date: PrepDate:	08-Jun-2022	2 13:28 DF: 1
Chloride Fluoride Nitrogen, N Nitrogen, N Nitrate/Nitr Sulfate MS Client ID: Analyte	Vitrate (As N) Vitrite (As N) rite (as N) Sample ID: DUP 2	19.44 4.305 4.09 4.391 8.481 19.37 HS22060384-07 Result	0.500 0.100 0.100 0.200 0.500 <b>MS</b> Run ID: ICS-	20 4 4 20 Units: Integrion_41025 SPK Val	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	97.2 108 102 110 106 96.8 9683966 %REC	90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 alysis Date: PrepDate: Control Limit	<b>08-Jun-2022</b> RPD Ref Value	2 13:28 DF: 1 RPD %RPD Limit Qual
Chloride Fluoride Nitrogen, N Nitrogen, N Nitrate/Nitr Sulfate MS Client ID: Analyte Chloride	Vitrate (As N) Vitrite (As N) rite (as N) Sample ID: DUP 2	19.44 4.305 4.09 4.391 8.481 19.37 HS22060384-07 Result 32.91	0.500 0.100 0.100 0.200 0.500 MS Run ID: ICS- PQL 0.500	20 4 4 20 Units: Integrion_41025 SPK Val 10	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 24.11	97.2 108 102 110 96.8 9683966 %REC 88.0	90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 alysis Date: PrepDate: Control Limit 80 - 120	<b>08-Jun-2022</b> RPD Ref Value	2 13:28 DF: 1 RPD %RPD Limit Qual
Chloride Fluoride Nitrogen, N Nitrogen, N Nitrate/Nitr Sulfate MS Client ID: Analyte Chloride Fluoride	Nitrate (As N) Nitrite (As N) rite (as N) Sample ID: DUP 2	19.44 4.305 4.09 4.391 8.481 19.37 HS22060384-07 Result 32.91 3.426	0.500 0.100 0.100 0.200 0.500 MS Run ID: ICS- PQL 0.500 0.100	20 4 4 4 20 Units: Integrion_41025 SPK Val 10 2	0 0 0 0 0 0 <b>mg/L</b> 4 SeqNo: 6 SPK Ref Value 24.11 1.407	97.2 108 102 110 96.8 9683966 %REC 888.0 101	90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 alysis Date: PrepDate: Control Limit 80 - 120 80 - 120	08-Jun-2022 RPD Ref Value	2 <b>13:28</b> DF: 1 RPD %RPD Limit Qual
Chloride Fluoride Nitrogen, N Nitrogen, N Nitrate/Nitr Sulfate MS Client ID: Analyte Chloride Fluoride Nitrogen, N	Vitrate (As N) Vitrite (As N) rite (as N) Sample ID: DUP 2	19.44 4.305 4.09 4.391 8.481 19.37 HS22060384-07 Result 32.91 3.426 2.074	0.500 0.100 0.100 0.200 0.500 MS Run ID: ICS- PQL 0.500 0.100 0.100	20 4 4 4 20 Units: Integrion_41025 SPK Val 10 2 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	97.2 108 102 110 96.8 9683966 %REC 888.0 101 99.0	90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 alysis Date: PrepDate: Control Limit 80 - 120 80 - 120 80 - 120	<b>08-Jun-2022</b> RPD Ref Value	2 <b>13:28</b> DF: 1 RPD %RPD Limit Qual
Chloride Fluoride Nitrogen, N Nitrogen, N Nitrate/Nitr Sulfate MS Client ID: Analyte Chloride Fluoride Nitrogen, N Nitrogen, N	Vitrate (As N) Vitrite (As N) Fite (as N) Sample ID: DUP 2	19.44 4.305 4.09 4.391 8.481 19.37 HS22060384-07 Result 32.91 3.426 2.074 1.667	0.500 0.100 0.100 0.200 0.500 MS Run ID: ICS- PQL 0.500 0.100 0.100	20 4 4 4 20 Units: Integrion_41025 SPK Val 10 2 2 2	0 0 0 0 0 0 0 0 0 0 0 24.11 1.407 0.0952 0	97.2 108 102 110 96.8 96.8 9683966 %REC 888.0 101 99.0 83.4	90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 alysis Date: PrepDate: Control Limit 80 - 120 80 - 120 80 - 120 80 - 120	<b>08-Jun-2022</b> RPD Ref Value	2 <b>13:28</b> DF: <b>1</b> RPD %RPD Limit Qual
Chloride Fluoride Nitrogen, N Nitrate/Nitr Sulfate MS Client ID: Analyte Chloride Fluoride Nitrogen, N Nitrogen, N	Nitrate (As N) Nitrite (As N) rite (as N) Sample ID: DUP 2	19.44 4.305 4.09 4.391 8.481 19.37 HS22060384-07 Result 32.91 3.426 2.074 1.667 3.742	0.500 0.100 0.100 0.200 0.200 0.500 MS Run ID: ICS- PQL 0.500 0.100 0.100 0.100	20 4 4 4 20 Units: Integrion_41025 SPK Val 10 2 2 2 4	0 0 0 0 0 0 0 0 0 0 0 0 24.11 1.407 0.0952 0 0.0952	97.2 108 102 110 96.8 9683966 %REC 888.0 101 99.0 83.4 91.2	90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 90 - 110 alysis Date: PrepDate: Control Limit 80 - 120 80 - 120 80 - 120 80 - 120 80 - 120	<b>08-Jun-2022</b> RPD Ref Value	2 <b>13:28</b> DF: 1 RPD %RPD Limit Qual

## Date: 16-Jun-22

Batch ID:	R410254 ( 0 )	Ins	trument:	ICS-Integrion	М	ethod: A	ANIONS BY	E300.0, REV	2.1, 1993	1	
MSD	Sample ID:	HS22060384-07M	SD	Units: <b>n</b>	ng/L	Ana	alysis Date:	08-Jun-2022	13:33		
Client ID:	DUP 2	F	Run ID: ICS	-Integrion_410254	SeqNo: 6	683967	PrepDate:		DF:	1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	F %RPD L	RPD .imit (	Qual
Chloride		32.9	0.500	10	24.11	87.9	80 - 120	32.91	0.0274	20	
Fluoride		3.422	0.100	2	1.407	101	80 - 120	3.426	0.129	20	
Nitrogen, N	litrate (As N)	2.066	0.100	2	0.0952	98.5	80 - 120	2.074	0.391	20	
Nitrogen, N	litrite (As N)	1.672	0.100	2	0	83.6	80 - 120	1.667	0.299	20	
Nitrate/Nitr	ite (as N)	3.738	0.200	4	0.0952	91.1	80 - 120	3.742	0.0829	20	
Sulfate		466.1	0.500	10	474.7	-85.7	80 - 120	465.8	0.0591	20	SEC
The followin	g samples were analyze	d in this batch: HS22	2060384-01	HS22060384-	05	HS220603	84-06	HS22060384-	-07		

#### **Client:** Altamira **QC BATCH REPORT Project:** WFEC CCR/Landfill WorkOrder: HS22060384 Batch ID: R410286 (0) Instrument: **ICS-Integrion** Method: ANIONS BY E300.0, REV 2.1, 1993 MBLK Sample ID: MBLK Units: mg/L Analysis Date: 09-Jun-2022 08:17 Run ID: ICS-Integrion\_410286 SeqNo: 6684819 DF: 1 Client ID: PrepDate: SPK Ref RPD Ref Control RPD Result PQL SPK Val %REC %RPD Limit Qual Analyte Value Limit Value Chloride U 0.500 Fluoride U 0.100 Nitrogen, Nitrate (As N) U 0.100 Sulfate U 0.500 LCS Sample ID: LCS Units: mg/L Analysis Date: 09-Jun-2022 08:23 Client ID: Run ID: ICS-Integrion\_410286 SeqNo: 6684820 PrepDate: DF-1 SPK Ref RPD Ref RPD Control Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit Qual 19.48 0.500 0 Chloride 20 97.4 90 - 110 Fluoride 4.326 0.100 4 0 108 90 - 110 Nitrogen, Nitrate (As N) 4.11 0.100 4 0 103 90 - 110 Sulfate 19.43 0.500 20 0 97.1 90 - 110 MS Sample ID: HS22060426-04MS Units: mg/L Analysis Date: 09-Jun-2022 09:51 Client ID: Run ID: ICS-Integrion\_410286 SeqNo: 6684830 DF: 2 PrepDate: SPK Ref Control RPD Ref RPD SPK Val Value Analyte Result PQL Value %REC Limit %RPD Limit Qual Chloride 954.5 1.00 20 964 -47.5 80 - 120 SEO Fluoride 5.179 0.200 4 1.045 103 80 - 120 3.675 0.200 4 0 91.9 80 - 120 Nitrogen, Nitrate (As N) Sulfate 133.1 1.00 20 116.5 82.7 80 - 120 0 MS Sample ID: HS22060381-01MS Units: mg/L Analysis Date: 09-Jun-2022 18:05 Client ID: Run ID: ICS-Integrion\_410286 SeqNo: 6686134 PrepDate: DF: 1 SPK Ref RPD Control **RPD** Ref Analyte Result PQL SPK Val Value %REC I imit Value %RPD Limit Qual Chloride 11.2 0.500 10 1.097 101 80 - 120 Fluoride 2.371 0.100 2 0.1725 110 80 - 120 2 0.0784 Nitrogen, Nitrate (As N) 2.137 0.100 103 80 - 120 Sulfate 15.71 0.500 10 5.615 101 80 - 120

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Batch ID:	R410286 ( 0 )	Instru	iment:	ICS-Integrion	M	ethod: A	NIONS BY	E300.0, REV	2.1, 1993	
MSD	Sample ID:	HS22060426-04MSE	)	Units: <b>n</b>	ng/L	Ana	alysis Date:	09-Jun-2022	09:56	
Client ID:		Rur	ID: ICS-I	Integrion_410286	SeqNo: 6	684831	PrepDate:		DF: <b>2</b>	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit	Qual
Chloride		954.2	1.00	20	964	-48.8	80 - 120	954.5	0.0272 20	SEC
Fluoride		4.908	0.200	4	1.045	96.6	80 - 120	5.179	5.38 20	
Nitrogen, N	litrate (As N)	3.655	0.200	4	0	91.4	80 - 120	3.675	0.535 20	
Sulfate		133	1.00	20	116.5	82.3	80 - 120	133.1	0.0642 20	С
MSD	Sample ID:	HS22060381-01MSE	)	Units: <b>n</b>	ng/L	Ana	alysis Date:	09-Jun-2022	18:10	
Client ID:		Run	ID: ICS-I	Integrion_410286	SeqNo: 6	686135	PrepDate:		DF: <b>1</b>	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit	Qual
Chloride		11.49	0.500	10	1.097	104	80 - 120	11.2	2.56 20	
Fluoride		2.537	0.100	2	0.1725	118	80 - 120	2.371	6.76 20	
Nitrogen, N	litrate (As N)	2.125	0.100	2	0.0784	102	80 - 120	2.137	0.563 20	
Sulfate		15.89	0.500	10	5.615	103	80 - 120	15.71	1.15 20	
The following	g samples were analyze	ed in this batch: HS2206	50384-02	HS22060384-	03	HS220603	84-04			

# Client:AltamiraProject:WFEC CCR/LandfillWorkOrder:HS22060384

Batch ID:	R410339 ( 0 )	In	strumen	t:	UV-2450	Μ	ethod:	FERROUS IF	RON BY SM3: ))	500 FE D	
MBLK	Sample ID:	MBLK-R410339			Units:	mg/L	Aı	nalysis Date:	08-Jun-2022	13:20	
Client ID:			Run ID:	UV-2	450_410339	SeqNo: (	6685747	PrepDate:		DF: <b>1</b>	
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control C Limit	RPD Ref Value	RPD %RPD Limit Qu	al
Ferrous Iro	n, Dissolved	U	0.0	0500							
LCS	Sample ID:	LCS-R410339			Units:	mg/L	Aı	nalysis Date:	08-Jun-2022	13:20	
Client ID:			Run ID:	UV-2	450_410339	SeqNo:	6685746	PrepDate:		DF: <b>1</b>	
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Control	RPD Ref Value	RPD %RPD Limit Qu	al
Ferrous Iro	n, Dissolved	0.245	0.0	0500	0.25	0	98.0	80 - 120			
MS	Sample ID:	HS22060381-03	MS		Units:	mg/L	Aı	nalysis Date:	08-Jun-2022	13:20	
Client ID:			Run ID:	UV-2	450_410339	SeqNo: (	6685749	PrepDate:		DF: <b>1</b>	
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qu	al
Ferrous Iro	on, Dissolved	0.368	0.0	0500	0.25	0.127	96.4	80 - 120			
MSD	Sample ID:	HS22060381-03	MSD		Units:	mg/L	Aı	nalysis Date:	08-Jun-2022	13:20	
Client ID:			Run ID:	UV-2	450_410339	SeqNo:	6685748	PrepDate:		DF: <b>1</b>	
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qu	al
Ferrous Iro	n, Dissolved	0.367	0.0	0500	0.25	0.127	96.0	80 - 120	0.368	0.272 20	
The followin	e following samples were analyzed in this batch: HS22060384-07										

**QC BATCH REPORT** 

# Client:AltamiraProject:WFEC CCR/LandfillWorkOrder:HS22060384

Batch ID: R410	397(0)	Instrume	nt: V	WetChem_HS	Μ	ethod:	SPECIFIC CO 2011	ONDUCTANO	E BY SM 2510B-
MBLK	Sample ID:	MBLK-R410397		Units:	umhos/cm 25.0 °C	@ An	alysis Date:	10-Jun-2022	12:33
Client ID:		Run ID:	WetC	chem_HS_41039	97 SeqNo: (	6686952	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Specific Conducti	vity	U	5.00						
LCS	Sample ID:	LCS-R410397		Units:	umhos/cm 25.0 °C	@ An	alysis Date:	10-Jun-2022	12:33
Client ID:		Run ID:	WetC	chem_HS_4103	97 SeqNo: 6	6686951	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Specific Conducti	vity	1518	5.00	1413	0	107	80 - 120		
DUP	Sample ID:	HS22060381-01DUP		Units:	umhos/cm 25.0 °C	@ An	alysis Date:	10-Jun-2022	12:33
Client ID:		Run ID:	WetC	chem_HS_41039	97 SeqNo: 6	686953	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Specific Conducti	vity	252.8	5.00					252.7	0.0396 20
The following samp	oles were analyze	ed in this batch: HS2206038 HS2206038	4-01 4-05	HS22060384 HS22060384	4-02 4-06	HS220603 HS220603	84-03 84-07	HS22060384	-04

Balcinid. R410419(0)	Instrumer	nt: I	ManTech01	M	ethod:	ALKALINITY	BY SM 2320	B-2011
MBLK Sample ID:	MBLK-R410419		Units:	mg/L	An	alysis Date:	09-Jun-2022	17:40
Client ID:	Run ID:	ManT	ech01_410419	SeqNo: 6	687393	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 CaCO	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:	LCS-R410419		Units:	mg/L	An	alysis Date:	09-Jun-2022	17:40
Client ID:	Run ID:	ManT	ech01 410419	SeqNo: 6	687392	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)	996	5.00	1000	0	99.6	85 - 115		
Alkalinity, Total (As CaCO3)	1035	5.00	1000	0	104	85 - 115		
LCSD Sample ID:	LCSD-R410419		Units:	mg/L	An	alysis Date:	09-Jun-2022	17:40
Client ID:	Run ID:	ManT	ech01 410419	SeqNo: 6	687391	PrepDate:		DF: <b>1</b>
			_			•		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Analyte Alkalinity, Carbonate (As CaCO3)	Result	PQL 5.00	SPK Val	SPK Ref Value	%REC 101	Control Limit 85 - 115	RPD Ref Value 996	RPD %RPD Limit Qual
Analyte Alkalinity, Carbonate (As CaCO3) Alkalinity, Total (As CaCO3)	Result ) 1011 1011	PQL 5.00 5.00	SPK Val 1000 1000	SPK Ref Value 0	%REC 101 101	Control Limit 85 - 115 85 - 115	RPD Ref Value 996 1035	RPD Limit Qual           1.47         20           2.38         20
Analyte Alkalinity, Carbonate (As CaCO3) Alkalinity, Total (As CaCO3) DUP Sample ID:	Result ) 1011 1011 HS22060362-13DUP	PQL 5.00 5.00	SPK Val 1000 1000 Units:	SPK Ref Value 0 0 mg/L	%REC 101 101 An	Control Limit 85 - 115 85 - 115 nalysis Date:	RPD Ref Value 996 1035 09-Jun-2022	RPD Limit Qual 1.47 20 2.38 20 2.17:40
Analyte Alkalinity, Carbonate (As CaCO3) Alkalinity, Total (As CaCO3) DUP Sample ID: Client ID:	Result ) 1011 1011 HS22060362-13DUP Run ID:	PQL 5.00 5.00 ManT	SPK Val 1000 1000 Units: Fech01_410419	SPK Ref Value 0 0 mg/L SeqNo: 6	%REC 101 101 An 687394	Control Limit 85 - 115 85 - 115 alysis Date: PrepDate:	RPD Ref Value 996 1035 09-Jun-2022	RPD Limit Qual 1.47 20 2.38 20 2.17:40 DF: 1
Analyte Alkalinity, Carbonate (As CaCO3) Alkalinity, Total (As CaCO3) DUP Sample ID: Client ID: Analyte	Result ) 1011 1011 HS22060362-13DUP Run ID: Result	PQL 5.00 5.00 Man <sup>1</sup> PQL	SPK Val 1000 1000 Units: <b>Fech01_410419</b> SPK Val	SPK Ref Value 0 0 mg/L SeqNo: 6 SPK Ref Value	%REC 101 101 687394 %REC	Control Limit 85 - 115 85 - 115 alysis Date: PrepDate: Control Limit	RPD Ref Value 996 1035 <b>09-Jun-2022</b> RPD Ref Value	RPD Limit Qual 1.47 20 2.38 20 2.17:40 DF: 1 RPD %RPD Limit Qual
Analyte Alkalinity, Carbonate (As CaCO3) Alkalinity, Total (As CaCO3) DUP Sample ID: Client ID: Analyte Alkalinity, Bicarbonate (As CaCO3)	Result         )       1011         1011       1011         HS22060362-13DUP       Run ID:         Result       3)	PQL 5.00 5.00 Man <sup>1</sup> PQL 5.00	SPK Val 1000 1000 Units: Fech01_410419 SPK Val	SPK Ref Value 0 0 mg/L SeqNo: 6 SPK Ref Value	%REC 101 101 687394 %REC	Control Limit 85 - 115 85 - 115 alysis Date: PrepDate: Control Limit	RPD Ref Value 996 1035 09-Jun-2022 RPD Ref Value 44.22	RPD Limit Qual 1.47 20 2.38 20 2.38 20 2.17:40 DF: 1 RPD %RPD Limit Qual 0.743 20
Analyte Alkalinity, Carbonate (As CaCO3) Alkalinity, Total (As CaCO3) DUP Sample ID: Client ID: Analyte Alkalinity, Bicarbonate (As CaCO3)	Result         1011         1011         HS22060362-13DUP         Run ID:         Result         3)       44.55         U       U	PQL 5.00 5.00 Man <sup>T</sup> PQL 5.00 5.00	SPK Val 1000 1000 Units: <b>Fech01_410419</b> SPK Val	SPK Ref Value 0 0 mg/L SeqNo: 6 SPK Ref Value	%REC 101 101 687394 %REC	Control Limit 85 - 115 85 - 115 halysis Date: PrepDate: Control Limit	RPD Ref Value 996 1035 <b>09-Jun-2022</b> RPD Ref Value 44.22	RPD       Limit Qual         1.47       20         2.38       20         2       Tr:40         DF: 1       RPD         %RPD       Limit Qual         0.743       20         0       20
Analyte Alkalinity, Carbonate (As CaCO3) Alkalinity, Total (As CaCO3) DUP Sample ID: Client ID: Analyte Alkalinity, Bicarbonate (As CaCO3) Alkalinity, Carbonate (As CaCO3) Alkalinity, Hydroxide (As CaCO3)	Result       )     1011       1011     1011       HS22060362-13DUP     Run ID:       Result     3)     44.55       )     U       U     U	PQL 5.00 5.00 Man <sup>T</sup> PQL 5.00 5.00	SPK Val 1000 Units: <b>Fech01_410419</b> SPK Val	SPK Ref Value 0 0 mg/L SeqNo: 6 SPK Ref Value	%REC 101 101 An 687394 %REC	Control Limit 85 - 115 85 - 115 alysis Date: PrepDate: Control Limit	RPD Ref Value 996 1035 <b>09-Jun-2022</b> RPD Ref Value 44.22 0 0	RPD       EPD         %RPD       Limit Qual         1.47       20         2.38       20         2       17:40         DF: 1       RPD         %RPD       Limit Qual         0.743       20         0       20         0       20         0       20         0       20
Analyte Alkalinity, Carbonate (As CaCO3) Alkalinity, Total (As CaCO3) DUP Sample ID: Client ID: Analyte Alkalinity, Bicarbonate (As CaCO3) Alkalinity, Hydroxide (As CaCO3) Alkalinity, Total (As CaCO3)	Result ) 1011 1011 HS22060362-13DUP Run ID: Result 3) 44.55 ) U U 44.5	PQL 5.00 5.00 Man <sup>T</sup> PQL 5.00 5.00 5.00	SPK Val 1000 Units: <b>Fech01_410419</b> SPK Val	SPK Ref Value 0 0 mg/L SeqNo: 6 SPK Ref Value	%REC 101 101 687394 %REC	Control Limit 85 - 115 85 - 115 alysis Date: PrepDate: Control Limit	RPD Ref Value 996 1035 09-Jun-2022 RPD Ref Value 44.22 0 0 0	RPD       RPD         1.47       20         2.38       20         2       1000000000000000000000000000000000000

Batch ID:	R410421 ( 0 )	Inst	rument:	UV-2450	M	ethod: F		RON BY SM3	500 FE B
MBLK	Sample ID:	MBLK-R410421		Units:	mg/L	Ana	alysis Date:	10-Jun-2022	2 13:02
Client ID:		R	un ID: UV-2	450_410421	SeqNo: 6	687404	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Irc	on	U	0.0500				80 - 120		
LCS	Sample ID:	LCS-R410421		Units:	mg/L	Ana	alysis Date:	10-Jun-2022	2 13:02
Client ID:		R	un ID: UV-2	450_410421	SeqNo: 6	687403	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Irc	on	0.237	0.0500	0.25	0	94.8	80 - 120		
MS	Sample ID:	HS22060384-02M	5	Units:	mg/L	Ana	alysis Date:	10-Jun-2022	2 13:02
Client ID:	MW-5S	R	un ID: UV-2	450_410421	SeqNo: 6	687406	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Irc	on	0.243	0.0500	0.25	-0.005	99.2	75 - 125		
MSD	Sample ID:	HS22060384-02M	SD	Units:	mg/L	Ana	alysis Date:	10-Jun-2022	2 13:02
Client ID:	MW-5S	R	un ID: UV-2	450_410421	SeqNo: 6	687405	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Irc	on	0.24	0.0500	0.25	-0.005	98.0	75 - 125	0.243	1.24 20
The followin	ig samples were analyze	ed in this batch: HS22	060384-02	HS2206038	34-03	HS220603	84-04		

# Client:AltamiraProject:WFEC CCR/LandfillWorkOrder:HS22060384

Batch ID:	R410423 ( 0 )	In	strument	: l	JV-2450	М	ethod:	FERROUS IR (DISSOLVED	RON BY SM3 ))	500 FE D
MBLK	Sample ID:	MBLK-R410423			Units:	mg/L	Ar	nalysis Date:	10-Jun-2022	2 13:11
Client ID:			Run ID:	UV-24	450_410423	SeqNo: 6	687420	PrepDate:		DF: <b>1</b>
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Irc	on, Dissolved	U	0.0	)500						
LCS	Sample ID:	LCS-R410423			Units:	mg/L	Ar	nalysis Date:	10-Jun-2022	2 13:11
Client ID:			Run ID:	UV-24	450_410423	SeqNo: 6	687419	PrepDate:		DF: <b>1</b>
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Irc	on, Dissolved	0.237	0.0	)500	0.25	0	94.8	80 - 120		
MS	Sample ID:	HS22060384-02	MS		Units:	mg/L	Ar	nalysis Date:	10-Jun-2022	2 13:11
Client ID:	MW-5S		Run ID:	UV-24	450_410423	SeqNo: 6	687422	PrepDate:		DF: <b>1</b>
Analyte		Result	I	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Ferrous Irc										
T CHOUS IIC	on, Dissolved	0.252	0.0	500	0.25	0.001	100	80 - 120		
MSD	on, Dissolved Sample ID:	0.252 HS22060384-02	0.0 MSD	500	0.25 Units:	0.001 <b>mg/L</b>	100 Ar	80 - 120 nalysis Date:	10-Jun-2022	2 13:11
MSD Client ID:	on, Dissolved Sample ID: <b>MW-5S</b>	0.252 HS22060384-02	0.0 <b>MSD</b> Run ID:	0500 UV-24	0.25 Units: <b>150_410423</b>	0.001 <b>mg/L</b> SeqNo: <b>6</b>	100 Ar <b>5687421</b>	80 - 120 nalysis Date: PrepDate:	10-Jun-2022	2 <b>13:11</b> DF: 1
MSD Client ID: Analyte	on, Dissolved Sample ID: <b>MW-5S</b>	0.252 HS22060384-02 Result	0.0 MSD Run ID: I	0500 UV-24 PQL	0.25 Units: <b>150_410423</b> SPK Val	0.001 mg/L SeqNo: 6 SPK Ref Value	100 Ar 5 <b>687421</b> %REC	80 - 120 nalysis Date: PrepDate: Control Limit	<b>10-Jun-2022</b> RPD Ref Value	2 <b>13:11</b> DF: <b>1</b> RPD %RPD Limit Qual
MSD Client ID: Analyte Ferrous Irc	Sample ID: MW-5S	0.252 HS22060384-02 Result 0.25	0.0 MSD Run ID: I 0.0	0500 UV-24 PQL	0.25 Units: <b>150_410423</b> SPK Val 0.25	0.001 mg/L SeqNo: 6 SPK Ref Value 0.001	100 Ar 5 <b>687421</b> %REC 99.6	80 - 120 nalysis Date: PrepDate: Control Limit 80 - 120	<b>10-Jun-2022</b> RPD Ref Value 0.252	2 <b>13:11</b> DF: <b>1</b> RPD %RPD Limit Qual 0.797 20

#### QC BATCH REPORT **Project:** WorkOrder: HS22060384 Batch ID: R410439 (0) Instrument: **ICS-Integrion** Method: ANIONS BY E300.0, REV 2.1, 1993 MBLK Sample ID: MBLK Units: mg/L Analysis Date: 10-Jun-2022 16:23 Run ID: ICS-Integrion\_410439 SeqNo: 6687945 Client ID: PrepDate: DF·1 SPK Ref RPD Ref Control RPD Result PQL SPK Val %REC %RPD Limit Qual Analyte Value Limit Value Sulfate U 0.500 LCS Sample ID: LCS Units: mg/L Analysis Date: 10-Jun-2022 16:28 Client ID: Run ID: ICS-Integrion\_410439 SeqNo: 6687946 PrepDate: DF: 1 SPK Ref Control RPD Ref RPD %RPD Limit Qual Analyte Result PQL SPK Val Value %REC Limit Value Sulfate 19.41 0.500 20 0 97.0 90 - 110 HS22060501-07MS Units: mg/L Analysis Date: 10-Jun-2022 18:04 MS Sample ID: Run ID: ICS-Integrion 410439 SeqNo: 6688901 Client ID: PrepDate: DF: 1 SPK Ref Control **RPD** Ref RPD %RPD Limit Qual Result PQL SPK Val %REC Analyte Value Limit Value Sulfate 223.2 0.500 10 218 51.3 80 - 120 SEO MS Sample ID: HS22060495-01MS Units: mg/L Analysis Date: 10-Jun-2022 20:59 Run ID: ICS-Integrion\_410439 SeqNo: 6687987 PrepDate: DF: 1 Client ID: SPK Ref Control RPD Ref RPD PQL SPK Val Value %REC Limit %RPD Limit Qual Analyte Result Value SEO Sulfate 106.2 0.500 10 98.55 76.6 80 - 120 MSD HS22060501-07MSD Units: mg/L Analysis Date: 10-Jun-2022 18:09 Sample ID: Client ID: Run ID: ICS-Integrion\_410439 SeqNo: 6688902 PrepDate: DF: 1 SPK Ref **RPD** Ref RPD Control Analyte Result PQL SPK Val Value %REC Limit %RPD Limit Qual Value Sulfate 223.1 0.500 10 218 80 - 120 223.2 0.0233 20 SEO 50.8 MSD Sample ID: HS22060495-01MSD Units: mg/L Analysis Date: 10-Jun-2022 21:04 Client ID: Run ID: ICS-Integrion\_410439 SeqNo: 6687988 PrepDate: DF: 1 SPK Ref Control RPD Ref RPD PQL SPK Val %REC %RPD Limit Qual Analyte Result Value Limit Value Sulfate 106 0.500 10 98.55 74.2 80 - 120 106.2 0.228 20 SEO The following samples were analyzed in this batch: HS22060384-02

**Client:** 

Altamira

QC BATCH REPORT

# Client:AltamiraProject:WFEC CCR/LandfillWorkOrder:HS22060384

Batch ID:	R410618 ( 0 )	Instrumer	nt:	WetChem_HS	Μ	lethod:	SULFIDE BY	SM4500 S2-	F-2011
MBLK Client ID:	Sample ID:	MBLK-R410618 Run ID:	Wet	Units: Chem_HS_4106	<b>mg/L</b> 18 SeqNo: 0	An 6692021	alysis Date: PrepDate:	14-Jun-2022	2 16:32 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	Sample ID:	LCS-R410618		Units:	mg/L	An	alysis Date:	14-Jun-2022	2 16:32
Client ID:		Run ID:	Wet	Chem_HS_4106	18 SeqNo:	6692020	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Sulfide		22.16	1.00	25	0	88.6	85 - 115		
LCSD	Sample ID:	LCSD-R410618		Units:	mg/L	An	alysis Date:	14-Jun-2022	2 16:32
Client ID:		Run ID:	Wet	Chem_HS_4106	18 SeqNo:	6692019	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Sulfide		22.36	1.00	25	0	89.4	85 - 115	22.16	0.898 20
MS	Sample ID:	HS22060342-01MS		Units:	mg/L	An	alysis Date:	14-Jun-2022	2 16:32
Client ID:		Run ID:	Wet	Chem_HS_4106	18 SeqNo:	6692022	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Sulfide		22.16	1.00	25	-2.04	96.8	80 - 120		
The followin	g samples were analyze	ed in this batch: HS22060384	4-02	HS2206038	4-03	HS220603	384-04	HS22060384	-07

# Date: 16-Jun-22

QC BATCH REPORT

# Client:AltamiraProject:WFEC CCR/LandfillWorkOrder:HS22060384

Batch ID:	R410620 ( 0 )	Instrum	ent:	Balance1	Met	thod:	TOTAL DISS 2011	OLVED SOL	IDS BY SM2540C-
MBLK	Sample ID:	WBLK-061322		Units:	mg/L	An	alysis Date:	13-Jun-2022	2 16:37
Client ID:		Run II	): Bala	ance1_410620	SeqNo: <b>66</b>	92085	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Total Disso Filterable)	olved Solids (Residue,	U	10.0						
LCS	Sample ID:	WLCS-061322		Units:	mg/L	An	alysis Date:	13-Jun-2022	2 16:37
Client ID:		Run II	): Bala	ance1_410620	SeqNo: <b>66</b>	92086	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Total Disso Filterable)	olved Solids (Residue,	1016	10.0	1000	0	102	85 - 115		
DUP	Sample ID:	HS22060384-07DUP		Units:	mg/L	An	alysis Date:	13-Jun-2022	2 16:37
Client ID:	DUP 2	Run II	): Bala	ance1_410620	SeqNo: <b>66</b>	92084	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Total Disso Filterable)	olved Solids (Residue,	1174	10.0					1176	0.17 5
DUP	Sample ID:	HS22060287-01DUP		Units:	mg/L	An	alysis Date:	13-Jun-2022	2 16:37
Client ID:	•	Run II	): Bala	ance1_410620	SeqNo: 66	92064	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Total Disso Filterable)	blved Solids (Residue,	1352	10.0					1348	0.296 5
The followin	g samples were analyze	d in this batch: HS220603 HS220603	84-01 84-05	HS2206038 HS2206038	34-02 Н 34-06 Н	IS220603	384-03 384-07	HS22060384	-04

Batch ID:	R410708 ( 0 )	Instrume	nt:	WetChem_HS	M	ethod:	CHEMICAL O REV 2.0, 199	OXYGEN DE	MAND BY E410.4,
MBLK	Sample ID:	MBLK-R410708		Units:	mg/L	Ar	nalysis Date:	15-Jun-2022	2 15:30
Client ID:		Run ID:	Wet	Chem_HS_4107	<b>'08</b> SeqNo: 6	694290	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Chemical (	Oxygen Demand	U	15.0						
LCS	Sample ID:	LCS-R410708		Units:	mg/L	Ar	nalysis Date:	15-Jun-2022	2 15:30
Client ID:		Run ID:	Wet	Chem_HS_4107	<b>'08</b> SeqNo: 6	694289	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Chemical (	Oxygen Demand	99	15.0	100	0	99.0	85 - 115		
MS	Sample ID:	HS22060384-06MS		Units:	mg/L	Ar	nalysis Date:	15-Jun-2022	2 15:30
<b>MS</b> Client ID:	Sample ID: MW-21	HS22060384-06MS Run ID:	Wet	Units: Chem_HS_4107	<b>mg/L</b> 708 SeqNo: 6	Ar 6 <b>694292</b>	nalysis Date: PrepDate:	15-Jun-2022	2 <b>15:30</b> DF: <b>1</b>
<b>MS</b> Client ID: Analyte	Sample ID: MW-21	HS22060384-06MS Run ID: Result	<b>Wet</b>	Units: <b>Chem_HS_4107</b> SPK Val	<b>mg/L</b> 208 SeqNo: 6 SPK Ref Value	Ar 6 <b>694292</b> %REC	nalysis Date: PrepDate: Control Limit	<b>15-Jun-2022</b> RPD Ref Value	2 <b>15:30</b> DF: <b>1</b> %RPD Limit Qual
MS Client ID: Analyte Chemical 0	Sample ID: <b>MW-21</b> Oxygen Demand	HS22060384-06MS Run ID: Result 51	: <b>Wet</b> PQL 15.0	Units: Chem_HS_4107 SPK Val 50	mg/L 708 SeqNo: 6 SPK Ref Value 2	Ar 5 <b>694292</b> %REC 98.0	nalysis Date: PrepDate: Control Limit 80 - 120	<b>15-Jun-2022</b> RPD Ref Value	2 <b>15:30</b> DF: <b>1</b> RPD %RPD Limit Qual
MS Client ID: Analyte Chemical ( MSD	Sample ID: MW-21 Oxygen Demand Sample ID:	HS22060384-06MS Run ID: Result 51 HS22060384-06MSD	: Wet PQL 15.0	Units: Chem_HS_4107 SPK Val 50 Units:	mg/L Y08 SeqNo: 6 SPK Ref Value 2 mg/L	Ar 5 <b>694292</b> %REC 98.0 Ar	nalysis Date: PrepDate: Control Limit 80 - 120 nalysis Date:	15-Jun-2022 RPD Ref Value	2 15:30 DF: 1 RPD %RPD Limit Qual
MS Client ID: Analyte Chemical 0 MSD Client ID:	Sample ID: MW-21 Oxygen Demand Sample ID: MW-21	HS22060384-06MS Run ID: Result 51 HS22060384-06MSD Run ID:	: Wet PQL 15.0	Units: Chem_HS_4107 SPK Val 50 Units: Chem_HS_4107	mg/L 208 SeqNo: 6 SPK Ref Value 2 mg/L 208 SeqNo: 6	Ar 5694292 %REC 98.0 Ar 5694291	nalysis Date: PrepDate: Control Limit 80 - 120 nalysis Date: PrepDate:	15-Jun-2022 RPD Ref Value	2 15:30 DF: 1 RPD %RPD Limit Qual 2 15:30 DF: 1
MS Client ID: Analyte Chemical O MSD Client ID: Analyte	Sample ID: MW-21 Oxygen Demand Sample ID: MW-21	HS22060384-06MS Run ID: Result 51 HS22060384-06MSD Run ID: Result	: Wet PQL 15.0 : Wet	Units: Chem_HS_4107 SPK Val 50 Units: Chem_HS_4107 SPK Val	mg/L 208 SeqNo: 6 SPK Ref Value 2 mg/L 208 SeqNo: 6 SPK Ref Value	Ar 5694292 %REC 98.0 Ar 5694291 %REC	nalysis Date: PrepDate: Control Limit 80 - 120 nalysis Date: PrepDate: Control Limit	15-Jun-2022 RPD Ref Value	2 15:30 DF: 1 RPD kRPD Limit Qual
MS Client ID: Analyte Chemical 0 Client ID: Analyte Chemical 0	Sample ID: MW-21 Oxygen Demand Sample ID: MW-21	HS22060384-06MS Run ID: Result 51 HS22060384-06MSD Run ID: Result 50	: Wet PQL 15.0 : Wet PQL 15.0	Units: Chem_HS_4107 SPK Val 50 Units: Chem_HS_4107 SPK Val 50	mg/L 208 SeqNo: 6 SPK Ref Value 2 mg/L 208 SeqNo: 6 SPK Ref Value 2	Ar 5694292 98.0 98.0 Ar 5694291 %REC 96.0	nalysis Date: PrepDate: Control Limit 80 - 120 nalysis Date: PrepDate: Control Limit 80 - 120	15-Jun-2022 RPD Ref Value 15-Jun-2022 RPD Ref Value	2 15:30 DF: 1 RPD %RPD Limit Qual 2 15:30 DF: 1 %RPD Limit Qual 1.98 20

QC	BAT	СН	REP	ORT
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Batch ID:	R410712 ( 0 )	Instrume	nt:	WetChem_HS	M	lethod: F	PH BY SM45	600H+ B-2011	
DUP	Sample ID:	HS22060384-02DUP		Units:	pH Units	Ana	alysis Date:	15-Jun-2022	16:36
Client ID:	MW-5S	Run ID	Wet	Chem_HS_4107	12 SeqNo: (	6694415	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
рН		8.2	0.100					8.19	0.122 10
Temp Deg	C @pH	20.6	0					20.4	0.976 10
The followin	g samples were analyze	d in this batch: HS2206038	4-01	HS2206038	4-02	HS220603	84-05	HS22060384-	06

	BATCH	RFPORT
Q U	DAION	

Batch ID:	R410716 ( 0 )	Instrume	nt:	WetChem_HS	N	Aethod: F	PH BY SM45	600H+ B-2011	
DUP	Sample ID:	HS22060384-07DUP		Units:	pH Units	Ana	alysis Date:	15-Jun-2022	16:47
Client ID:	DUP 2	Run ID	Wet	Chem_HS_4107	16 SeqNo:	6694479	PrepDate:		DF: <b>1</b>
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
pН		8.46	0.100					8.4	0.712 10
Temp Deg	C @pH	20.2	0					21.6	6.7 10
The followin	g samples were analyze	ed in this batch: HS2206038	34-03	HS2206038	34-04	HS220603	84-07		
### ALS Houston, US

Client: Project: WorkOrder:	Altamira WFEC CCR/Landfill HS22060384	QUALIFIERS, ACRONYMS, UNITS
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	
Μ	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
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-34	30-Jun-2022
Illinois	2000322022-9	09-May-2023
Kansas	E-10352 2021-2022	31-Jul-2022
Louisiana	03087, 2021-2022	30-Jun-2022
Maryland	343, 2021-2022	30-Jun-2022
North Carolina	624-2022	31-Dec-2022
Oklahoma	2021-080	31-Aug-2022
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932021-12	30-Jul-2022

					Sample Receipt Checklist
Work Order ID: Client Name:	HS22060384 Enviro Clean Services-Tulsa		Date/ Rece	Time Received: ived by:	<u>08-Jun-2022 10:00</u> Paresh M. Giga
Completed By	: /S/ Paresh M. Giga	08-Jun-2022 11:49	Reviewed by: /S/	Anna Kinchen	10-Jun-2022 10:44
	eSignature	Date/Time		eSignature	Date/Time
Matrices:	Water		Carrier name:	<u>FedEx Pric</u>	ority Overnight
Shipping contai	iner/cooler in good condition?		Yes 📝	No 🔲	Not Present
Custody seals i	intact on shipping container/coole	er?	Yes 🔽	No 📃	Not Present
Custody seals i	intact on sample bottles?		Yes 📃	No 🗌	Not Present
VOA/TX1005/T	X1006 Solids in hermetically sea	led vials?	Yes 📃	No 📃	Not Present
Chain of custor	dy present?		Yes 🔽	No 📃	1 Page(s)
Chain of custor	dy signed when relinquished and	received?	Yes 🗹	No 📃	COC IDs:none
Samplers name	e present on COC?		Yes 🗹	No 📃	
Chain of custor	dy agrees with sample labels?		Yes 🗹	No 🗌	
Samples in pro	per container/bottle?		Yes 🗹	No 🗌	
Sample contain	ners intact?		Yes 🔽	No 🗌	
Sufficient samp	ble volume for indicated test?		Yes 🗹	No	
All samples rec	eived within holding time?		Yes 🔽	No	
Container/Tem	p Blank temperature in complian	ce?	Yes 🗹	No	
Temperature(s)	)/Thermometer(s):		1.7C/2.2C U/C		IR31
Cooler(s)/Kit(s)	I:		43078		ü
Date/Time sam	ple(s) sent to storage:		6/8/22 12:10		
Water - VOA vi	als have zero headspace?		Yes	No 📃	No VOA vials submitted
Water - pH acc	eptable upon receipt?		Yes 🔽	No 🗌	N/A
pH adjusted?			Yes	No 🗹	N/A
pH adjusted by	:				
Login Notes:	1 x missing cooler. Samples not received : MW-5S MW-16 MW-17				
Client Contacte	ed:	Date Contacted:		Person Cor	ntacted:
Contacted By:		Regarding:			
Comments:					
Corrective Action	on:				

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ork Order ID: HS22060384		Date/	Time Received:	: <u>08-Jun-2022 10:00</u>				
lient Name: Enviro Clean Services-Tulsa		Recei	ved by:	<u>Paresh M. Giga</u>				
Completed By: /S/ Paresh M. Giga	09-Jun-2022 15:31	Reviewed by: /S/	Anna Kinchen	10-Jun-2022 10:44				
eSignature	Date/Time		eSignature	Date/Time				
Matrices: <u>Water</u>		Carrier name:	<u>FedEx Pric</u>	ority Overnight				
Shipping container/cooler in good condition?		Yes 🗹	No	Not Present				
Custody seals intact on shipping container/coo	er?	Yes 🔽	No 🗌	Not Present				
Custody seals intact on sample bottles?		Yes 🗌	No 🗌	Not Present				
VOA/TX1005/TX1006 Solids in hermetically se	aled vials?	Yes 📃	No 🗌	Not Present				
Chain of custody present?		Yes 🔽	No 🗌	1 Page(s)				
Chain of custody signed when relinquished and	I received?	Yes 🗹	No 🗌	COC IDs:none				
Samplers name present on COC?		Yes 🔽	No 🗌					
Chain of custody agrees with sample labels?		Yes 🗹	No 🗌					
Samples in proper container/bottle?		Yes 🗹	No 🗌					
Sample containers intact?		Yes 🗹	No 📃					
Sufficient sample volume for indicated test?		Yes 🗹	No 📃					
All samples received within holding time?		Yes 📃	No 🗹					
Container/Temp Blank temperature in compliar	nce?	Yes 🗹	No 🗌					
emperature(s)/Thermometer(s):		1.6C/2.1C U/C		IR31				
Cooler(s)/Kit(s):		Blue						
Date/Time sample(s) sent to storage:		6/9/22 15:45						
Water - VOA vials have zero headspace?		Yes 🗌	No 🔽	No VOA vials submitted				
Vater - pH acceptable upon receipt?		Yes 🔽	No 🗖	N/A				
oH adjusted?		Yes 🗖	No 🔽	N/A				
oH adjusted by:								
Login Notes: SRC for missing cooler receive Proceed with all out of hold an MW-5S MW-16 & MW-17 per	d 6/9/22 alysis for : RG							
Client Contacted:	Date Contacted:		Person Cor	ntacted:				
Contacted By:	Regarding:							
Comments:								
Corrective Action:								

Sample Receipt Checklist

	PROJECT NAME: ADD TO NO HU22040016 COC: / of /																
	WHE160022/0	2004	WFEC/COR LANDFILL														
formerly known as Enviro Clean Cardinal	CLIENT CONTACT:		CLIEN		IL:	-	7	HITA	WIR	AIL		T PHO	NE:	~	0	_ •	
	HEATHER TIFFA	m	HEATTHER. TIFFANY D.COM 7405-618-2021														
LABORATORY / LAB PM:	TAT: 5 DAY - NO CHARGE										interference of the						
ALG RAGEN GIGA	PARAMETERS																
LAB ADDRESS:	S	<u> </u>								Rev Rev				。 死	- 17 II.		
10450 STANGULF MU	INER	N/N							てえ	別日	·			38			
HOUSTON, TX 77099	TACK TE		DNTA	( YES		Ш		at	2		×8	臣	Ű	R	Ŕ	e g	
SHIPMENT METHOD: TRACKING:	no laco tore	l.	OF CC	ERED		Ł		J	á		2H	S	5	.0	N.	万日	•
FEDEX ST.	87 1773 857	1 <sup>2</sup>	IBER	ЭНЦ	+	Æ	,0	тJ		Q	王	ā	T A	5	R	F	, 
NO. SAMPLE DESCRIPTION	DATE TIME	MATRIX PRES.	NUN	FIELC	PF	Ē	7	ত	$\mathcal{O}$	ບ	E)	R	5	P P	Q	R	HOL
1 NW-3	6622 1706	W 3,9	2	N	X	X	X	X	X	X							
2 MW-59	67/22 1120	W 1,2,3,4,9	1	N	X	X	X	X	X	X	X	X	X	X	X	X	
3 NN-16	6722 12.22	W I	17	N	X	$\left  \right\rangle$	X	X	Х	X	X	X	$\boldsymbol{\chi}$	X	X	Х	
4 NW-17	6722 7259	324	17	N	×	X	X	X	Х	Х	X	Х	X	X	X	Х	
5 NW -20	6/6/22 1800	W 3,9	2	N	X	X	X	Х	X	X							-
6 NNN -21	6/6/22 1617	W 3,9	2	N	X	X	X	Х	Х	$\checkmark$							
7 Dup 2	6/7/22 1120	H327B/13.2.4.9	9		X	X	$\times$	X	X	X	X	X	$\mathbf{X}$	X	X	X	
8 Temp Blank		W	1	$\mathbb{N}$													
9		1327		]	1	, ,		000	000	กวด	A						
10	Service State State Stream	7ho					H	522	200	USO	4						L
11							\\//		tami	ra IL and	fill						
12															and and an and a state of a state		
13																	
14													<b>      </b>		1		
15											<u> </u>			DATE			
SAMPLER(S) NAME:		SAM	iler(S 7	SIGNA	Cirl I	bull	0g_	_				TIME:	67	422	·		
RELINQUISHED BY: DATE: 0 7/27 RECEIVED BY: DATE: 0 06122 LOGGED BY: DATE: COOLER TEMP:																	
Chilling (block)         Time:         1         BCD         FG         Time:         1         Time:         T																	
PRESErvation kgr.     Tell     Zenitos     Senziou     Analog     Senziou       POINT OF ORIGIN:     Norman     Oklahoma City     Tulsa     Yukon     Midland     Other :																	
	ALTAMIRA-US, LLC UTGLERA # 43078 FEMPEN MIL 92231																
									1.1		AL.	>					

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RIGHT SOLUTIONS | RIGHT PARTNER

	ALS 10450 Stancliff Rd., Suite 210	CUSTODY SEAL	Seal Broken By:
	Houston, Texas 77099	Date: 6777 Time: 6900	Date:
(ALS)	Tel. +1 281 530 5656	Company: Dull Man Latte Att Tiscare	06108122

43078 JUN 0 8 2022

ALS 10450 Stancliff Bd _Suite 210	CUSTODY SEAL	Seal Broken By:
Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	Date: (01777, Time: 1992) Name:	06/08122



**RIGHT SOLUTIONS | RIGHT PARTNER** 

Remy 4/8/22 134:14:52.



				R
ALS	ALS 10450 Stancliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	Dat Nat Cot	CUSTODY SEAL	Seal Britten By:



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# ATTACHMENT B

DATA SUMMARY TABLES (LANDFILL CCR UNIT)

	MCL	Established Background	Established GWPS	Comula 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 ID: Sample Date:	25-May-16	27. Jul-16	28-Sen-16	1-Dec-16	31- Jan-17	5-Apr-17	6- Jun-17	6- lun-17	8-Aug-17	17-May-18	1-Aug-18	9-40-18
	-	<b>,</b>	<b>( - - /</b>	oumpie Dute.	20 may 10	27 001 10	20 000 10		or our m	U Aprill	o oun n	e eun n	- Chug II	Tr may to	- FAug To	o Aug Io
					BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKG	ROUND	BACKGROUND	DETECTION	EVALUATION	VERIFICATION
Detection Monitoring Paramet	ore			Units	1	2	3	4 5 6			7	8	MON. #1	SAMPLE	SAMPLE	
Boron	None	1 806	Not Applicable	ma/l	1.00	1 17	11	17	1.28.1*	0.88	1 15	12	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	14.2.1*	14 9	13.7	13.3.1*	13.2	13.4	14.3	13.4
Eluoride	4	0.6359	Not Applicable	mg/L	0.211	0.442	0.407	0.392	0.399	0.3	0.384	0.354.1*	0.331	0.324	0.338	0.291
nH (laboratory)	65-85	6 485 - 8 018	Not Applicable	SII	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	ma/l	1350	1230	1230	1220	1140	1250	1230	1250	1070	1170	1190	1170
Total Dissolved Solids	500	2.191	Not Applicable	ma/L	2030	2060	1960	1990	2080	2090	2150	2200	2090	2180	2150	2160
Assessment Monitoring Paran	neters			<u>y</u>			<u>,, ,,,,,</u> ,		n	nn			<u></u>			
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	< 0.000500	< 0.000500	<0.00800	< 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																
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												
Suifide	None	Not Applicable	Not Applicable	mg/L												
Field Parameters							1			1 <b>-</b>						
Temperature	None	Not Applicable	Not Applicable	0	21.87	24.83	22.37	18.81	20.98	17.2	23.35		22.32	23.87	26.5	21.31
рн	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
Turbiaity	None	Not Applicable	Not Applicable	NIU	0.89	0.18	0.18	0.91	0.36	0.15	0.44		0.33	0.29	0.02	0.02

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.

mg/L : milligrams per liter.
 pCi/L : picoCuries per liter.
 S.U. : Standard Units.

<sup>o</sup>C : degrees Celsius.
 μmhos/cm : micromhos per centimeter.

7. mV : millivolts.
 8. NTU : Nephelometric Turbidity Unit.

8. NTU : Nephelometric Luriolity 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. The reported quantitation limit is approximate and may be inaccurate or imprecise. J\*: 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.

#: Data from hintial 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). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
 \*: Data for hintial 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-3			MW-3	MW-3	MW-3	MW-3	MW-3 DUP 3		MW-3	MV	V-3
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	4-Oct-18	11-J	an-19	24-Apr-19	2-Oct-19	17-Jun-20	8-0	ct-20	31-Mar-21	13-Oct-21	30-Mar-22	6-Jun-22
Detection Monitoring Paramet	ers			Units	INITIAL ASSESSMENT MON.	INITIAL ASSE (RESA UNFILTERED	SSMENT MON. MPLE) FILTERED	FIRST 2019 ASSESSMENT MON.	SECOND 2019 ASSESSMENT MON.	FIRST 2020 ASSESSMENT MON.	SECON ASSES MO	ND 2020 SMENT DN.	FIRST 2021 ASSESSMENT MON.	SECOND 2021 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON. (RESAMPLE)
Boron	None	1.896	Not Applicable	mg/L	1.06 #	1.05	1	1.39	1.06	1.16	0.903	0.946	1.01	0.939	1.06	
Calcium	None	670.30	Not Applicable	mg/L	206 #	198	225	225	213	214	183	181	207	155	210	
Chloride	250	18.51	Not Applicable	mg/L	13.8 #	13.4	16.3	13	13.7	13.7	13.8	13.8	14	12.7	13^	12.1
Fluoride	4	0.6359	Not Applicable	ma/L	0.318 #	0.373	0.52	0.396 J	0.319	0.203	0.328	0.337	0.376	0.258	2.12^	0.36
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	7.7 #	7.19		7.64	7.07	6.9	7.36	7.5	7.24	5.99	1.61^	7.51
Sulfate	250	1.396	Not Applicable	ma/L	1270 #	1220	1450	1150	1210	1240	1320	1290	1260	1.200	1790^	1090
Total Dissolved Solids	500	2,191	Not Applicable	ma/L	2130 #	2110	2060	2100	2110	2150	2020	2010	2030	1.970	2700^	1860
Assessment Monitoring Paran	neters	_,						<u></u>	<u> </u>	2100				.,		
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.0008 #	< 0.000400	< 0.000400	< 0.000400	0.000410 J	< 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	< 0.000400	< 0.000400	< 0.000400	0.000474 J	0.000464 J	0.000471 J	0.000422 J	0.000576 J	
Barium	2	Not Applicable	2 (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	
Bervllium	0.004	Not Applicable	0.004 (MCL)	ma/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	0.005 (MCL)	ma/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	<0.005 #	<0.000400	<0.000400	<0.000400	0.00142.1	<0.000400	<0.000400	<0.000400	<0.000400	0.000467.1	<0.000400	
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.000162.1#	<0.000200	0.000208.1	0.000232.1	0.000259.1	0.000289.1	<0.000200	<0.000200	<0.000200	<0.000200	0.000765.1	
Fluoride	4	Not Applicable	4 (MCL)	ma/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
Lead	0.015	Not Applicable	0.015 (MCL)	ma/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	0 147 J #	0 152	0 148	0 148	0 136	0 145	0 118	0 122	0 138	0 137	0 142	
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0001 #	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.0000300	0.000760.1	0.0000610.1	<0.000300	
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	<0.0001 #	0.000613.1	0.000622.1	<0.0000000	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	0.000629.1	<0.000600	
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.001 #	<0.00110	<0.000022.0	<0.000000	<0.000000	<0.000000	<0.000000	<0.000000	<0.000000	<0.000023.0	<0.000000	
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0000 #	0.000560 1	0.000400 1	<0.00110	0.000466.1	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	
$P_2 - 226 \pm P_2 - 228 (combined)$	0.002	Not Applicable	5 (MCL)	nCi/L	-0.0000 #	<0.67	0.000499 J	<0.000200	<0.000400 J	1.02	1.65	1.7	1/3	<0.000200	<0.000200	
Other Peremeters	0	Not Applicable	J G (MOL)	p01/L	1.40 1/2 0.444 #	40.07		40.00	40.75	1.02	1.00	1.7	1.40	40.00	-0.01	
Other Parameters			Net Applicable		<b>5</b> //	<u>ام</u>	1	-5.00	-5.00		5.00	5.00	5.00	10.0.1	5.0.1	15.0
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	<5 #	<5		<5.00	<5.00		<5.00	<5.00	<5.00	12.0 J	5.0 J	15.0
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		318										
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		23.7	25.3									
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Nitrate as N	10	Not Applicable	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
Potassium	None	Not Applicable	Not Applicable	mg/L		8.17	8.4									
Sodium	None	Not Applicable	Not Applicable	mg/L		388	429									
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	2520 #	2730					2980	2970	2630	2680	20.900	3.030
Sulfide	None	Not Applicable	Not Applicable	mg/L												
Field Parameters									n		1				·	
Temperature	None	Not Applicable	Not Applicable	°C.	23.1	13.1		18.31	24.37	23.62	23.8		15.9	20.4	16.4	25
nH	65-85	Not Applicable	Not Applicable	SU	6.95	6.93		7.31	7 18	7 15	7 22		7.04	7 11	7 29	7 24
Specific Conductance	0.0 - 0.0	Not Applicable	Not Applicable	umbos/cm	2814	2600		2778	2707	2576	2670		2666	2.676	2.008	2 406
Dissolved Ovygen	None	Not Applicable	Not Applicable	ma/l	0.50	0.7		1.26	6.06	2010	0.25		0.57	0.54	2,090	2,430
Ovidation Reduction Potential	None	Not Applicable	Not Applicable	m\/	0.09			F4.6	24.4	-24.6	-102.6				-115.0	30.4
	None	Not Applicable	Not Applicable	NTU	-31	- 12	1.04	-34.0	-34.4	3.36	1 3		3 11	2 50	-110.9	3 10
	110110				7.23	1.0	1.04	0.57	1.14	0.00	1.3		3.11	2.00	0.00	5.10

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.

mg/L : milligrams per liter.
 pCi/L : picoCuries per liter.
 S.U. : Standard Units.

<sup>o</sup>C : degrees Celsius.
 μmhos/cm : micromhos per centimeter.

7. mV : millivolts.
 8. NTU : Nephelometric Turbidity Unit.

8. NTU : Nephelometric Luriolity 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. The reported quantitation limit is approximate and may be inaccurate or imprecise. J\*: 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.
 New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

#: Data from hintial 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). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
 \*: Data for hintial 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 (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
Detection Mariterian Derrort				11-14-	BACKG	GROUND 1	BACKGROUND 2	BACKGROUND 3	BACKGROUND 4	BACKGROUND	BACKGROUND 6	BACKGROUND 7	BACKGROUND 8	DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Detection Monitoring Paramete	None	1.900	Not Applicable	Units	2.56	4.27	2.02	2.0	2.07	0.24	1.22	1.96	1.20	1.05	1.06	2.00
Boron	None	670.20	Not Applicable	mg/L	3.00	4.37	3.02	3.2	3.87	2.34	54.7	1.80	1.29	1.05	1.00	3.09
Chloride	250	18 51	Not Applicable	mg/L	33.2	20.1	27.0	29.9	28.2	20.8	22.3	13.3	40.0	25	18.7	24.9 J 26 1
Fluoride	230	0.6359	Not Applicable	mg/L	1.84.1*	1 91	1.6	1.59	1.32	1.39	1.06	107	1 17	1.38	1.02	15
nH (laboratory)	65-85	6 485 - 8 018	Not Applicable	SII	8.2	83	7.0	7.8	7.8	7.9	7.4	7.5	7.5	7.6	7.7	8
Sulfate	250	626	Not Applicable		527	540	504	501	415	469	326	321	301	369	294	384
Total Dissolved Solids	500	1.334	Not Applicable	ma/L	1230	1180	1200	1210	1070	1060	948	1010	980	950	880	1150
Assessment Monitoring Paran	neters	· · · ·													II	
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/l	<0.00400	<0.000800	<0.000800	<0.000800	<0.000800	<0.000800	<0.000800	<0.00400	<0.000800			
Arsenic	0.010	Not Applicable	0.01 (MCL)	ma/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)	ma/L	0.0267	0.0165	0.0212	0.0192	0.0144	0.0177	0.0183	0.023	0.0186			
Bervllium	0.004	Not Applicable	0.004 (MCL)	ma/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)	ma/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	< 0.000800	< 0.000800	<0.000800	< 0.00400	<0.000800			
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/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./1 +/- 0.392	0.684 +/- 0.239	0.827 +/- 0.274			
Other Parameters							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									418			
Hydroxide Aikalinity	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 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									5 19			
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 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							n		1		n			·		n
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.

Standard Onits.
 °C : degrees Celsius.
 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.

in on analysis performed.
 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). Data from 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	MW-5S		MW-5S	MW-5S	MW-5S	MW-5S	MW-5S	MW-5S	MV	V-5S
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	2-Oct-18	10-Ja	n-19	23-Apr-19	2-Oct-19	18-Jun-20	8-Oct-20	1-Apr-21	14-Oct-21	31-Mar-22	7-Jun-22
Detection Monitoring Parameters Units		INITIAL INITIAL ASSESSMENT MON. ASSESSMENT (RESAMPLE) MON. UNFILTERED 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.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON. (RESAMPLE)				
Boron	None	1.896	Not Applicable	ma/L	2.82 #	2.73	1.82	1.87	2.49	0.811	2.57	2.04	1.82	1.64	
Calcium	None	670.30	Not Applicable	ma/L	25 #	27.7	27.8	57	22.5	68.2	19.6	33.4	21.0	53.8	
Chloride	250	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
Fluoride	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
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
Sulfate	250	626	Not Applicable	ma/L	447 #	457	472	394	434	408	485	477	499	1540^	503
Total Dissolved Solids	500	1,334	Not Applicable	mg/L	1140 #	1120	1210	1090	1180	904	1080	1140	1140	1540^	1170
Assessment Monitoring Param	neters			¥			·				11	1		I	·
Antimony	0.006	Not Applicable	0.006 (MCL)	ma/l	<0.0008 #	0.00122 J	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	
Arsenic	0.010	Not Applicable	0.01 (MCL)	ma/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	
Barium	2	Not Applicable	2 (MCL)	ma/L	0.012 #	0.012	0.0116	0.0141	0.00928	0.021	0.00787	0.00867	0.00732	0.0113	
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	
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	
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	
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	
Fluoride	4	Not Applicable	4 (MCL)	ma/L	1.54 #	1.54	1.5	1.11	1.54	0.824	1.51	1.24	1.57	3.24^	1.41
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	
Lithium	None	Not Applicable	0.235 (UTL)	ma/L	0.0691 J #	0.0644	0.0642	0.0604	0.0536	0.049	0.0546	0.0496	0.0532	0.0654	
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0001 #	< 0.0000300	< 0.0000300	< 0.0000300	< 0.0000300	< 0.0000300	< 0.0000300	0.0000870 J	< 0.0000300	< 0.0000300	
Molvbdenum	None	Not Applicable	0.1 (ACL)	ma/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	
Selenium	0.05	Not Applicable	0.05 (MCL)	ma/L	<0.0003 #	< 0.0011	< 0.0011	< 0.00110	< 0.00110	< 0.00110	< 0.00110	< 0.00110	< 0.00110	< 0.00110	
Thallium	0.002	Not Applicable	0.002 (MCL)	ma/L	<0.0008 #	<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	0.611 +/- 0.249 #	< 0.79		< 0.64	1.44	1.25	1.15	0.95	1.28	<0.79	
Other Parameters	·		· · · · · ·	· · · ·			·				11				·
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	ma/l	<5.00 #	<5.00		<5.00	<5.00		<5.00	<5.00	6.00.1	<5.00^	17.0
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L						412	444	405	470		
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		12.6				15	20.5	<5	9.52		
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	ma/L		427				397	424	405	460		
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/l		<5				<5	<5	<5	<5.00		
Iron Total	None	Not Applicable	Not Applicable	mg/L						<0.0120	<0.0120	0.0170.J	0.0270.1		
Iron Dissolved	None	Not Applicable	Not Applicable	mg/L						<0.0120	<0.0120	<0.0120	<0.0120		
Iron. Ferrous	None	Not Applicable	Not Applicable	ma/L						0.029(J)	< 0.0200	<0.020	< 0.0200		
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	ma/L								< 0.020	<0.020 H		
Iron. Ferric	None	Not Applicable	Not Applicable	ma/L								<0,020	0.0270 J		
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	ma/L								< 0.020	<0.020		
Magnesium	None	Not Applicable	Not Applicable	mg/l		5.73	5 58			5 16	4.38	4 53	4 60		
Molybdenum Dissolved	None	Not Applicable	Not Applicable	mg/L						0.00308(.1)	0.00244.1	0.00287.1	0.00296.1		
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.089.1#	0.964	0.916	0.665	0.212	<0.0300	<0.0300	00287.1	0.0984.1	705^	0.0996.LH
Potassium	None	Not Applicable	Not Applicable	mg/L		4 49	4 27			3 48	3.94	3 25	3 96		0.0000 0,11
Sodium	None	Not Applicable	Not Applicable	mg/L		405	257			277	335	312	243		
Specific Conductance (Jaboratory)	None	Not Applicable	Not Applicable	umhos/cm	1730 #	1870	201				1960	1770	1820	15600^	2 280
Sulfide	None	Not Applicable	Not Applicable	ma/l						<1	1.97	<1	<1.00		2,200
Field Parameters	None	- Hot Applicable		iiig/L							1.01		-1.00		
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	10.8
nH	65.95	Not Applicable	Not Applicable	<u> </u>	7.61	7.56		7.05	7.01	7.0	7.83	7.74	7.85	7 77	70
Specific Conductance	0.0 - 0.0	Not Applicable	Not Applicable	U. umbos/om	1.01	1701		1.90	1976	1.9	1.03	1.14	1.00	1272	1.9
	None	Not Applicable	Not Applicable	ma/l	0.24	0.62		0.05	0.45	1 000	0.22	0.04	1,003	0.21	1,020
Ovidation Deduction Detentic	None	Not Applicable	Not Applicable	mg/L	0.21	0.03		0.85	0.45	1.89	0.32	0.81	0.30	0.31	2.1
Turbidity	None	Not Applicable	Not Applicable		-125.1	-30.9	1.27	19.7	-54.1	-48.2	108.1	283.3	-59.9	40.2	20.0
	NONE	Not Applicable		NIU	3.3	4.31	1.27	1.10	0.94	2.00	1.9/	2.00	2.10	1.01	1.72

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.

Standard Onits.
 °C : degrees Celsius.
 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.

in on analysis performed.
 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). Data from 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
Detection Monitoring Parameter	re			Units	BACKGROUND	BACKGROUND 2	BACKGROUND 3	BACKGROUND 4	BACKGROUND 5	BACKG	ROUND 6	BACKGROUND 7	BACKGROUND 8	DETECTION MON. #1	EVALUATIO	ON SAMPLE	VERIFICATION SAMPLE
Boron	Nono	1 906	Not Applicable	Units	2.0	0.901	0.557	<0.975	0.292	17	1.02	1.94	2.21	1.25	0.292	0.270	2 21
Calcium	None	670.30	Not Applicable	mg/L	53.8	340	267	×0.075	115	71	1.92	1.04	80.6	1.25	0.203	88.8	1/2
Chloride	250	18.51	Not Applicable	mg/L	17.7	23.8	10.8	17.5	21.8	14.9	15.5	16.3	16.2	17.6	16.4	16.5	142
Eluoride	200	0.6359	Not Applicable	mg/L	1 02 1*	0.569	0.497	0.368	0.425	0.607	0.58	0.579	0 744	0.509	0.771	0.733	0.664
nH (laboratony)	65-85	6 485 - 8 018	Not Applicable	SIL	8.4	7.3	73	7.2	7.5	7.5	7.4	73	7.4	7.6	7.6	7.8	77
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
Accordment Monitoring Parame	otoro	,		<u> </u>			N		n1			<u></u>	JI				
Assessment womtoring Parame		Not Applicable	0.006 (MCL)	ma/l	0.00624.1	<0.000900	<0.000900	<0.000900	<0.000900	<0.000900	<0.000900	<0.00400	<0.000900			1	1
Anumony	0.000	Not Applicable	0.000 (IVICL)	mg/L	0.00034 J	0.000728 1	0.000766 1	0.00176 1	0.00176 1	0.00137 1	0.00128 1	0.00400					
Barium	2	Not Applicable	2 (MCL)	mg/L	0.002013	0.0007203	0.0007003	0.00170 3	0.001703	0.00137 3	0.001203	0.00310 3	0.001303				
Beryllium	0.004	Not Applicable		mg/L	<0.0411	<0.0402	<0.0427	<0.000	<0.0000	<0.0292	<0.0040	<0.0440	<0.0000				
Cadmium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.000500	<0.000100	<0.000100	0.000115	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100				
Chromium	0.000	Not Applicable	0.0000 (MOL)	mg/L		0.000680.1	<0.000100	<0.000500	<0.000100	0.000731.1	<0.000100	<0.000000	11 (0.000100				
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.00120 J	0.000648.J	<0.00100	0.000735.1	0.000439.1	0.000349.1	0.000333.1	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	<0.00800	<0.000800	<0.00800	<0.000800	<0.000800	< 0.00400	<0.00800				
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													
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									2/3				
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umnos/cm													
Field Parameters	NONE	Not Applicable	Not Applicable	IIIg/L													
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	20.34		25.21
nH	65-85	Not Applicable	Not Applicable	SU	7.88	7 17	7.2	7 18	7 22	7 27		7 10	7.99	7.4	6.02		7 99
Specific Conductance	None	Not Applicable	Not Applicable	umhos/cm	1614	2010	2029	2216	2205	1925		1929	1680	2101	1822		1932
Dissolved Oxygen	None	Not Applicable	Not Applicable	ma/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. 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.
 S.U. : Standard Units.

<sup>o</sup>C : degrees Celsius.
 μmhos/cm : micromhos per centimeter.

7. mV : millivolts.
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9. < : Analyte not detected at the laboratory method detection limit (MDL).

1. 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 invatory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered). Data from 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	MV	I-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	DUP 2	MW-7S	MW	-7\$
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	lar-21	15-Oct-21	31-Mar-22	Jun-22
Detection Monitoring Paramet	ers			Units	INITIAL ASSESSMENT MON.	INITIAL ASSE (RESA UNFILTERED	SSMENT MON. MPLE) FILTERED	FIRST 2019 ASSESSMENT MON.	SECOND 2019 ASSESSMENT MON.	FIRST 2020 ASSESSMENT MON.	SECOND 2020 ASSESSMENT MON.	FIRS ASSES MO	T 2021 SMENT DN.	SECOND 2021 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON. (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	
Calcium	None	670.30	Not Applicable	mg/L	76 #	277	293	271	81.1	160	90.2	254	219	97.1	302	
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	
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	
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	
Sulfate	250	1,281	Not Applicable	mg/L	1600 #	1200	1110	1040	633	970	759	1200	1190	690	1190	
Total Dissolved Solids	500	1,863	Not Applicable	mg/L	1230 #	1670	1890	1890	1270	1680	1340	2060	2000	1290	1920	
Assessment Monitoring Paran	neters															
Antimony	0.006	Not Applicable	0.006 (MCL)	ma/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)	ma/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	
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	
Bervllium	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	
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)	ma/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	
Cobalt	None	Not Applicable	0.006 (ACL)	ma/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	
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	
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	0.0714 J #	0.0558	0.0606	0.0593	0.0608	0.0681	0.065	0.0472	0.0468	0.0645	0.0533	
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0001 #	< 0.0000300	< 0.0000300	< 0.0000300	< 0.0000300	0.0000350 J	< 0.0000300	0.000104 J	0.0000320 J	< 0.0000300	< 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	
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)	ma/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)	pČi/L	2.07 +/- 0.453 #	1.34		0.9	<0.71	1.05	1.2	1.73	1.92	1.95	1.11	
Other Parameters																
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	ma/L	<5#	5.0 J		<5.00	<5.00		8.00 J	<5.00	<5.00	7.00 J	<5.00	
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L						264	315	180	177	343		
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5	<5.00		
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	ma/L		222				264	315	180	177	343		
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5	<5.00		
Iron. Total	None	Not Applicable	Not Applicable	ma/L						0.278	0.111 J	0.0145 J	0.0156 J	0.310		
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L						0.034(J)	0.235	0.0154 J	0.0234 J	0.134 J		
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L						0.306	0.216	< 0.02	< 0.02	0.207		
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	ma/L								< 0.02	< 0.02	<0.0200 H		
Iron, Ferric	None	Not Applicable	Not Applicable	ma/L								< 0.02	< 0.02	0.103		
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	ma/L								< 0.02	0.0234 J	0.134		
Magnesium	None	Not Applicable	Not Applicable	ma/L		19	18.7			17.1	12	16.9	17.4	12.2		
Molybdenum. Dissolved	None	Not Applicable	Not Applicable	ma/L						0.000987(J)	0.00103 J	0.000846 J	0.000941 J	0.00121 J		
Nitrate as N	10	Not Applicable	Not Applicable	ma/L	0.118 #	0.557	0.644	< 0.0300	< 0.0300	< 0.0300	<0.0300	<0.0600	<0.0600	0.0940.1	0.0613.J	
Potassium	None	Not Applicable	Not Applicable	mg/L		4.67	4.79			5.33	5.1	4.06	4.18	5.14		
Sodium	None	Not Applicable	Not Applicable	ma/L		274	294			313	272	230	197	261		
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	1610 #	2240					2110	2380	2380	1860	2 530	
Sulfide	None	Not Applicable	Not Applicable	mg/L						<1	1.48	<1	<1	<1.00		
Field Parameters				5		·			n							
Temperature	None	Not Applicable	Not Applicable	°C	25	12.8		17.92	25.27	21.95	23.1	16.8		22.5	14.2	
pH	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	
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	1887	2180		2326	1944	2097	1945	2377		1,973	2,385	
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	
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	
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	

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.

mg/L : milligrams per liter.
 pCi/L : picoCuries per liter.
 S.U. : Standard Units.

<sup>o</sup>C : degrees Celsius.
 μmhos/cm : micromhos per centimeter.

7. mV : millivolts.
 8. NTU : Nephelometric Turbidity Unit.

9. < : Analyte not detected at the laboratory method detection limit (MDL).

1. 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.

: 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 invatory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered). Data from 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	DUP-2	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	BACKGROUND 2	BACKGROUND 3	BACKGROUND 4	BACKGROUND 5	BACKGROUND 6	BACKGROUND 7	BACKGROUND 8	DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Detection Monitoring Paramete	ers			Units												
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		Not Applicable	mg/L	341	362	440	302	306	485	343	421	313	251	249	284
Chionde	230	Background Well	Not Applicable	mg/L	0.102	0.192	13.1	14.0 J	12.5	0.205	12.2	13	12.1 J	0.001	13.0	0.742
nH (laboratory)	65-85	(Not Applicable)	Not Applicable	S II	7 16	7.28	7.84	7.7	7.3	7 1	7	6.0	0.240 J	7	7.5	7.7
Sulfate	250		Not Applicable		1570	1.680 1*	1450	1360	1340	1320	1360	1320	1 350 1*	1320	1250	1440
Total Dissolved Solids	500		Not Applicable	ma/L	2220	2190	2340	2.380 J	2230	2230	2250	2410	2370	2400	2130	2560
Assessment Monitoring Param	notors	1					1			1	1					
Antimony	0.006	Not Applicable		ma/l	<0.000500	<0.000500	<0.000500	<0.000800	<0.000800	<0.000800	<0.00400	<0.000800	<0.000800			
Arsenic	0.000	Not Applicable		mg/L	0.00394	0.00377	0.00244	0.00177.1	0.00180.1	0.00170.1	<0.00200	<0.000000	0.0057			
Barium	2	Not Applicable	-	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	1	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 / tppiloable)	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			
Nolybdenum	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
Thellium	0.002	Not Applicable		mg/L	<0.000600	<0.000600	<0.000600	<0.000300	<0.000512 J	<0.000300	<0.00150	<0.00402				
Ra-226 + Ra-228 (combined)	0.002	Not Applicable		nGi/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		rior, ppriodoro	1	pone		1.01 / 0.021	1.00 / 0.021				1110 1 0.000	1110 1 01000			11	n
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	ma/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 Malukadamum Diagahuad	None	Not Applicable	Not Applicable	mg/L									26.4			
Norybaenum, Dissorved	None	Not Applicable	Not Applicable	mg/L												
Nitrate as N Botossium	Nono	Not Applicable	Not Applicable	mg/L									0.22			
Sodium	None	Not Applicable	Not Applicable	mg/L									240			
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umbos/cm												
Sulfide	None	Not Applicable	Not Applicable	ma/L												
Field Parameters						1	11			11	11					1
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
pH	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	None	Not Applicable	Not Applicable	mV	0.6		-103.3	-136.8	-178.8	-179.1	-93.3	-10.6	-68.7	-48.9	49.1	187.6
lurbidity	None	Not Applicable	Not Applicable	NTU	4.12		1.91	0.26	1.14	0.5	1.38	1.93	0.87	0.28	0.02	0.02

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.

mg/L : milligrams per liter.
 pCi/L : picoCuries per liter.
 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 invation used on the bused in statistical evaluation. Resampling was conducted in January 2019 (both filtered). Data from 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	MV	/-13	DI	UP 2	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MV	N-13
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	4-Oct-18		11-J	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
Detection Monitoring Paramet	ers			Units	INITIAL ASSESSMENT MON.	UNFILTERED	INITIAL ASSE (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. (RESAMPLE)
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	
Calcium	None	Ť.	Not Applicable	mg/L	299 #	270	360	334	348	130	182	243	242	284	237	116	
Chloride	250		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	
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	
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	
Sulfate	250		Not Applicable	mg/L	1400 #	1450	1420	1450	1440	1450	1380	1390	1480	1470	1570	1,510	
Total Dissolved Solids	500		Not Applicable	mg/L	2350 #	2350	2220	2270	2260	2590	2350	2450	2360	2320	2360	2,520	
Assessment Monitoring Paran	neters																
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	
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	
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	
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	
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	
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	
Eluoride	None	Not Applicable	Background Well	mg/L 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	
Lead	0.015	Not Applicable	(Not Applicable)	mg/L	<0.0001 #	<0.042	<0.000600	<0.00600	<0.000600	<0.002	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	
Lithium	None	Not Applicable	-	mg/L	0 174 .1 #	0.17	0 194	0.181	0.176	0 131	0.139	0.156	0 146	0 166	0 163	0.120	
Mercury	0.002	Not Applicable	-	mg/L	<0.00015 #	<0.0000300	< 0.0000300	<0.000300	< 0.0000300	< 0.0000300	< 0.0000300	< 0.0000300	< 0.0000300	0.0000990 J	0.0000490 J	< 0.0000300	
Molvbdenum	None	Not Applicable	-	ma/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	
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	
Thallium	0.002	Not Applicable	1	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		pČi/L	1.46 +/- 0.346 #	2.12		1.14		1.65	1.81	2.09	2.67	2.47	1.75	1.46	
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	
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	mg/L													
Iron, Ferrous, Dissolved	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		27	30.7	30.4	20.6								
Magnesium Molybdenum Dissolved	None	Not Applicable	Not Applicable	mg/L					23.0								
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.061.1#	<0.03	<0.03	<0.03	<0.03	<0 150	0 191	<0.0300	<0.0600	<0.0600	0.0613.1	0.304.1	
Potassium	None	Not Applicable	Not Applicable	ma/L		8.43	8.61	8.43	8.64								
Sodium	None	Not Applicable	Not Applicable	mg/L		557	416	447	418								
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	2570 #	3090		2960					3280	2940	3050	3,840	
Sulfide	None	Not Applicable	Not Applicable	mg/L													
Field Parameters																	
Temperature	None	Not Applicable	Not Applicable	°C	25.7	12.4				20.41	27	21.69	21.8	16.9	21.4	17.3	
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	
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	3728	3569				3688	3751	3474	3576	3616	3,688	3,658	
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	
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	
	inone	Not Applicable	Not Applicable		5.63	2.27	0.76			4.66	1.28	4.95	3.21	3.76	8.30	3.27	

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.

mg/L : milligrams per liter.
 pCi/L : picoCuries per liter.
 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 invation used on the bused in statistical evaluation. Resampling was conducted in January 2019 (both filtered). Data from 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 Background	Established GWPS	Sample ID:	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A	DUP-2	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A (Shallow)	MW-14A (Deep)	DUP1 (Deep)
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	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	1-Aug-18	9-Aug-18	9-Aug-18
					BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKG	ROUND	BACKGROUND	BACKGROUND	BACKGROUND	DETECTION	EVALUATION	VERIFICATI	ON SAMPLE
Detection Monitoring Paramet	ers			Units	1	2	3	4	;	•	6	1	8	MON. #1	SAMPLE		
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	1	Not Applicable	mg/L	500	380	327	328	544	503	451	530	672	313	341	746	358
Chloride	250	De alternation d'Mail	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	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 Paran	neters																
Antimony	0.006	Not Applicable		mg/L	< 0.000500	<0.00800	<0.000800	<0.00800	<0.000800	<0.000800	<0.00400	<0.000800	<0.000800				
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	_	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	-	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				
Eluoride	None	Not Applicable	Background Well	mg/L	0.000730 J	0.000258 J	0.000708 J	0.384	0.000334 J	0.000342 J	<0.000500	< 0.000100	0.000350 J	0.202	0 333	0.296	0.253
Lead	0.015	Not Applicable	(Not Applicable)	mg/L	<0.00200	<0.00100	<0.00100	<0.004	<0.012	<0.000100	<0.000500	<0.000100	<0.012	0.232	0.000	0.230	0.233
Lithium	None	Not Applicable	-	mg/L	0.167	0.000100	0.000100	0.175.1	0.16	0 164	0.235.1	0 147	0.000100		0 149	0.328.1	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	<0.00150				
Molybdenum	None	Not Applicable	-	mg/L	0.00477	0.00237	0.00524 J	< 0.0100	0.00253	0.00238	< 0.00500	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	< 0.000300	< 0.00150	< 0.000300	< 0.000300				
Thallium	0.002	Not Applicable	-	mg/L	< 0.000500	< 0.000800	<0.000800	< 0.00800	< 0.000800	<0.000800	< 0.00400	< 0.000800	<0.000800				
Ra-226 + Ra-228 (combined)	5	Not Applicable	-	pČi/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																	
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													
Magnasium	None	Not Applicable	Not Applicable	mg/L													
Malyhdanum Dissolvad	None	Not Applicable	Not Applicable	mg/L									24.4				
Nitrate as N	10	Not Applicable	Not Applicable	mg/L													
Potossium	Nono	Not Applicable	Not Applicable	mg/L									7 00				
Sodium	None	Not Applicable	Not Applicable	mg/L									518				
Specific Conductance (Jaboratory)	None	Not Applicable	Not Applicable	umbos/cm													
Sulfide	None	Not Applicable	Not Applicable	mg/L													
Field Parameters							· · · · · ·	I			1	11	n]		nI		
Temperature	None	Not Applicable	Not Applicable	°C	20.03	22.4	21.06	17.51	17.76		18.84	10.83	21.41	22.0	25.6	21.33	
nH	65-85	Not Applicable	Not Applicable	SU SU	7 01	7 13	7.01	6 95	6 97		7 08	6.88	6.75	7 1	6.82	6.47	
Specific Conductance	None	Not Applicable	Not Applicable	umhos/cm	2781	3345	3365	3434	3350		3390	3201	3186	3301	3415	3410	
Dissolved Oxygen	None	Not Applicable	Not Applicable	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. 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.
 S.U. : Standard Units.

<sup>o</sup>C : degrees Celsius.
 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.

14. Data validation based on USEPA "National Functional Guidelines", USWER 9353.0-132, EPA-940-R-014-002, Revision August 2014 for Organics and OSWER 9353.0-13
 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<sup>\*</sup>: 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). Data from 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-14A	MW	-14A	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A	MV	V-14
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
Detection Monitoring Parame	ters			Units	INITIAL ASSESSMENT MON.	INITIAL ASSES (RESA UNFILTERED	SSMENT MON. MPLE) 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.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON. (RESAMPLE)
Boron	None		Not Applicable	mg/L	1.18 #	1.42	1.16	1.23	0.98	0.907	0.882	0.839	0.857	0.918	
Calcium	None	1	Not Applicable	mg/L	319 #	402	388	314	306	280	278	298	263	330	
Chloride	250	Background Wall	Not Applicable	mg/L	14.2 #	14	14.8	13.5	14.2	13.3	14.9	14.3	12.8	13.8	
Fluoride	4		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	
pH (laboratory)	6.5 - 8.5		Not Applicable	S.U.	7.6 #	7.28		7.61	7.18	7.44	7.41	7.7	6.74	7.99	
Sulfate	250		Not Applicable	mg/L	1650 #	1660	1630	1540	1580	1650	1770	1680	1690	1,610	
Total Dissolved Solids	500		Not Applicable	mg/L	2710 #	2590	2580	2680	2750	2780	2630	2680	2630	2,690	
Assessment Monitoring Para	neters														
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	
Arsenic	0.010	Not Applicable		mg/L	<0.004 #	< 0.000400	< 0.000400	< 0.000400	< 0.000400	< 0.00040	< 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	
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	
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	
Chromium	0.1	Not Applicable		mg/L	<0.005 #	<0.000400	<0.000400	<0.000400	0.00110 J	< 0.000400	<0.000400	<0.000400	< 0.000400	<0.000400	
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	
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	
Lead	0.015	Not Applicable		mg/L	<0.0001 #	<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	
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	
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	
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	
I hallium	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	
Ra-226 + Ra-228 (combined)	5	Not Applicable		pCI/L	1.00 +/- 0.309 #	2.0		0.97	1.79	2.02	1.42	1.70	1.08	1.33	
Other Parameters	News		Not Applicable			~5		<5.00	5 00 I	1	-5.00	-5.00	0.00.1	0.00.1	
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	<5	<0		<5.00	5.00 J		<5.00	<5.00	6.00 J	6.00 J	
Carbonata Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L						321	321	332	348		
Disarbanata Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		5000000000000000000000000000000000000				C0 007	< 0 007	<5	< 5.00		
Bicarbonale Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		321				321	321	332	348		
	None	Not Applicable	Not Applicable	mg/L		<0				0.771(1)	0.026	0.162.1	< 5.00		
Iron, Total	None	Not Applicable	Not Applicable	mg/L						<u> </u>	0.230	0.162 J	0.257		
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L						0.0120	0.109 J	0.150 J	0.337		
Iron Ferrous Dissolved	None	Not Applicable	Not Applicable	mg/L						0.090	0.104	0.000	<0.203		
Iron Ferric	None	Not Applicable	Not Applicable	mg/L								0.0340 3	0.0200 H		
Iron Ferric Dissolved	None	Not Applicable	Not Applicable	mg/L								0.107	0.955		
Magnesium	None	Not Applicable	Not Applicable	mg/L		28.8	27.9			26.6	26.2	25.9	26.5		
	None	Not Applicable	Not Applicable	mg/L		20.0	21.5			0.000768(1)	0.000621.1	0.00165.1	<0.00000		
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.087.1#	0.478	0.500	1.64	<0.0300	0.000700(3)	<0.150	<0.00103 3	<0.000000	0.494.1	
Potassium	None	Not Applicable	Not Applicable	mg/L	0.001 0 #	8.64	8 37	1.04	~0.0300	7.66	7.94	7.87	7.84	0.404 J	
Sodium	None	Not Applicable	Not Applicable	mg/L		516	467			382	388	413	388		
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	3000 #	3270				002	3660	3260	3320	3 /00	
Sulfide	None	Not Applicable	Not Applicable	ma/l						<1	<1	<1	3.08		
Field Peremetere	, none						I						0.00		1
Field Parameters	NL	Net Any Reality	Nat Americant	00	00.4	40.0		47.75	04.4	0.1	00.7	45.04	00.0	45.0	1
	None	Not Applicable	Not Applicable	<u> </u>	23.1	16.2		1/./5	24.4	21	23./	15.84	20.0	15.2	
Pn Cassifia Candustanas	0.5 - 8.5	Not Applicable	Not Applicable	S.U.	0.93	0.9		1.28	(.1	1.04	1.1	1.33	1.00	1.1/	
Dissolved Overger	None	Not Applicable	Not Applicable	μmnos/cm	3491	3251		3380	3435	3107	3394	4453	2,989	3,300	
Ovidation Reduction Detertion	None	Not Applicable	Not Applicable	mg/L	0.31	0.19		1.40	0.02	0.79	0.59	0.34	0.40	0.00	
Uxidation-Reduction Potential	None	Not Applicable	Not Applicable		13.1	19.5		4.0	21.1	-45./	107.1	20.5	-128.9	35.2	
- anoidity	i tone	I NOLAPPIICADIE	Not Applicable	110	3.17	4.09	0.94	2.00	3.00	4./1	2.90	3.52	9.30	2.40	

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.

mg/L : milligrams per liter.
 pCi/L : picoCuries per liter.
 S.U. : Standard Units.

<sup>o</sup>C : degrees Celsius.
 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.

14. Data validation based on USEPA "National Functional Guidelines", USWER 9353.0-132, EPA-940-R-014-002, Revision August 2014 for Organics and OSWER 9353.0-13
 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<sup>\*</sup>: 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). Data from 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.



BMC         BMC <th></th> <th>MCL or</th> <th>Established Background</th> <th>Established GWPS</th> <th>Sample ID:</th> <th>MW-15A</th> <th>MW-15A</th> <th>MW-15A</th> <th>MW-15A</th> <th>DUP 1</th> <th>MW-15A</th> <th>MW-15A</th> <th>MW-15A</th> <th>MW-15A</th> <th>MW-15A</th> <th>MW-15A (Shallow)</th> <th>MW-15A (Deep)</th>		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)
Image: Problem in the proble	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
Boom         Inter         Non         Inter         In	Detection Monitoring Paramete	ors			Units	BACKGROUND	BACKGROUND 2	BACKGROUND 3	BACKG	ROUND 4	BACKGROUND	BACKGROUND 6	BACKGROUND 7	BACKGROUND 8	DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Cacham         Into         <	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	37	4 14
Chronie         220         16.3         New Agencie         mpl.         221         128         12.4         12.5         12.4         12.5         12.6	Calcium	None	670.30	Not Applicable	mg/L	152	154	181	209	279	151	117	183	156	160	93.4	129
Piconic         4         0.0399         Noi Applicable         rmgL         1.22         1.32         1.32         1.32         1.42         1.42         1.45         1.09         1.37         1.78	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
api Laboratory         6.5         6.5         7.5         7.6        7.6         7.6         <	Fluoride	4	0.6359	Not Applicable	mg/L	1.23	1.32	1 49	1.32	1.33	14	1 15	1 09	1.37	1 76	12	1 17
Skila         263         11.283         Nik Aspicable         mult         1490         1790	pH (laboratory)	65-85	6 485 - 8 018	Not Applicable	SU	7.66	8.1	8	7.6	77	7.6	74	7.5	7.5	7.6	7.8	7.8
Total Teschool 2016         900         2774         Not Applicable         Particip	Sulfate	250	1.824	Not Applicable	mg/L	1450	1570	1580	1630	1610	1580	1760	1610	1720	1690	1510	1490
Uniterimant of Normal N	Total Dissolved Solids	500	2,774	Not Applicable	mg/L	2470	2420	2410	2540	2530	2460	2640	2600	2710	2660	2490	2610
Ammony         0.00         Na Applicable         0.00 (NL)         ng.         0.000000         0.000000         0.000000         0.000000         0.00000         0.00000	Assessment Monitoring Param	neters					0	n				n		n			
Azenet <sup>®</sup> O        O         O         O<	Antimony	0.006	Not Applicable	0.006 (MCL)	ma/L	<0.000500	<0.000800	<0.000800	<0.00800	< 0.00400	<0.000800	< 0.00400	<0.000800	< 0.00400			
Barlum         2         NA Applicable         2 (MG.)         mpl.         0.089         0.028         0.0283         0.0275         0.0171         m-         m- </td <td>Arsenic</td> <td>0.010</td> <td>Not Applicable</td> <td>0.01 (MCL)</td> <td>ma/L</td> <td>0.00242</td> <td>0.00218</td> <td>0.00205</td> <td>&lt; 0.00400</td> <td>0.00407 J</td> <td>0.00156 J</td> <td>&lt; 0.00200</td> <td>0.00218</td> <td>0.00259 J</td> <td></td> <td></td> <td></td>	Arsenic	0.010	Not Applicable	0.01 (MCL)	ma/L	0.00242	0.00218	0.00205	< 0.00400	0.00407 J	0.00156 J	< 0.00200	0.00218	0.00259 J			
Ben Jiam         Dot M         Na Apjetabe         Dot Q         Na Apjetabe         Option         South         South<	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			
Cadmam         0.05         Met Applicable         0.055(MC)         mg/L         40.00000 <t< td=""><td>Beryllium</td><td>0.004</td><td>Not Applicable</td><td>0.004 (MCL)</td><td>mg/L</td><td>&lt; 0.00100</td><td>&lt; 0.000100</td><td>&lt; 0.000100</td><td>&lt; 0.00100</td><td>&lt; 0.000500</td><td>&lt; 0.000100</td><td>&lt; 0.000500</td><td>&lt; 0.000100</td><td>&lt; 0.000500</td><td></td><td></td><td></td></t<>	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			
Chromium         0.1         Nex Applicable         0.01 (MC)         mgL         0.0008331         *0.00500         *0.00500         *0.00500         *0.00500         *0.00050         *0.00050         *0.00050         *0.000251         *0.00005         *0.000251         *0.00005         *0.000251         *0.00005         *0.000251         *0.00005         *0.00005         *0.000251         *0.000251         *0.00050         *0.00051         *0.000251         *0.00050         *0.00051         *0.000151         *0.000151         *0.000151         *0.000150         *0.00051         *0.000510         *0.000510         *0.000510         *0.000510         *0.000510         *0.000510         *0.000510         *0.000510         *0.000510         *0.000510         *0.000510         *0.00050         *0.00050         *0.00050         *0.00050         *0.00050         *0.00050         *0.00050         *0.000510         *0.	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			
Cobalt         None         Nor Applicable         0.0006(AL)         mmjL         0.0006041         0.0006614         0.0002614         0.0000215         0.000050         1.78         1	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			
Fluchés         4         Nel Ageitade         4 (NCL)         migL         1.23         1.42         1.33         1.44         1.15         1.09         1.37         1.76         1.2         1.17           Lad         0.051         Nel Ageitade         0.051         Nel Ageitade         0.051         Nel Ageitade         0.051         Nel Ageitade         0.071         migL         0.0071         0.0071         0.00715	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			
Lead         0.015         Net Applicable         0.015 (MCL)         mg/L         0.00028/J         0.000100         <0.000100         <0.000100         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.0000500         <0.0000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500         <0.0000500	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
Lithum         None         No. Applicable         0.025 (NLC)         mgL         0.0046         0.0375 (0.0057)         0.00015 (0.000175)         0.00515 (0.000176)         0.00516 (0.000176)         0.00520 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00516 (0.000176)         0.00176 (0.000176)         0.	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			
IMercury         0.002         Net Applicable         0.002 (MCL)         mg/L         0.000150	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
Molyberun         None         Not Applicable         0.1 (AC1, 0)         mgL         0.0380         0.0285         0.276         0.043         0.0281         0.182         0.225         0.275         0.018           Selenum         0.05         Nrd Applicable         0.000000         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800         <0.000800	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			
Sale num         0.05         Nit Applicable         0.06 (U)         mgL             ·	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
Thallum         0.02         Not Applicable         0.002 (NCL)         mg/L <td>Selenium</td> <td>0.05</td> <td>Not Applicable</td> <td>0.05 (MCL)</td> <td>mg/L</td> <td>&lt;0.000600</td> <td>&lt;0.000300</td> <td>&lt;0.000300</td> <td>&lt;0.00300</td> <td>&lt;0.00150</td> <td>0.000357 J</td> <td>&lt; 0.00150</td> <td>0.000539 J</td> <td>0.00161 J</td> <td></td> <td></td> <td></td>	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			
RB-228 (combined)       5       Not Applicable       5 (MCL)       pC/L       1.0 1+/-0.288       0.86 +/-0.371       0.36 +/-0.381       1.38 +/-0.481       1.38 +/-0.380       2.18 +/-0.380       2.19 +/-0.382  <	Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000500	<0.000800	<0.000800	<0.00800	<0.00400	<0.000800	<0.00400	<0.000800	< 0.00400			
Uniter Variantees           One Not Applicable         Not Ap	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			
Chemical Oxygen Demand (COD)         Nore         Nor Applicable         Mod. Applicable         mg/L <th< td=""><td>Other Parameters</td><td>1</td><td></td><td></td><td></td><td></td><td>1</td><td>1</td><td></td><td></td><td>1</td><td>1</td><td></td><td>1</td><td></td><td></td><td></td></th<>	Other Parameters	1					1	1			1	1		1			
Idal Akaininy as CaCO3       None       None       None       None       None Applicable       mg/L  <	Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L												
Cardonate Arkalinity as CaCU3         Nohe         Not Applicable         Mort Applicable         mgL	Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L												
Bicardonate Alkalinity SCACU3         None         Nol Applicable         mg/L	Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									<5.00			
Improvable Aukalinity         None         Nork Applicable         Mot Appli	Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									130			
India         Note         Note Applicable         Not Applicable         Not Applicable         Not Applicable         Mode Applicable         M	Hydroxide Aikalinity	None	Not Applicable	Not Applicable	mg/L									<5.00			
Information         Noise         Noise         Noise Noise         Noise Noise         Noise Noise         Noise Noise         Noise Noise         Noise         Noise Noise         Noise Noise         Noise Noise         Noise         Noise Noise         Noise Noise         Noise Noise         Noise Noise         Noise Noise         Noise Noise         Noise Noise         Noise Noise         Noise Noise         Noise Noise         Noise Noise         Noise         Noise         Noise Noise         Noise         Noise Noise         Noise Noise         Noise         Noise Noise         Noise	Iron, Total	None	Not Applicable	Not Applicable	mg/L												
India Pariods         Note Not Applicable         Not Applicable         Not Applicable         mgL	Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L												
Indit Priority, Dissolved         None         Not Applicable         Not Applicable         mg/L	Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L												
Indit Path         None         Not Applicable         Not Applicable         Indit	Iron, Ferrio	None	Not Applicable	Not Applicable	mg/L												
Indit         Note         Not Applicable         Not Applicable         Indit Appl	Iron, Ferric Dissolved	None	Not Applicable	Not Applicable	mg/L												
Inder Modypicable         None         Not Applicable         Not Applicable         mg/L	Magnesium	None	Not Applicable	Not Applicable	mg/L									0.36			
Index         Note         Note Applicable         Not Applicable	Molybdenum Dissolved	None	Not Applicable	Not Applicable	mg/L									3.50			
Indicator         Nor Applicable         Nor Applicable         Indicator         Indinin         Indicator         Indicator	Nitrate as N	10	Not Applicable	Not Applicable	mg/L												
None         Not Applicable         Not Applicable         Integration	Potassium	None	Not Applicable	Not Applicable	mg/L									5.28			
None         Not Applicable         Not Applicable <td>Sodium</td> <td>None</td> <td>Not Applicable</td> <td>Not Applicable</td> <td>mg/L</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>541</td> <td></td> <td></td> <td></td>	Sodium	None	Not Applicable	Not Applicable	mg/L									541			
Opening Conduction (tabbility)         None         Not Applicable         Not Applicable         mode         <	Specific Conductance (Jaboratory)	None	Not Applicable	Not Applicable	umbos/cm												
Field Parameters         None         Not Applicable         Not Applicable         °C         20.05         24.8         21.87         18.2          7.5         7.6         7.47         7.42         7.72         7.42         7.43           pH         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         Not Applicable         mmhos/cm         3050         3373         3442         3430          3488         3520         3498         3524         3505         3548         3578           Dissolved Oxygen         None         Not Applicable         mg/L         0.16         0.37         0.06         0.33          0.29         0.22         0.08         0.06         0.14         1.62         1.23           Oxidation-Reduction Potential         None         Not Applicable         mV         66.1         -61.7         -96.7         -211.9          -140.6         -81.1         -82.3         43.1         -101.3         133.1	Sulfide	None	Not Applicable	Not Applicable	ma/L												
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           pH         6.5 - 8.5         Not Applicable         Not Applicable         SUL         7.73         7.72         7.69         7.59          7.6         7.47         7.42         7.72         7.42         7.43           Specific Conductance         None         Not Applicable         Not Applicable         3050         3373         3442         3430          3488         3520         3498         3524         3505         3548         3578           Dissolved Oxygen         None         Not Applicable         Mot Applicable         mg/L         0.16         0.37         0.06         0.33          0.29         0.22         0.08         0.06         0.14         1.62         1.23           Oxidation-Reduction Potential         None         Not Applicable         mV         66.1         -61.7         -96.7         -211.9          -140.6         -81.1         -82.3         43.1         -101.3         133.1         14	Field Parameters						11	11			1			JI			
International         None         Not Applicable         NU         4.07         0.7         0.18         0.31 <td>Temperature</td> <td>None</td> <td>Not Applicable</td> <td>Not Applicable</td> <td>°C</td> <td>20.05</td> <td>24.8</td> <td>21.87</td> <td>18.2</td> <td></td> <td>20.43</td> <td>10.3/</td> <td>20.24</td> <td>22.68</td> <td>21.24</td> <td>25.05</td> <td>23.28</td>	Temperature	None	Not Applicable	Not Applicable	°C	20.05	24.8	21.87	18.2		20.43	10.3/	20.24	22.68	21.24	25.05	23.28
None         None         Not Applicable         Not Applicable         MU         6.1.7         1.0.9 <th1.0.9< th=""> <th1.0.9< th=""> <th1.0.9< th=""></th1.0.9<></th1.0.9<></th1.0.9<>	nH	65 95	Not Applicable	Not Applicable	<u> </u>	20.00	7 72	7.60	7.50		20.43	7.6	7 /7	7.42	7 79	7.40	7.43
Operation         None         Not Applicable         Not Applicable         mm         State         Stat	Specific Conductance	0.0 - 0.0 None	Not Applicable	Not Applicable	umbos/cm	3050	3373	3442	3430		3/88	3520	3/08	3524	3505	3548	3578
Displayed Cryptical         Note         Not Applicable         Not Applicable         NU         66.1         -61.7         -96.7         -21.9          -140.6         -81.1         -82.3         43.1         -101.3         133.1         140.8           Turbidity         None         Not Applicable         NTU         4.97         0.7         0.18         0.31          0.52         0.66         0.53         13.1         0.39         5.5         1.40.8		None	Not Applicable	Not Applicable	mg/l	0.16	0.37	0.06	0.33		0.20	0.22	0.08	0.06	0.14	1.62	1 23
Turbidity None Not Applicable Not Applicable NTU 0.1 0.7 0.1 0.1 -01.3 0.52 0.66 0.53 1.31 0.39 5.5 10.8	Ovidation-Reduction Potential	None	Not Applicable	Not Applicable	m\/	66.1	-61.7	-96.7	-211.9		-140.6		-82.3	43.1	-101 3	133.1	1.23
	Turbidity	None	Not Applicable	Not Applicable	NTU	4.97	0.7	0.18	0.31		0.52	0.66	0.53	1.31	0.39	5.5	1.68

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.

<sup>6</sup>C : degrees Celsius.
 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.

Cells shaded in blue indicate results that are above the laboratory MDL.
 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.

in an analysis performed.
 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.

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). Data from 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-15A	DUP 2	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	n-19	25-Apr-19	2-Oct-19	18-Jun-20	8-Oct-20	31-Mar-21	13-Oct-21	30-Mar-22	Jun-22
Detection Monitoring Paramet	ers			Units	INITIAL ASSE	SSMENT MON.	INITIAL ASSES (RESA UNFILTERED	SMENT MON. MPLE) 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.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON. (RESAMPLE)
Boron	None	1.896	Not Applicable	ma/L	3.76 #	3.77 #	3.52	5.48	3.61	3.19	4.57	3.33	3.35	2.14	3.35	
Calcium	None	670.30	Not Applicable	ma/L	170 #	171 #	129	187	92	82.4	141	89.8	78.6	96.6	119	
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	
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	
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	
Sulfate	250	1,824	Not Applicable	mg/L	1570 #	1580 #	1610	1540	1310	1510	1680	1650	1590	1580	1,540	
Total Dissolved Solids	500	2,774	Not Applicable	mg/L	2650 #	2570 #	2590	2640	2570	2500	2520	2460	2420	2370	2,450	
Assessment Monitoring Paran	neters															
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.0008 #	<0.0008 #	< 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	0.00179 J #	0.00166 J #	0.000626 J	0.00122 J	0.000663 J	0.000676 J	0.000965 J	0.000592 J	0.000523 J	0.00113 J	0.000661 J	
Barium	2	Not Applicable	2 (MCL)	mg/L	0.0226 #	0.0229 #	0.023	0.0192	0.0217	0.0216	0.0291	0.0199	0.0186	0.0224	0.0222	
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.0001 #	<0.0001 #	<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 #	<0.0001 #	0.000231 J	<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	0.00119 J #	<0.0005 #	<0.000400	< 0.000400	<0.000400	< 0.000400	0.000900 J	<0.000400	<0.000400	0.000502 J	<0.000400	
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.000293 J #	0.000210 J #	< 0.000200	0.000374 J	0.000231 J	0.000257 J	0.000402 J	0.000221 J	< 0.000200	0.000296 J	0.000651 J	
Lood	4	Not Applicable	4 (IVICL)	mg/L	1.21#	1.2 #	1.22	1.40	1.02	1.24	0.00	1.14	1.13	1.01	1.31	
Leau	0.015	Not Applicable	0.015 (MCL)	mg/L	0.000360 J #	0.000145 J #	0.0701	0.0582	0.000000	0.000600	0.111	0.000000	0.000000	0.0627	0.0815	
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0013 #	<0.000100 #	<0.0701	<0.0002	<0.000300	<0.000300	<0.000300	<0.0709	0.000420.1	<0.0027	<0.0013	
Molybdenum	None	Not Applicable	0.002 (MOL)	mg/L	0.233 #	0.228 #	0.205	0.0000000	0.0000000	0.196	0.269	0.167	0.0000420.0	0.149	0.181	
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	0.000459.1#	0.000353.1#	<0.0011	<0.0011	<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 #	<0.0008 #	0.000565.1	0.000375.1	<0.000110	<0.00110	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	1.28 +/- 0.294 #	1.66 +/- 0.358 #	1.46		<0.87	2 03	1 67	1 72	1 45	2.04	1.61	
Other Parameters										2.00						
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	
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L							209	204	196	226		
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L			<5				<5	<5	<5	<5.00		
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L			149				209	204	196	226		
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L			<5				<5	<5	<5	<5.00		
Iron, Total	None	Not Applicable	Not Applicable	mg/L							0.0535(J)	0.0496 J	0.0492 J	0.368		
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L							<0.0120	0.165 J	0.133 J	0.590		
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L							0.0410(J)	0.0210 J	0.054	0.284		
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L									0.0320 J	<0.0200 H		
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L									< 0.02	0.0840		
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L									0.101	0.590		
Magnesium	None	Not Applicable	Not Applicable	mg/L			12.4	10.9			165	11	10.9	10.2		
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L							0.168	0.153	0.159	0.181		
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	0.894	
Potassium	None	Not Applicable	Not Applicable	mg/L			5.98	5.47			8.24	5.15	5.47	4.97		
Sodium	None	Not Applicable	Not Applicable	mg/L			746	703			1040	627	594	421		
Sulfide	None	Not Applicable	Not Applicable	umnos/cm	3490 #	3480 #	3540				1 12	3/80	3400	3370	3,620	
Sunde	INOTIC	Not Applicable		IIIg/L							1.12			<1.00		
Field Parameters	NL	Net Any Reality	Net Americant	00	00.4		40.5		00.70	07.05	04.00	00.0	40.07	00.4	40.4	
	None	Not Applicable	Not Applicable	<u>ँ</u>	23.1		18.5		20.72	27.05	24.09	7.71	10.3/	22.4	18.1	
Pn Specific Conductors	0.5 - 8.5	Not Applicable	Not Applicable	S.U.	1.53		1.45		1.82	1./1	1.13	1./1	1.82	7.01	2 200	
Discolved Oxygon	None	Not Applicable	Not Applicable	µnnos/cm	3003		0.41		3044	35/5	333/	3422	4,040	3,431	3,380	
Ovidation-Reduction Potential	None	Not Applicable	Not Applicable	m\/	-60.0		0.41		1.24	- 70.5	50.2	167.2	4.97	-50.0	0.51	
Turbidity	None	Not Applicable	Not Applicable	NTU	4.11		1,13	1.09	0.55	0.84	2.6	1.73	0.88	3.34	2.38	
L .	1			1		1			0.00	0.01	2.0					

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.

<sup>6</sup>C : degrees Celsius.
 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.

Cells shaded in blue indicate results that are above the laboratory MDL.
 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.

in an analysis performed.
 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.

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). Data from 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
Detection Monitoring Paramet	ters			Units	BACKGROUND	BACKGROUND 2	BACKGROUND 3	BACKGROUND 4	BACKGROUND 5	BACKGROUND 6	BACKGROUND 7	BACKG	ROUND 8	DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
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 Paran	neters															
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	<0.00800			
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			
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	0.00604 J	< 0.000500	0.0579	< 0.00250	< 0.000500	< 0.000500	< 0.00500	< 0.000500	< 0.000500			
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	< 0.00250	0.000340 J	0.000498 J	< 0.000500	< 0.000100	< 0.000100	< 0.00100	0.000354 J	0.000343 J			
Fluoride	4	Not Applicable	4 (MCL)	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
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	0.235 (UTL)	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	0.002 (MCL)	mg/L	< 0.000150	< 0.000150	< 0.000150	<0.000150 UJ	< 0.000150	< 0.000150	< 0.000150	< 0.000150	< 0.000150			
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	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	0.05 (MCL)	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	0.002 (MCL)	mg/L	< 0.000500	<0.00800	<0.000800	< 0.00400	<0.008000	<0.000800	< 0.00400	<0.008000	<0.00800			
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	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																
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
pH	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	None	Not Applicable	Not Applicable	μmhos/cm	2066	2327	2492	2395	2620	2275	2256	2330		2463	2436	2678
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.38	2.53	0.31	0.25	0.59	0.81	0.04	0.16		0.37	1.59	2.7
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-47.3	46	-106.4	-135.8	-104.9	10.2	0.4	60.3		-83.7	186.4	150.4
Turbidity	None	Not Applicable	Not Applicable	NTU	2.18	0.85	0.33	0.98	0.18	0.63	0.61	1.11		1.21	3.49	2.96

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.

mg/L : milligrams per liter.
 pCi/L : picoCuries per liter.
 S.U. : Standard Units.

<sup>o</sup>C : degrees Celsius.
 μmhos/cm : micromhos per centimeter.

millivolts.
 NTU : Nephelometric Turbidity Unit.
 < : 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.

Cells shaded in blue indicate results that are above the laboratory MDL.
 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.

in no analysis performed.
 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.

14. Data validation based on USEPA "National Functional Guidelines", USWER 9353.0-132, EPA-940-R-014-002, Revision August 2014 for Organics and OSWER 9353.0-13
 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<sup>\*</sup>: 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.

#: Data from hintial 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). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
 \*: Data for hintial 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	MV	/-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MV	V-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
Detection Monitoring Paramet	ers			Units	INITIAL ASSESSMENT MON.	INITIAL ASSES (RESA UNFILTERED	SSMENT MON. MPLE) 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.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON. (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	
Calcium	None	670.30	Not Applicable	mg/L	221 #	215	215	192	149	186	166	140	158	153	
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
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
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
Sulfate	250	1,494	Not Applicable	mg/L	959 #	1020	1030	974	1020	1030	929	1070	1110	1100^	1090
Total Dissolved Solids	500	1,883	Not Applicable	mg/L	1780 #	1740	1670	1740	1810	1610	1610	1790	1590	1670^	1700
Assessment Monitoring Paran	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	
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	
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	
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	
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	
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	
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	
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
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	
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	
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	
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	
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	
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	
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	
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
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L						232	233	228	264		
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5.00		
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		256				232	233	228	264		
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5.00		
Iron, Total	None	Not Applicable	Not Applicable	mg/L						0.0358(J)	0.125 J	0.0536 J	0.369		
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L						0.0160(J)	0.0694 J	0.0140 J	0.190 J		
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L						0.0380(J)	0.0240 J	<0.020	0.191		
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L								<0.020	<0.0200 H		
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L								0.0536	0.178		
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L								< 0.02	0.190		
Magnesium	None	Not Applicable	Not Applicable	mg/L		10.2	10.2			8.44	7.59	7.65	7.38		
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L						0.173	0.16	0.18	0.189		
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
Potassium	None	Not Applicable	Not Applicable	mg/L		4.18	4.07			2.85	3.09	3.12	3.18		
Sodium	None	Not Applicable	Not Applicable	mg/L		405	394			309	316	325	295		
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	2240 #	2340					2400	2420	2340	2500^	2,910
Sulfide	None	Not Applicable	Not Applicable	mg/L						<1	1.4	<1	<1.00		
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
pH	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
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	2816	2273		2330	2836	2438	2615	3178	2,699	1,865	2,358
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.25	1.37		0.83	3.67	2.18	1.99	0.46	3.3	1.06	0.42
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
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

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.

mg/L : milligrams per liter.
 pCi/L : picoCuries per liter.
 S.U. : Standard Units.

<sup>o</sup>C : degrees Celsius.
 μmhos/cm : micromhos per centimeter.

millivolts.
 NTU : Nephelometric Turbidity Unit.
 < : 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.

Cells shaded in blue indicate results that are above the laboratory MDL.
 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.

in no analysis performed.
 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.

14. Data validation based on USEPA "National Functional Guidelines", USWER 9353.0-132, EPA-940-R-014-002, Revision August 2014 for Organics and OSWER 9353.0-13
 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<sup>\*</sup>: 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.

#: Data from hintial 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). Data from unfiltered analysis from January 2019 is appropriate for statistical evaluation.
 \*: Data for hintial 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	Comple 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
Detection Monitoring Paramet	tors	<u> </u>	<u> </u>	Units	BACKGROUND	BACKGROUND	BACKGROUND 3	BACKGROUND 4	BACKGROUND 5	BACKGROUND 6	BACKGROUND 7	BACK	GROUND 8	DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Boron	Nono	1 906	Not Applicable	mall	0.624	0.596	0.954	0.020 1	0.917	<0.975	0.712	0.666	0.64	0.599	0.650	0.945 1
Calcium	None	670.30	Not Applicable	mg/L	750	520	540	535	4/1	727	564	528	537	136	540	787
Chloride	250	18.51	Not Applicable	mg/L	4.08	3.64	3.46	5.58.1*	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	0.480.1*	0.488	0.266	0.361	0.328	0.323	0.324	0.47	0.317
pH (laboratory)	65-85	6 485 - 8 018	Not Applicable	SU	6.82	6.8	7.5	7.6	7 1	6.9	6.8	6.9	6.8	6.9	72	7
Sulfate	250	1.557	Not Applicable	ma/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 Parar	neters							n			-nr					
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	< 0.000500	< 0.00100	<0.000800	< 0.00800	<0.00800	<0.000800	< 0.000800	< 0.000800	<0.000800			İ
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	<0.00800	< 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			
Nolybdenum	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
Thellium	0.05	Not Applicable	0.05 (IVICL)	mg/L	<0.000600	<0.00120		<0.00300	0.000526 J	<0.00150	<0.000300	<0.000300	<0.000300			
Ra-226 + Ra-228 (combined)	0.002	Not Applicable	5 (MCL)	nCi/L	<pre>&lt;0.000500</pre>	0.00100	1 32 ±/- 0 425	0.536 ±/- 0.356	0.105 ±/- 0.273 11		< 0.000000	<pre>&lt;0.000000</pre>	<pre>&lt;0.0000000</pre>			
Other Parameters	<u> </u>	Not Applicable	J (MOL)	p01/L	0.000 1/- 0.201	0.200 1/- 0.200 0	1.02 1/- 0.420	0.000 1/- 0.000	0.133 1/2 0.213 0	0.011 1/2 0.200 0	0.473 17-0.211	0.001 1/2 0.221	0.100 1/- 0.201 0			
Chamical Overgan Damand (COD)	None	Not Applicable	Not Applicable	mg/l							1					1
Total Alkalipity as CaCO2	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	ma/L												
Iron, Dissolved	None	Not Applicable	Not Applicable	ma/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	10.70		1	1		1			1
Iemperature	None	Not Applicable	Not Applicable	<u>°C</u>	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	μmnos/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	5.5/	4.59
Turbidity	None	Not Applicable	Not Applicable	NTU	42.0	0 02	-99.0	-103.4	0 11	-33.9	-01.3	0.7		-49.2 0.52	4.63	14 5
	1	- Tor Applicable	1 ior Applicable		0.00	0.52	U. 7	0.40	0.11	0.21	U V.27	0.01		0.02	7.00	17.0

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.

mg/L : milligrams per liter.
 pCi/L : picoCuries per liter.
 S.U. : Standard Units.

5. °C : degrees Celsius.
 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.

Cells shaded in blue indicate results that are above the laboratory MDL.
 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). Data from 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-17	MV	V-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MV	V-17
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	3-Oct-18	10-J	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
Detection Monitoring Paramet	ters			Units	INITIAL ASSESSMENT MON.	INITIAL ASSE (RESAMPLE) FILT	SSMENT MON. UNFILTERED ERED	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)
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	
Calcium	None	670.30	Not Applicable	mg/L	461 #	591	499	499	555	494	453	467	428	435	
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
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
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
Sulfate	250	1,557	Not Applicable	mg/L	821 #	1480	1200	1100	1310	1390	1,220 H	1310	1390	1970^	1,460
Total Dissolved Solids	500	2,343	Not Applicable	mg/L	1670 #	2300	1870	2400	2160	2230	2160	2200	2210	2340^	2,220
Assessment Monitoring Parar	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	
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	
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	
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	
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	
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	
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	<0.0001 #	0.000238 J	<0.000200	0.000313 J	<0.000200	0.000281 J	<0.000200	0.000239 J	0.000275 J	0.00148 J	
Fluoride	4	Not Applicable	4 (MCL)	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
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	
Litnium	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	
Mercury	0.002	Not Applicable		mg/L	<0.000100 #	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.000142 J	0.0000540 J	<0.0000300	
Solonium	0.05	Not Applicable	0.1 (ACL)	mg/L	<pre></pre>	<0.000000	<0.000000	0.000071J	<0.000600	<0.000600	<0.000600	0.000950 J	<0.000000		
Thellium	0.00	Not Applicable	0.03 (MCL)	mg/L	<0.0000753#	<0.0011	<0.0011	<0.00110	0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00149 J	
Ra-226 + Ra-228 (combined)	0.002	Not Applicable	5 (MCL)	nCi/l	1 27 +/- 0 335 #	<0.000200	<0.000200	<0.000200	<0.76	<0.000200	<0.000200	<0.000200	0.000200	<0.000200	
Other Parameters	5	Not Applicable	J J (NOL)	p0//L	1.27 17 0.000 #	40.70		40.70	40.70	<0.00	<0.09	40.04	0.01	40.75	
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/l	6 13 1 #	<5.00		<5.00	<5.00		<5.00	<5.00	7.00 1	8.00.1.5	<5.00
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	0.133#	-0.00		-0.00	-0.00	28/	273	260	7.00 J	0.00 J	<5.00
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5.00		
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		280				284	273	269	288		
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5.00		
Iron Total	None	Not Applicable	Not Applicable	mg/L						<0.0120	<0.0120	0.0541.J	<0.00		
Iron Dissolved	None	Not Applicable	Not Applicable	mg/L						<0.0120	<0.0120	<0.00110	0.0198.1		
Iron Ferrous	None	Not Applicable	Not Applicable	mg/L						0.02(.1)	<0.02	<0.02	<0.0200		
Iron Ferrous Dissolved	None	Not Applicable	Not Applicable	mg/L								<0.02	<0.0200 H		
Iron, Ferric	None	Not Applicable	Not Applicable	ma/L								0.0541	< 0.0200		
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	ma/L								< 0.02	<0.0200		
Magnesium	None	Not Applicable	Not Applicable	ma/L		38.1	31.3			37.8	30.9	29.3	34.6		
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L						0.00123(J)	< 0.000600	0.00292 J	< 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
Potassium	None	Not Applicable	Not Applicable	mg/L		5.37	4.9			5.15	4.42	4.19	4.94		
Sodium	None	Not Applicable	Not Applicable	mg/L		35.7	32.9			35.6	29.2	28.2	32.5		
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	1920 #	2450					2610	2460	2390	11900 ^	2,920
Sulfide	None	Not Applicable	Not Applicable	mg/L						<1	<1	<1	1.12		
Field Parameters				Units											
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
pH	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
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	2548	2416		2470	2458	2344	2393	3321	2,467	1,811	2,369
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
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	237.5	57.8		2.4	148.3	-28.1	129.9	-2.5	61.7	103.6	81.5
Turbidity	None	Not Applicable	Not Applicable	NTU	5.4	1.24	0.69	0.63	0.65	2.28	0.58	0.75	1.80	0.85	1.61

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.

mg/L : milligrams per liter.
 pCi/L : picoCuries per liter.
 S.U. : Standard Units.

5. °C : degrees Celsius.
 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.

Cells shaded in blue indicate results that are above the laboratory MDL.
 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). Data from 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-18	MW-18	MW-18	DUP 2	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18 (Shallow)	MW-18 (Deep)
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	1-Jun-16	3-Aug-16	30-Sep-16	30-Sep-16	2-Dec-16	31-Jan-17	5-Apr-17	7-Jun-17	10-Aug-17	18-May-18	2-Aug-18	10-Aug-18
Detection Monitoring Parame	ters			Units	BACKGROUND	BACKGROUND 2	BACKO	GROUND 3	BACKGROUND 4	BACKGROUND 5	BACKGROUND 6	BACKGROUND 7	BACKGROUND 8	DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Boron	None	1.896	Not Applicable	mg/L	5.91	6.45	6.88	6.15	6.82	9.71	8.51	6.39	6.51	6.71	4.86	6.65
Calcium	None	670.30	Not Applicable	mg/L	39.7	36.9	34.7	35.8	34.5	34.1	30.5	37.3 J*	28.7	28.1	36.1	31.1
Chloride	250	18.51	Not Applicable	mg/L	6.77	6.71	6.67	6.8	6.02	6.31	5.94	5.54 J*	6.1	5.19	8.04	5.33
Fluoride	4	0.6359	Not Applicable	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
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	10.4	10.3	10	10	10.2	10.3	10.6	10.7	10.7	10.1	7.8	10.2
Sulfate	250	1,820	Not Applicable	mg/L	1430	1800	1320	1320	1300	1090	1170	1200	1070	1120	996	1030
Total Dissolved Solids	500	2,006	Not Applicable	mg/L	2000	1910	1870	1860	1860	1830	1800	1850	1850	1740	1660	1730
Assessment Monitoring Para	meters										·					
Antimony	0.006	Not Applicable	0.006 (MCL)	ma/L	< 0.00250	< 0.00100	<0.000800	<0.000800	<0.00800	<0.000800	< 0.000800	< 0.00400	<0.000800			
Arsenic	0.010	Not 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	Not 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	0.004	Not Applicable	0.004 (MĆL)	mg/L	< 0.00500	< 0.00200	< 0.000100	< 0.000500	< 0.00100	< 0.000100	< 0.000100	< 0.000500	<0.000100			
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	< 0.00200	<0.000800	< 0.000100	< 0.000100	< 0.00100	0.000242 J	0.000123 J	< 0.00100	<0.000100			
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	< 0.00250	< 0.00100	< 0.000500	< 0.00250	< 0.00500	< 0.000500	< 0.000500	< 0.00500	<0.000500			
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	< 0.00250	< 0.00100	< 0.000100	< 0.000100	< 0.00100	< 0.000100	< 0.000100	< 0.00100	<0.000100			
Fluoride	4	Not 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	0.015	Not 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	None	Not 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	0.002	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	0.43	0.433	0.392	0.417	0.434	0.403	0.4	0.442	0.39		0.113	0.319
Selenium	0.05	Not 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	0.002	Not 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 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	J 0.282 +/- 0.201 U	0.146 +/- 0.228 U	0.445 +/- 0.200			
Other Parameters	1			1		1	1		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									52.6			
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									<5.00			
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L									25.3			
Iron, I otal	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												
Magnacium	None	Not Applicable	Not Applicable	mg/L									<0.000			
Malukalarum Disseluad	None	Not Applicable	Not Applicable	mg/L									<0.220			
Nitroto og N	None 10	Not Applicable	Not Applicable	mg/L												
Deteosium	Nono	Not Applicable	Not Applicable	mg/L												
Sodium	None	Not Applicable	Not Applicable	mg/L									522			
Specific Conductance (Inheratory)	None	Not Applicable	Not Applicable	IIIg/L									523			
Sulfide	None	Not Applicable	Not Applicable	mg/l												
Field Parameters	- NONE	- Not Applicable	not Applicable													
	Nonc	Net Applicable	Not Applicable	00	10.74	24.14	10.50	1	10.70	10.45	19.46	22.5	22.11	21.12	24.1	00.07
	None	Not Applicable	Not Applicable	<u>ະ</u> ບ ຊາງ	19.74	24.14	19.09		10./0	10.40	10.40	22.0	10.54	21.12	24.1	. 22.37
Pn Specific Conductors	0.5 - 8.5	Not Applicable	Not Applicable	S.U.	10.88	10.40	10.95		10.88	10.0/	10.0	00.00	10.54	10.74	9./ 1	10.41
Dissolved Owger	None	Not Applicable	Not Applicable	µmmos/cm	2022	2004	2900		2804	2/04	2098	2000	2/10	2030	2008	2000
Ovidation Reduction Potential	None	Not Applicable	Not Applicable	m\/	2.00	0.15	100		0.2	0.21	0.09	0.00	0.03	U.1/ 120.0	4.03	-110.7
	None	Not Applicable	Not Applicable	NTU	0.33	-41./	0.33		-220.0	- 192.0	02.0	-11	1.21	-139.0	-03.1	-119.7
L			1 Not Applicable		0.00	0.01	0.00		0.10	0.03	0.00	1.00	1.21	0.22	0.02	0.02

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.

pCi/L : picoCuries per liter.
 S.U. : Standard Units.

<sup>6</sup>C : degrees Celsius.
 μmhos/cm : micromhos per centimeter.

7. mV : millivolts.

8. NTU : Nephelometric Turbidity Unit.

No. Nepretories induction and the provided effective induction of the induction in the induction is an approximate value.
 J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.

Cells shaded in blue indicate results that are above the laboratory MDL.
 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.

in an analysis performed.
 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.

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). Data from 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-18	M	W-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	DUP 3	MW-18
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	3-Oct-18	14-	Jan-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
Detection Monitoring Parame	ters			Units	INITIAL ASSESSMENT MON.	INITIAL ASSE (RES) UNFILTERE	ESSMENT 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.	FIRS ASSES MO	T 2022 SMENT DN.	FIRST 2022 ASSESSMENT MON. (RESAMPLE)
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	
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	
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	
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	
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	
Sulfate	250	1,820	Not Applicable	mg/L	1090 #	1110	1120	933	1020	888	794	904	896	837	842	
Total Dissolved Solids	500	2,006	Not Applicable	mg/L	1760 #	1630	1660	1680	1550	1340	1270	1260	1320	1,300	1,310	
Assessment Monitoring Para	meters										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	
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	
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	
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 #	0.000374 J	0.000431 J	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.000298 J	0.000202 J	0.000207 J	
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	
Eluoride	None	Not Applicable	0.006 (ACL)	mg/L mg/l	<0.0001# 1.37#	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	
	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 (LITL)	mg/L	0.0105.1#	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00339.1	0.000000	0.000000	0.00347 1	
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0100.0 #	<0.000300	<0.000300	<0.000300	<0.000720	<0.0002200	<0.002700	0.0000500.1	0.000247	<0.0000200	<0.00047.0	
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	
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	
Thallium	0.002	Not Applicable	0.002 (MCL)	ma/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	
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	
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	
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L						71	69.9	65.5	73.8			
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		42.2				60.6	64.3	46.8	55.8			
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5.00			
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L		32.9				10.4	5.63	18.7	17.9			
Iron, Total	None	Not Applicable	Not Applicable	mg/L						<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			
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L						0.02(J)	<0.020	< 0.02	<0.0200			
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L								< 0.02	<0.0200 H			
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L								< 0.02	<0.0200			
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L								<0.02	<0.0200			
Magnesium	None	Not Applicable	Not Applicable	mg/L		0.244	0.175 J			0.141(J)	0.27	0.426	0.152 J			
Nolybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L						0.18	0.166	0.215	0.211			
Nitrate as N	10 Name	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	
Potassium	None	Not Applicable	Not Applicable	mg/L		22.3	21.9			15.9	14.6	13.0	15.0			
Sodium Specific Conductores (Inheritany)	None	Not Applicable	Not Applicable	mg/L		003	510			370	348	324	329			
Sulfide	None	Not Applicable	Not Applicable	ma/l	2090 #	2320				<1	<1	<1	<1.00	2,070	2,080	
Field Parameters	None			iiig/L									1.00			
Tomporature	Nonc	Not Appliachia	Not Applicable	00	22.6	14	1	17.90	24.9	22.45	22.5	17	20.7	17.6	1	1
nH		Not Applicable	Not Applicable	<u> </u>	23.0	10.47		11.09	24.0	22.40	23.3	10.30	10.46	0.07		
Specific Conductance	0.0 - 0.0 None	Not Applicable	Not Applicable	umbos/cm	2632	2//2		2486	2350	10.05	10.4	10.39	2 0/1	1 062		
Dissolved Oxygen	None	Not Applicable	Not Applicable	ma/l	0.21	0.36		1 //	0.33	0.55	0.24	0.30	0.36	0.40		
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	130.1	174.9		-152.8	-71.2	-140.3	-80.5	_49.7	-97	-0.8		
Turbidity	None	Not Applicable	Not Applicable	NTU	2.04	2 79	1 47	0.49	0.92	2 / 2	0.34	-49.1	1.99	2.53		
,					2.01	2.10	1.30	0.10	0.02	2.40	0.04		1.00	2.00	1	

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.

pCi/L : picoCuries per liter.
 S.U. : Standard Units.

<sup>6</sup>C : degrees Celsius.
 μmhos/cm : micromhos per centimeter.

7. mV : millivolts.

8. NTU : Nephelometric Turbidity Unit.

No. Nepretories induction and the provided effective induction of the induction in the induction is an approximate value.
 J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.

Cells shaded in blue indicate results that are above the laboratory MDL.
 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.

in an analysis performed.
 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.

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). Data from 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 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
Detection Monitoring Parame	ters			Units	BACKGROUND 1	BACKG	ROUND 2	BACKGROUND 3	BACKGROUND 4	BACKGROUND 5	BACKGROUND 6	BACKGROUND 7	BACKGROUND 8	DETE	CTION N. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Boron	None	1.896	Not Applicable	mg/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
Calcium	None	670.30	Not Applicable	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	1.1	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
Assessment Monitoring Para	neters																
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	< 0.00400	<0.008000	<0.000800	<0.008000	<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	2	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	0 (0.00108)	<0.000500	<0.00250	<0.000500	<0.00250	<0.000500				
Eluoride	None	Not Applicable	0.006 (ACL)	mg/L mg/l	0.000568 J	<0.000100	<0.000100	0.000237 J	0.000103 J	<0.000500	<0.000100	0.000872 J	<0.000100		13	1 3/	
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	0.000621.1	<0.000100	<0.000100	0.000589.1	<0.000100	<0.000500	<0.000100	<0.000500	0.000114.1	1.5	1.5	1.54	1.5
Lithium	None	Not Applicable	0.235 (LITL)	mg/L	<0.0150	<0.000100	<0.000100	<0.00300	<0.000100	<0.0150	<0.00300	<0.0150	<0.00300			<0.00300	<0.00300
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	< 0.000150	0.000100 UJ	< 0.000150	<0.000150	< 0.000150	<0.000150				
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	0.466	0.484	0.483	0.435	0.481	0.586	0.495	0.607	0.469			0.384	0.112
Selenium	0.05	Not Applicable	0.05 (MCL)	ma/L	0.00616 J	0.0107	0.0105	0.00888 J	0.0116	0.0131	0.00879	0.0152	0.00349				
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	< 0.00400	<0.000800	<0.000800	<0.000800	<0.000800	< 0.00400	< 0.000800	< 0.00400	< 0.000800				
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pČi/L	1.47 +/- 0.739	-0.0377 +/- 0.325 U	0.0518 +/- 0.264 U	0.483 +/- 0.372 U	0.287 +/- 0.277 U	0.121 +/- 0.235 U	0.136 +/- 0.226 U	0.202 +/- 0.190 U	0.296 +/- 0.222 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									85.8				
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									<5.00				
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L									46.2				
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 Dissoluted	None	Not Applicable	Not Applicable	mg/L													
Magnacium	None	Not Applicable	Not Applicable	mg/L													
Molybdenum Dissolved	None	Not Applicable	Not Applicable	mg/L									<0.220				
Nitroto og N	10	Not Applicable	Not Applicable	mg/L													
Potassium	None	Not Applicable	Not Applicable	mg/L									35.0				
Sodium	None	Not Applicable	Not Applicable	ma/l									697				
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umbos/cm													
Sulfide	None	Not Applicable	Not Applicable	mg/L													
Field Parameters													n		·		
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
nH	65-85	Not Applicable	Not Applicable	SII	11 14	11 16		11 16	11 00	11.08	10.8	10.05	10.72	11 00		10.55	10.56
Specific Conductance	None	Not Applicable	Not Applicable	umhos/cm	3576	3585		3389	3602	3575	3546	3526	3552	3530		3587	3563
Dissolved Oxygen	None	Not Applicable	Not Applicable	ma/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

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.

mg/L : milligrams per liter.
 pCi/L : picoCuries per liter.
 S.U. : Standard Units.

5. °C : degrees Celsius. 6. umhos/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.

Cells shaded in blue indicate results that are above the laboratory MDL.
 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). Data from 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	MV	V-19S	MW-19S	MW-19S	MW-19S	DUP 2	MW-19S	MW-19S	DUP 3	MW-19S	MV	/-19S
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	3-Oct-18	15-,	Jan-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
Detection Monitoring Paramet	ters			Units	INITIAL ASSESSMENT MON.	INITIAL ASSE (RES UNFILTERE	ESSMENT MON. AMPLE) D FILTERED	FIRST 2019 ASSESSMENT MON.	SECOND 2019 ASSESSMENT MON.	FIRS ASSES MO	T 2020 SSMENT ON.	SECOND 2020 ASSESSMENT MON.	FIRST ASSES MC	7 2021 SMENT DN.	SECOND 2021 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON. (RESAMPLE)
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	
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	
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	
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	
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	
Sulfate	250	1,708	Not Applicable	mg/L	1950 #	1640	1580	1520	1580	1490	1590	1640	1560	1560	1570	1,420	
I otal Dissolved Solids	500	2,505	Not Applicable	mg/L	2490#	2500	2470	2440	2460	2300	2290	2340	2360	2310	2290	2,180	
Assessment Monitoring Parar	meters																
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	<0.008 #	0.00634	0.00643	0.00673	0.00624	0.0061	0.00577	0.00588	0.00554	0.00452	0.00689	0.00689	
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	
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	
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	
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	
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	
Fluoride	4	Not Applicable	4 (NICL)	mg/L	1.24 #	1.27	1.59	1.13	1.37	1.15	1.04	1.38	1.40	1.54	1.57	1.00	
Leau	0.015	Not Applicable	0.015 (MCL)	IIIg/L	0.000110 J #	<0.000000	<0.000000	<0.000000	<0.000000	<0.000000	<0.000000	<0.000000	<0.000000	<0.000000	<0.000600	<0.000000	
Litnium	None 0.002	Not Applicable	0.235 (UTL)	mg/L mg/l	<0.00 #	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	
Melubdonum	0.002	Not Applicable		mg/L	0.000150#	0.472	0.462	0.462	0.0000300	0.0000300	0.0000300	0.0000300	0.0000450 5	0.0000400 J	0.000113.3	0.0000300	
Solonium	0.05	Not Applicable	0.1 (ACL)	mg/L	0.439#	0.472	0.00621	0.402	0.0124	0.402	0.0064	0.007	0.0957	0.00742	0.407	0.445	
Thallium	0.00	Not Applicable	0.03 (MCL)	mg/L	<0.0009 #	<0.0011	<0.00031	<0.00141	<0.0024	<0.00033	<0.0004	<0.000200	<0.00007	<0.00743	<0.000200	<0.0020	
Ra-226 + Ra-228 (combined)	0.002	Not Applicable	5 (MCL)	nCi/l	0.0000 #	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	
Other Parameters		Not Applicable	J (NOL)	p01/L	0.000 17 0.001 #	40.00		40.10	-0.74	40.70	-0.12	40.70	40.07	40.02	+0.0+	40.02	
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	ma/l	26.2	25		21	23			19	16	14.0.1	21.0	21.0	
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L						128	130	132	135	133	150	21.0	
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		59.8				92.6	98.7	89.2	63.8	69	77.3		
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		<5				<5	<5	<5	<5	<5	<5.00		
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/l		81.2				35.1	31.4	42.6	71.6	64.4	73.0		
Iron. Total	None	Not Applicable	Not Applicable	mg/L						0.0153(J)	< 0.0120	<0.0120	< 0.012	< 0.012	0.0509.1		
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L						< 0.0120	< 0.0120	< 0.0120	< 0.012	< 0.012	0.0210 J		
Iron. Ferrous	None	Not Applicable	Not Applicable	ma/L						0.043(J)	0.330(J)	0.0310 J	< 0.02	< 0.02	0.0450 J		
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	ma/L									< 0.02	< 0.02	<0.0200 H		
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L									< 0.02	< 0.02	< 0.0200		
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L									< 0.02	< 0.02	0.0210 J		
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		
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L						0.373	0.383	0.37	0.457	0.398	0.440		
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	
Potassium	None	Not Applicable	Not Applicable	mg/L		38.2	37.7			35.2	34.1	33.7	33.9	29	34.6		
Sodium	None	Not Applicable	Not Applicable	mg/L		801	774			644	598	610	639	545	462		
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	2470 #	3530						3860	3500	3540	3370	3,570	
Sulfide	None	Not Applicable	Not Applicable	mg/L						1.52	<1	1.8	<1	<1	<1.00		
Field Parameters	L NI				05.4	10.1	1	47.00	05.00	00.00	1	00.0	40.0		01.0	17.0	
I emperature	None	Not Applicable	Not Applicable	<u> </u>	25.4	13.4		17.92	25.86	22.99		23.8	18.3		21.8	17.2	
	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	
Specific Conductance	None	Not Applicable	Not Applicable	µmnos/cm	3610	3438		3524	3552	3309		3433	3406		3,342	3,309	
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.33	0.21		1.5	0.5	0.36		0.16	0.2/		0.21	0.27	
Uxidation-Reduction Potential	None	Not Applicable	Not Applicable		1/2.1	-162		-281./	-252.4	-588.1		209.2	-191./		-237.2	-244.4	
	None		Not Applicable	NIU	2.00	5.19	2.24	0.57	0.01	2.80		1.24	0.73		2.11	Z.22	

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.

mg/L : milligrams per liter.
 pCi/L : picoCuries per liter.
 S.U. : Standard Units.

5. °C : degrees Celsius.

6. umhos/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.

Cells shaded in blue indicate results that are above the laboratory MDL.
 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.

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 invation used on the valid due to laboratory issues and are not to be used in statistical evaluation. Resampling was conducted in January 2019 (both filtered). Data from 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-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
Detection Mariterian Departu				Unite	BACKGROUND	BACKGROUND 2	BACKG	ROUND 3	BACKGROUND 4	BACKGROUND 5	BACKGROUND 6	BACKGROUND 7	BACKGROUND 8	DETECTION MON. #1	VERIFICATION SAMPLE
Detection Monitoring Paramet	ers	1.000		Units	0.704		4.00	0.045	1.00		0.50	0.704	0.040	0.040	10
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
Chionde	250	16.51	Not Applicable	mg/L	5.99 J"	5.79	4.80	4.8	4.44	0.000	0.77	0.00 J*	5.08	0.14	4.90
	4	0.0359	Not Applicable	mg/L	0.322 J"	0.41	0.424	0.410	0.397	0.362	0.248	0.340 J	0.349	0.323	0.309
pH (laboratory)	0.0 - 0.0	0.460 - 0.018	Not Applicable	5.U.	0.94	/.0	1100	1.3	1.3	/	0.8	0.7	0.7	0.0	0.9
Suilate	250	1,303	Not Applicable	mg/L	1140	1080	1100	1810	1290	949	907	1020	1760	839	1060
Accessment Manitaring Baran		2,000	Not Applicable	IIIg/L	1710	1300	1000	1010	1300	1070	1730	1110	1700	1700	1300
Assessment Monitoring Paran		Not Applicable	0.006 (MCL)	mall	<0.000500	<0.000900	<0.000900	<0.000900	<0.00900	<0.000900	<0.000900	<0.00400	<0.000900		
Anumony	0.000	Not Applicable	0.006 (IVICL)	mg/L	<0.000500	<0.000600	<0.000000	<0.000600	<0.00000	<0.000000 0.000722 J	<0.000000	<0.00400	<0.000600 0.000508 J		
Arsenic	0.010	Not Applicable		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		
Dariulii Dariulii	2	Not Applicable		nig/L	0.0130	0.0151	0.0110	0.0109	0.0100 J	0.0122	0.0106	0.0120	0.00210		
Beryllium	0.004	Not Applicable	0.004 (MCL)	rng/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		
Chiomium	U.I	Not Applicable		mg/L	<0.000500	0.000500	0.000300	<0.000500	<0.00500	0.000500	0.000315	<0.00500	<0.00250		
Eluoride		Not Applicable	4 (MCL)	mg/L	0.322 /*	0.000327 J	0.000363 J	0.000300 J	0.00100	0.000642 J	0.000215 J	0.340 1*	0.000500	0.323	0.309
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.022.0	<0.00100	<0.00100	<0.00100	<0.00100	<0.002	<0.000100	<0.0400	<0.00500	0.020	0.000
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.123	0.000100	0.124	0.114	0.126	0.12	0.000100	0.112	0.110 1		0.100
Mercupy	0.002	Not Applicable	0.235 (01L)	mg/L	<0.00150	<0.000150	<0.00150	<0.00150	<0.000150	<0.00150	<0.0902	<0.000150	<0.000100		0.109
Melvhdonum	0.002	Not Applicable		mg/L	0.00120 1	0.00121	<0.000130	0.00126 1	<0.000130	<0.000150	<0.000150	<0.000130	<0.000100		<0.00100
Selenium	0.05	Not Applicable	0.1 (ACL)	mg/L	<0.00120 J	<0.001213	<0.00300	<0.001203	<0.0100	0.00100	<0.00100	<0.0100	<0.00300		<0.00100
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000000	<0.000300	<0.000300	<0.000300	<0.00300	<0.0000333	<0.000300	<0.00300	<0.00100		
Ra-226 + Ra-228 (combined)	0.002	Not Applicable	5 (MCL)	nCi/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	0.00400	0.670 +/- 0.261		
Other Parameters	5	Not Applicable	J (WOL)	poi/L	1.04 1/- 0.007	1.01 1/2 0.000	1.10 1/- 0.000	1.00 1/2 0.011	1.40 17- 0.421	0.000 1/- 0.001	1.20 1/2 0.022	0.303 17- 0.234	0.010 1/2 0.201		
Chemical Owner Demand (COD)	Nana	Not Applicable	Not Applicable	mall											
Tetel Alkelipity on CoCO2	None	Not Applicable	Not Applicable	nig/L											
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									<5.00		
Ricerbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									~5.00		
Hudrovide Alkelinity	None	Not Applicable	Not Applicable	mg/L									209 <5.00		
	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 Dissolved	None	Not Applicable	Not Applicable	mg/L											
Iron, Ferria	None	Not Applicable	Not Applicable	mg/L											
Iron, Ferric Dissolved	None	Not Applicable	Not Applicable	mg/L											
Magnasium	None	Not Applicable	Not Applicable	mg/L									20.0		
Malyhdanum Dissolvad	None	Not Applicable	Not Applicable	mg/L									20.9		
Nitroto og N	10	Not Applicable	Not Applicable	mg/L											
Potossium	Nono	Not Applicable	Not Applicable	mg/L									5.54		
Polassium	None	Not Applicable	Not Applicable	nig/L									0.04		
Sodium Spacific Conductorias (Icharatery)	None	Not Applicable	Not Applicable	rfig/L									80.1		
Sulfide	None	Not Applicable	Not Applicable	unnos/cm											
	none		Not Applicable	iiig/L											
Field Parameters	L N.			00	01.40	01.1	40.00	I	47.00	40.40	40.75	00.04	04.47	00.00	04.05
1 emperature	None	Not Applicable	Not Applicable	<u>"C</u>	21.43	21.4	18.92		17.06	19.18	18.75	20.84	21.1/	20.26	21.05
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	6.85	6.94	6.79		6.75	6./6	6.67	6.69	6.62	6.89	6.51
Specific Conductance	None	NOT Applicable	Not Applicable	μmnos/cm	1/42	2245	2332		2364	2259	2057	2088	2083	1999	2345
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.47	1./6	0.05		0.25	0.21	0.35	0.07	0.1	0.27	1.43
Uxidation-Reduction Potential	None	Not Applicable	Not Applicable	MV NTU	-4.6	935	-101		-211.5	-167.1	60.7	-1.1	62.1	-5/	54.1
	INUTIO	NOL Applicable	NOL Applicable	NIU	<u>   1.2</u>	2.90	3.23		2.00	C0.1	0.38	1.01	1.82	1.95	4.38

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.

mg/L : milligrams per liter.
 pCi/L : picoCuries per liter.
 S.U. : Standard Units.

5. °C : degrees Celsius.
 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.

Cells shaded in blue indicate results that are above the laboratory MDL.
 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.

The sharp of the sharp of the second of the sociated 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). Data from 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	MV	/-20	MW-20	MW-20	Dup 1	MW-20	MW-20	MW-20	MW-20	MV	/-20
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	4-Oct-18	10-J	an-19	23-Apr-19	30-S	Sep-19	17-Jun-20	12-Oct-20	31-Mar-21	15-Oct-21	31-Mar-22	6-Jun-22
Detection Monitoring Paramet	ers				INITIAL ASSESSMENT MON.	INITIAL ASSE (RESA UNFILTERED	SSMENT MON. MPLE) FILTERED	FIRST 2019 ASSESSMENT MON.	SECO ASSES M	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. (RESAMPLE)
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	
Calcium	None	670.30	Not Applicable	mg/L	448 #	398	386	327	368	331	320	312	309	325	324	
Chloride	250	18.51	Not Applicable	mg/L	4.74 #	6.29	7.27	8.02	5.3	5.32	6.18	5.69	5.78	5.17	8.67	5.34
Fluoride	4	0.6359	Not Applicable	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
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^	7.6
Sulfate	250	1,363	Not Applicable	mg/L	1110 #	977	892	794	1060	1080	870	989	782	1030	2070^	732
Total Dissolved Solids	500	2,066	Not Applicable	mg/L	1900 #	1630	1530	1690	1890	1850	1560	1710	1490	1850	1940^	1440
Assessment Monitoring Paran	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	
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	
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	
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	
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	<0.005 #	<0.000400	< 0.000400	<0.000400	< 0.000400	<0.000400	<0.000400	<0.000400	0.000401 J	0.000592 J	0.000674 J	
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	
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
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	
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	
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	
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	
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	
I nallium Re 226 - Re 228 (combined)	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-220 + Ra-228 (combined)	5	Not Applicable	5 (IVICL)	pci/L	0.000 +/- 0.291 #	<0.7Z		0.91	0.02	<0.74	<0.72	1.33	0.85	0.91	<0.07	
Other Parameters			Net Ameliachia			-5.00	1	<5.00	-5.00	-5.00	1	1				
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	<5	< 0.00		< 5.00	<0.00	< 5.00		6.00 J	5.00 J	10.0 J	7.00 J ^	<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, I otal	None	Not Applicable	Not Applicable	mg/L												
Iron, Dissoived	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 Malutadamum Disaaluad	None	Not Applicable	Not Applicable	mg/L		29.2	20.3									
Nilybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L						0.0010.1						
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
Polassium	None	Not Applicable	Not Applicable	mg/L		0.72	0.01									
Sodium Sna sife Candustance (Isherstern)	None	Not Applicable	Not Applicable	rng/L		10.2	84.7									
Sulfide	None	Not Applicable	Not Applicable	umnos/cm	2050 #	1900						2230	1890	2140	23700*	2,170
	none	Not Applicable	Not Applicable	iiig/L										I		
Field Parameters	L NL		hist Ann Bast 1	00	01.0	45.0	1	04.57	00.40	1	00.00	01.0	10.01	00.0	40.0	00.0
1 emperature	None	Not Applicable	Not Applicable	<u>۳</u> ۲	24.9	15.2		21.5/	23.46		22.06	21.3	18.61	20.9	16.3	22.9
pH Creating Conductor	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	6./1	6.65		/	6.83		6.86	6.81	/.0/	6.80	6.95	6.84
Specific Conductance	None	Not Applicable	NOT Applicable	µmnos/cm	2330	19/9		1937	2240		1/95	1981	2605	2,140	1,342	1,743
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
Uxidation-Reduction Potential	None	Not Applicable	Not Applicable	MV NTU	29.7	-13		-4.3	-15./		-32.8	29	/.6	58.8	-3.4	28
Linibidity	INUTE	NOL APPIICABLE	NOL Applicable	1110	ð.14	31.1	2.09	0.38	2.9		4.04	2.79	3.99	Z.44	0.82	1.5/

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.

mg/L : milligrams per liter.
 pCi/L : picoCuries per liter.
 S.U. : Standard Units.

5. °C : degrees Celsius.
 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.

Cells shaded in blue indicate results that are above the laboratory MDL.
 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). Data from 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
Detection Monitoring Param	otoro			Unito	BACKGROUND 1	BACKG	ROUND 2	BACKGROUND 3	BACKGROUND 4	BACKGROUND	BACKGROUND 6	BACKGROUND 7	BACKGROUND 8	DETECTION MON. #1	VERIFICATION SAMPLE
Detection Monitoring Param	None	1.906	Not Applicable	Units	2.0	0.76	2.96	2.50	2.09	4.41	2.42	2.26	2.07.1	2.05	2.00
Boron	None	1.890	Not Applicable	mg/L	2.9	2.70	2.80	2.59	3.98	4.41	3.43	3.30	3.07 J	2.95	2.99
Calcium	250	10.50	Not Applicable	mg/L	140	100	200	100	201	21.5	214	149	100	130	147
Chionde	250	10.01	Not Applicable	ng/L	22.9	22.2	21.0	23.1	22.3	21.0	20.5	21.4	0.770	22	21.9
riuoliue	4	0.0309	Not Applicable	nig/L	0.594	0.752	0.001	0.362	0.564	0.490	0.49	0.559	0.779	0.55	0.455
pH (laboratory)	0.0 - 0.0	0.485 - 8.018	Not Applicable	5.0.	/.00	7.98	8.02	7.9	7.9	1.0	1.4	1.3	1.4	1.0	C.1
Suilate	250	1,591	Not Applicable	mg/L	2410	1300	2360	2510	2430	2440	2320	2430	2320	2570	2560
Total Dissolved Solids	500	2,340		IIIg/L	2410	2300	2300	2010	2430	2440	2320	2430	2320	2370	2300
Assessment Monitoring Para	ameters														
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	< 0.000500	< 0.000500	<0.000500	<0.000800	<0.00400	<0.000800	<0.000800	<0.000800	<0.000800		
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.00259	0.00140 J	0.00154 J	0.00145 J	<0.00200	0.000960 J	0.00119 J	< 0.000400	0.00155 J		
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		
Fluoride	4	Not Applicable	4 (MCL)	mg/L	0.594	0.752	0.801	0.582	0.564	0.498	0.49	0.559	0.779	0.53	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		
I hallium	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 +/- 0.3/6	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			Not Applicable				1	1	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											
Carbonale Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L									< 5.00		
Bicarbonale 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											
Malyhdanum Dissolved	None	Not Applicable	Not Applicable	mg/L									30.1		
Nitrata an N	None	Not Applicable	Not Applicable	mg/L											
Nitrate as N	10	Not Applicable	Not Applicable	rng/L											
Polassium	None	Not Applicable	Not Applicable	mg/L									9.21		
Sodium	None	Not Applicable	Not Applicable	mg/L									/91		
Sulfide	None	Not Applicable	Not Applicable	umnos/cm											
	NONE	Not Applicable	Not Applicable	IIIg/L											
Field Parameters	NL	Net America bi	L Mat And Product	00	00.01	00.07	1	04.75	40.00	00.01	40.00	00.05	00.00	04.00	05.00
remperature	None	Not Applicable	Not Applicable	<u>ະ</u> ບ	20.64	22.37		21./5	19.28	20.91	18.26	22.05	20.69	21.30	25.09
pn Snasifia Candustanaa	6.5 - 8.5	Not Applicable	Not Applicable	5.U.	1.31	1.32		1.32	1.28	1.20	0.19	1.2	/.11	1.28	0.91
Specific Conductance	None	Not Applicable	Not Applicable	µmnos/cm	3111	35/8		3600	3586	3625	3555	3493	3421	3504	3544
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.24	0.45		0.07	0.1/	0.27	0.32	0.12	0.07	0.16	1.45
Uxidation-Reduction Potential	None	Not Applicable	Not Applicable	NTU	62.8	-12.1		-92.6	-239	-182	247.3	-12.6	59.8	-45.2	99
	NONE	Not Applicable		NIU	Z. I	0.32		0.3	0.29	0.27	0.04	0.74	1.07	0.20	0.5

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.

Standard Onits.
 °C : degrees Celsius.
 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.

in on analysis performed.
 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). Data from 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	MV	V-21	MW-21	DUP-2	MW-21	DUP-2	MW-21	MW-21	MW-21	MW-21	DUP 3	M	V-21
Parameters	SMCL	(Det. Mon.)	(Ass. Mon.)	Sample Date:	3-Oct-18	15-J	lan-19	24-A	Apr-19	2-0	ct-19	17-Jun-20	12-Oct-20	31-Mar-21	13-0	Oct-21	30-Mar-22	6-Jun-22
Detection Monitoring Paran	neters			Units	INITIAL ASSESSMENT MON.	INITIAL ASSE (RESA UNFILTERED	SSMENT MON. AMPLE) D FILTERED	FIRS ASSES M	T 2019 SSMENT ON.	SECO ASSES M	SECOND 2019 ASSESSMENT MON.		SECOND 2020 ASSESSMENT MON.	FIRST 2021 ASSESSMENT MON.	SECOND 2021 M	ASSESSMENT	FIRST 2022 ASSESSMENT MON.	FIRST 2022 ASSESSMENT MON. (RESAMPLE)
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	
Calcium	None	670.30	Not Applicable	mg/L	152 #	187	187	145	142	146	155	139	141	154	128	135	173	
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
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
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
Sulfate	250	1,591	Not Applicable	mg/L	1610 #	1670	1710	1440	1530	1560	1530	1470	1780	1660	1670	1520	2340^	1,610
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
Assessment Monitoring Pa	rameters																	
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	
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	
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	
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	
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	<0.01 #	< 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	
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	
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
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	0.164 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	
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	
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	
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.0003 #	<0.0011	<0.0011	<0.00110	0.00111 J	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	
I hallium	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	<0.000200	
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCI/L	3.41 +/- 0.490 #	0.29		2.24	1.07	1.59	2.57	3.09	2.38	2.44	2.94	2.58	2.58	
Other Parameters	Num		Not Applicable		-5.11	<5	1	-5.00	-5.00	-5.00	7.00 1	1	-5.00	-5.00	-5.00	7.00 1	<b>F 00 1 A</b>	-5.00
Total Alkalinity on CoCO2	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
Carbonata Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L														
Ricerbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L		202												
Bicarbonate Arkainity as CaCOS	None	Not Applicable	Not Applicable	mg/L		595												
	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	ma/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
Potassium	None	Not Applicable	Not Applicable	mg/L		12	11.8											
Sodium	None	Not Applicable	Not Applicable	ma/L		684	688											
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	3120 #	3610							3940	3550	3620	3480	22000^	9.390
Sulfide	None	Not Applicable	Not Applicable	mg/L														
Field Parameters																·		
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
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
Specific Conductance	None	Not Applicable	Not Applicable	μmhos/cm	3627	3585		3533		3633		3352	3516	4806	3,262		2,769	3542
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
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
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

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.

<sup>o</sup>C : degrees Celsius.
 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.

in analysis performed.
 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). Data from 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.