wfec
western farmers
electric cooperative

PO Box 429 Anadarko, OK 73005 (405) 247-3351 www.wfec.com

January 24, 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 October 2021 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 laboratory report for October 2021 (**Attachment A**). Based upon review of data from October 2021 assessment monitoring, WFEC has identified constituents listed in Appendix B of Oklahoma Administrative Code Chapter 517, Disposal of Coal Combustion Residuals from Electric Utilities (OAC 252:517) at statistically significant levels (SSLs) above the Ground Water Protection Standard (GWPS). In particular, molybdenum was detected at SSLs above the GWPS (as revised to reflect September 15, 2021 regulatory changes to OAC 252:517) at four of the Landfill CCR Unit monitoring wells (MW-15A, MW-16, MW-18, and MW-19S). This submittal addresses OAC 252:517-9-6(g), which requires the owner/operator to prepare a notification identifying OAC 252:517 Appendix B constituents detected at SSLs above the GWPS.

Molybdenum was detected at SSLs above the GWPS at these wells during the previous assessment monitoring events and notification was provided to the Oklahoma Department of Environmental Quality (ODEQ). A Plan and Schedule for Analyzing SSIs for Molybdenum (Altamira; March 4, 2020) was submitted to and approved for implementation by ODEQ in its letter dated April 28, 2020. An Assessment of Corrective Measures (ACM) Report 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.

Groundwater data summary tables for the Landfill CCR Unit updated to include results from October 2021 assessment monitoring are included (**Attachment B**). Other than as discussed above, no OAC 252:517 Appendix B constituents were detected at SSLs above the GWPS in monitoring wells associated with the Landfill CCR Unit. Also, no OAC 252:517 Appendix B constituents were detected at SSLs above the GWPS in monitoring wells associated with the Surface Impoundment CCR Unit.

Sincerely,

Kent Fletcher
Environmental Coordinator

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

ATTACHMENT A

OCTOBER 2021 ASSESSMENT MONITORING LABORATORY REPORT (LANDFILL CCR UNIT)

10450 Stancliff Rd. Suite 210
Houston, TX 77099
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January 14, 2022

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

Work Order: **HS21100884**

Laboratory Results for: **WFEC CCR/Landfill**

Dear Bert Smith,

ALS Environmental received 13 sample(s) on Oct 15, 2021 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

Client: Altamira
Project: WFEC CCR/Landfill
Work Order: HS21100884

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS21100884-01	MW-3	Water		13-Oct-2021 18:49	15-Oct-2021 10:20	☐
HS21100884-02	MW-14A	Water		13-Oct-2021 19:17	15-Oct-2021 10:20	☐
HS21100884-03	MW-15A	Water		13-Oct-2021 17:03	15-Oct-2021 10:20	☐
HS21100884-04	MW-21	Water		13-Oct-2021 17:35	15-Oct-2021 10:20	☐
HS21100884-05	DUP 3	Water		13-Oct-2021 17:35	15-Oct-2021 10:20	☐
HS21100884-06	MW-5S	Water		14-Oct-2021 15:00	16-Oct-2021 10:20	☐
HS21100884-07	MW-7S	Water		15-Oct-2021 11:16	16-Oct-2021 10:20	☐
HS21100884-08	MW-13	Water		15-Oct-2021 13:07	16-Oct-2021 10:20	☐
HS21100884-09	MW-16	Water		14-Oct-2021 16:43	16-Oct-2021 10:20	☐
HS21100884-10	MW-17	Water		14-Oct-2021 17:50	16-Oct-2021 10:20	☐
HS21100884-11	MW-18	Water		14-Oct-2021 19:15	16-Oct-2021 10:20	☐
HS21100884-12	MW-19S	Water		15-Oct-2021 12:02	16-Oct-2021 10:20	☐
HS21100884-13	MW-20	Water		15-Oct-2021 10:00	16-Oct-2021 10:20	☐

Client: Altamira **CASE NARRATIVE**
Project: WFEC CCR/Landfill
Work Order: HS21100884

Work Order Comments

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

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

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

Work Order Comments

• REV02: Samples HS21100884-06-13 subcontract Rad 226/228 results were appended to this report.

ALS Fort Collins RAD report revised, original Data reported for sample ID MW-21 result was an outlier in an order of magnitude higher than historically seen, Lab reporting error was corrected upon data review.

Metals by Method SM3500FED

Batch ID: R394454,R394455,R393566,R393740

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

Metals by Method SW6020A

Batch ID: 171800

Sample ID: MW-21 (HS21100884-04MS)

• 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. (Calcium,Magnesium,Sodium)

Sample ID: MW-21 (HS21100884-04PDS)

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

Batch ID: 171817

Sample ID: HS21100769-09MS

• MS and MSD were performed on an unrelated sample

Metals by Method SW7470A

Batch ID: 171793

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

Wet Chemistry by Method E300

Batch ID: R394578

Sample ID: HS21101112-01MS

• MS and MSD were performed on unrelated sample

WetChemistry by Method SM4500H+ B

Batch ID: R394509

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

Client: Altamira **CASE NARRATIVE**
Project: WFEC CCR/Landfill
Work Order: HS21100884

WetChemistry by Method M2510 B

Batch ID: R394421

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

WetChemistry by Method M2540C

Batch ID: R393922,R394028

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

WetChemistry by Method SM2320B

Batch ID: R393972

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

WetChemistry by Method E410.4

Batch ID: R394252

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

WetChemistry by Method SM4500 S2-F

Batch ID: R393819,R393988

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

Client: Altamira **CASE NARRATIVE**
Project: WFEC CCR/Landfill
Work Order: HS21100884

WetChemistry by Method SM3500FED

Batch ID: R394434

Sample ID: MW-14A (HS21100884-02)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: MW-15A (HS21100884-03)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: MW-16 (HS21100884-09)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: MW-17 (HS21100884-10)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: MW-18 (HS21100884-11)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: MW-19S (HS21100884-12)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: MW-5S (HS21100884-06)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: MW-7S (HS21100884-07)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

WetChemistry by Method E300

Batch ID: R394412

Sample ID: MW-17 (HS21100884-10)

- 2X dilution due to high concentration of SO4

Batch ID: R393664

Sample ID: DUP 3 (HS21100884-05)

- Sample ran at 2X due to high concentration of SO4

Sample ID: MW-3 (HS21100884-01)

- Sample ran at 2X due to high concentration of SO4

Sample ID: HS21100876-02MS

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

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-3
Collection Date: 13-Oct-2021 18:49

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-01
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	28-Oct-2021 15:21
Arsenic	**0.000422**	J	**0.000400**	**0.00200**	**mg/L**	1	28-Oct-2021 15:21
Barium	**0.0136**		**0.00190**	**0.00400**	**mg/L**	1	28-Oct-2021 15:21
Beryllium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:21
Boron	**0.939**		**0.110**	**0.200**	**mg/L**	10	29-Oct-2021 14:36
Cadmium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:21
Calcium	**155**		**0.340**	**5.00**	**mg/L**	10	29-Oct-2021 14:36
Chromium	**0.000467**	J	**0.000400**	**0.00400**	**mg/L**	1	28-Oct-2021 15:21
Cobalt	U		0.000200	0.00500	mg/L	1	28-Oct-2021 15:21
Lead	U		0.000600	0.00200	mg/L	1	28-Oct-2021 15:21
Lithium	**0.137**		**0.00100**	**0.00500**	**mg/L**	1	28-Oct-2021 15:21
Molybdenum	**0.000629**	J	**0.000600**	**0.00500**	**mg/L**	1	28-Oct-2021 15:21
Selenium	U		0.00110	0.00200	mg/L	1	28-Oct-2021 15:21
Thallium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:21
MERCURY BY SW7470A		**Method:SW7470A**			Prep:SW7470A / 27-Oct-2021		Analyst: MSC
Mercury	**0.0000610**	J	**0.0000300**	**0.000200**	**mg/L**	1	27-Oct-2021 12:46
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**12.7**		**0.400**	**1.00**	**mg/L**	2	15-Oct-2021 15:07
Fluoride	**0.258**		**0.100**	**0.200**	**mg/L**	2	15-Oct-2021 15:07
Nitrogen, Nitrate (As N)	U		0.0600	0.200	mg/L	2	15-Oct-2021 15:07
Sulfate	**1,200**		**10.0**	**25.0**	**mg/L**	50	30-Oct-2021 06:40
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		**Method:E410.4**					Analyst: TH
Chemical Oxygen Demand	**12.0**	J	**5.00**	**15.0**	**mg/L**	1	26-Oct-2021 18:30
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**2,680**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:30
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**1,970**		**5.00**	**10.0**	**mg/L**	1	20-Oct-2021 20:00
PH BY SM4500H+ B-2011		**Method:SM4500H+ B**					Analyst: SH
pH	**5.99**	H	**0.100**	**0.100**	**pH Units**	1	29-Oct-2021 11:00
Temp Deg C @pH	**21.2**	H	**0**	**0**	**°C**	1	29-Oct-2021 11:00
SUBCONTRACT ANALYSIS - RADIUM 226		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01
SUBCONTRACT ANALYSIS - RADIUM 228		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-14A
Collection Date: 13-Oct-2021 19:17

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-02
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	**0.935**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	**0.357**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	28-Oct-2021 15:23
Arsenic	U		0.000400	0.00200	mg/L	1	28-Oct-2021 15:23
Barium	**0.0121**		**0.00190**	**0.00400**	**mg/L**	1	28-Oct-2021 15:23
Beryllium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:23
Boron	**0.857**		**0.0110**	**0.0200**	**mg/L**	1	28-Oct-2021 15:23
Cadmium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:23
Calcium	**263**		**0.340**	**5.00**	**mg/L**	10	29-Oct-2021 14:12
Chromium	U		0.000400	0.00400	mg/L	1	28-Oct-2021 15:23
Cobalt	**0.000257**	J	**0.000200**	**0.00500**	**mg/L**	1	28-Oct-2021 15:23
Iron	**1.22**		**0.0120**	**0.200**	**mg/L**	1	28-Oct-2021 15:23
Lead	U		0.000600	0.00200	mg/L	1	28-Oct-2021 15:23
Lithium	**0.151**		**0.00100**	**0.00500**	**mg/L**	1	28-Oct-2021 15:23
Magnesium	**26.5**		**0.0100**	**0.200**	**mg/L**	1	28-Oct-2021 15:23
Molybdenum	U		0.000600	0.00500	mg/L	1	28-Oct-2021 15:23
Potassium	**7.84**		**0.0180**	**0.200**	**mg/L**	1	28-Oct-2021 15:23
Selenium	U		0.00110	0.00200	mg/L	1	28-Oct-2021 15:23
Sodium	**388**		**0.140**	**2.00**	**mg/L**	10	29-Oct-2021 14:12
Thallium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:23
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	**0.357**		**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 19:40
Molybdenum	U		0.000600	0.00500	mg/L	1	27-Oct-2021 19:40
MERCURY BY SW7470A		**Method:SW7470A**			Prep:SW7470A / 27-Oct-2021		Analyst: MSC
Mercury	**0.0000300**	J	**0.0000300**	**0.000200**	**mg/L**	1	27-Oct-2021 12:48
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**12.8**		**0.400**	**1.00**	**mg/L**	2	15-Oct-2021 15:15
Fluoride	**0.221**		**0.100**	**0.200**	**mg/L**	2	15-Oct-2021 15:15
Nitrogen, Nitrate (As N)	U		0.0600	0.200	mg/L	2	15-Oct-2021 15:15
Sulfate	**1,690**		**10.0**	**25.0**	**mg/L**	50	30-Oct-2021 06:48
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		**Method:E410.4**					Analyst: TH
Chemical Oxygen Demand	**6.00**	J	**5.00**	**15.0**	**mg/L**	1	26-Oct-2021 18:30
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**3,320**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:30

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-14A
Collection Date: 13-Oct-2021 19:17

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-02
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**2,630**		**5.00**	**10.0**	**mg/L**	1	20-Oct-2021 20:00
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**348**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:12
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	21-Oct-2021 23:12
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	21-Oct-2021 23:12
Alkalinity, Total (As CaCO3)	**348**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:12
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: AP
Ferrous Iron	**0.285**		**0.0200**	**0.0500**	**mg/L**	1	15-Oct-2021 15:29
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	**3.08**		**1.00**	**1.00**	**mg/L**	1	20-Oct-2021 12:50
PH BY SM4500H+ B-2011		**Method:SM4500H+ B**					Analyst: SH
pH	**6.74**	H	**0.100**	**0.100**	**pH Units**	1	29-Oct-2021 11:00
Temp Deg C @pH	**21.5**	H	**0**	**0**	**°C**	1	29-Oct-2021 11:00
SUBCONTRACT ANALYSIS - RADIUM 226		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01
SUBCONTRACT ANALYSIS - RADIUM 228		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-15A
Collection Date: 13-Oct-2021 17:03

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-03
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	**0.0840**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	**0.590**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	28-Oct-2021 15:25
Arsenic	**0.00113**	J	**0.000400**	**0.00200**	**mg/L**	1	28-Oct-2021 15:25
Barium	**0.0224**		**0.00190**	**0.00400**	**mg/L**	1	28-Oct-2021 15:25
Beryllium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:25
Boron	**2.14**		**0.110**	**0.200**	**mg/L**	10	29-Oct-2021 14:14
Cadmium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:25
Calcium	**96.6**		**0.0340**	**0.500**	**mg/L**	1	28-Oct-2021 15:25
Chromium	**0.000502**	J	**0.000400**	**0.00400**	**mg/L**	1	28-Oct-2021 15:25
Cobalt	**0.000296**	J	**0.000200**	**0.00500**	**mg/L**	1	28-Oct-2021 15:25
Iron	**0.368**		**0.0120**	**0.200**	**mg/L**	1	28-Oct-2021 15:25
Lead	U		0.000600	0.00200	mg/L	1	28-Oct-2021 15:25
Lithium	**0.0627**		**0.00100**	**0.00500**	**mg/L**	1	28-Oct-2021 15:25
Magnesium	**10.2**		**0.0100**	**0.200**	**mg/L**	1	28-Oct-2021 15:25
Molybdenum	**0.149**		**0.000600**	**0.00500**	**mg/L**	1	28-Oct-2021 15:25
Potassium	**4.97**		**0.0180**	**0.200**	**mg/L**	1	28-Oct-2021 15:25
Selenium	U		0.00110	0.00200	mg/L	1	28-Oct-2021 15:25
Sodium	**421**		**0.140**	**2.00**	**mg/L**	10	29-Oct-2021 14:14
Thallium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:25
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	**0.590**		**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 19:45
Molybdenum	**0.181**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 19:45
MERCURY BY SW7470A		**Method:SW7470A**			Prep:SW7470A / 27-Oct-2021		Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	27-Oct-2021 12:50
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**25.7**		**0.400**	**1.00**	**mg/L**	2	15-Oct-2021 15:22
Fluoride	**1.01**		**0.100**	**0.200**	**mg/L**	2	15-Oct-2021 15:22
Nitrogen, Nitrate (As N)	**0.0704**	J	**0.0600**	**0.200**	**mg/L**	2	15-Oct-2021 15:22
Sulfate	**1,580**		**10.0**	**25.0**	**mg/L**	50	30-Oct-2021 06:55
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		**Method:E410.4**					Analyst: TH
Chemical Oxygen Demand	**11.0**	J	**5.00**	**15.0**	**mg/L**	1	26-Oct-2021 18:30
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**3,370**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:30

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-15A
Collection Date: 13-Oct-2021 17:03

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-03
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**2,370**		**5.00**	**10.0**	**mg/L**	1	20-Oct-2021 20:00
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**226**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:24
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	21-Oct-2021 23:24
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	21-Oct-2021 23:24
Alkalinity, Total (As CaCO3)	**226**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:24
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: AP
Ferrous Iron	**0.284**		**0.0200**	**0.0500**	**mg/L**	1	15-Oct-2021 15:29
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	20-Oct-2021 12:50
PH BY SM4500H+ B-2011		**Method:SM4500H+ B**					Analyst: SH
pH	**7.45**	H	**0.100**	**0.100**	**pH Units**	1	29-Oct-2021 11:00
Temp Deg C @pH	**22.2**	H	**0**	**0**	**°C**	1	29-Oct-2021 11:00
SUBCONTRACT ANALYSIS - RADIUM 226		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01
SUBCONTRACT ANALYSIS - RADIUM 228		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-21
Collection Date: 13-Oct-2021 17:35

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-04
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	28-Oct-2021 15:36
Arsenic	**0.000539**	J	**0.000400**	**0.00200**	**mg/L**	1	28-Oct-2021 15:36
Barium	**0.0102**		**0.00190**	**0.00400**	**mg/L**	1	28-Oct-2021 15:36
Beryllium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:36
Boron	**2.53**		**0.220**	**0.400**	**mg/L**	20	29-Oct-2021 16:19
Cadmium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:36
Calcium	**128**		**0.0340**	**0.500**	**mg/L**	1	28-Oct-2021 15:36
Chromium	U		0.000400	0.00400	mg/L	1	28-Oct-2021 15:36
Cobalt	U		0.000200	0.00500	mg/L	1	28-Oct-2021 15:36
Lead	U		0.000600	0.00200	mg/L	1	28-Oct-2021 15:36
Lithium	**0.125**		**0.00100**	**0.00500**	**mg/L**	1	28-Oct-2021 15:36
Molybdenum	**0.000677**	J	**0.000600**	**0.00500**	**mg/L**	1	28-Oct-2021 15:36
Selenium	U		0.00110	0.00200	mg/L	1	28-Oct-2021 15:36
Thallium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:36
MERCURY BY SW7470A		**Method:SW7470A**			Prep:SW7470A / 27-Oct-2021		Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	27-Oct-2021 12:39
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**21.5**		**0.400**	**1.00**	**mg/L**	2	15-Oct-2021 15:29
Fluoride	**0.411**		**0.100**	**0.200**	**mg/L**	2	15-Oct-2021 15:29
Nitrogen, Nitrate (As N)	**0.207**		**0.0600**	**0.200**	**mg/L**	2	15-Oct-2021 15:29
Sulfate	**1,670**		**10.0**	**25.0**	**mg/L**	50	30-Oct-2021 07:02
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	26-Oct-2021 18:30
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**3,620**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:30
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**2,660**		**5.00**	**10.0**	**mg/L**	1	20-Oct-2021 20:00
PH BY SM4500H+ B-2011		**Method:SM4500H+ B**					Analyst: SH
pH	**7.28**	H	**0.100**	**0.100**	**pH Units**	1	29-Oct-2021 11:00
Temp Deg C @pH	**21.5**	H	**0**	**0**	**°C**	1	29-Oct-2021 11:00
SUBCONTRACT ANALYSIS - RADIUM 226		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01
SUBCONTRACT ANALYSIS - RADIUM 228		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: DUP 3
Collection Date: 13-Oct-2021 17:35

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-05
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Antimony	**0.000545**	J	**0.000400**	**0.00200**	**mg/L**	1	28-Oct-2021 15:47
Arsenic	**0.000521**	J	**0.000400**	**0.00200**	**mg/L**	1	28-Oct-2021 15:47
Barium	**0.0105**		**0.00190**	**0.00400**	**mg/L**	1	28-Oct-2021 15:47
Beryllium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:47
Boron	**2.31**		**0.110**	**0.200**	**mg/L**	10	29-Oct-2021 14:22
Cadmium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:47
Calcium	**135**		**0.0340**	**0.500**	**mg/L**	1	28-Oct-2021 15:47
Chromium	U		0.000400	0.00400	mg/L	1	28-Oct-2021 15:47
Cobalt	U		0.000200	0.00500	mg/L	1	28-Oct-2021 15:47
Lead	U		0.000600	0.00200	mg/L	1	28-Oct-2021 15:47
Lithium	**0.114**		**0.00100**	**0.00500**	**mg/L**	1	28-Oct-2021 15:47
Molybdenum	**0.000876**	J	**0.000600**	**0.00500**	**mg/L**	1	28-Oct-2021 15:47
Selenium	U		0.00110	0.00200	mg/L	1	28-Oct-2021 15:47
Thallium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:47
MERCURY BY SW7470A		**Method:SW7470A**			Prep:SW7470A / 27-Oct-2021		Analyst: MSC
Mercury	**0.0000330**	J	**0.0000300**	**0.000200**	**mg/L**	1	27-Oct-2021 12:51
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**22.1**		**0.400**	**1.00**	**mg/L**	2	15-Oct-2021 15:52
Fluoride	**0.471**		**0.100**	**0.200**	**mg/L**	2	15-Oct-2021 15:52
Nitrogen, Nitrate (As N)	**0.168**	J	**0.0600**	**0.200**	**mg/L**	2	15-Oct-2021 15:52
Sulfate	**1,520**		**10.0**	**25.0**	**mg/L**	50	30-Oct-2021 07:10
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		**Method:E410.4**					Analyst: TH
Chemical Oxygen Demand	**7.00**	J	**5.00**	**15.0**	**mg/L**	1	26-Oct-2021 18:30
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**3,480**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:30
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**2,560**		**5.00**	**10.0**	**mg/L**	1	20-Oct-2021 20:00
PH BY SM4500H+ B-2011		**Method:SM4500H+ B**					Analyst: SH
pH	**7.43**	H	**0.100**	**0.100**	**pH Units**	1	29-Oct-2021 11:00
Temp Deg C @pH	**20.6**	H	**0**	**0**	**°C**	1	29-Oct-2021 11:00
SUBCONTRACT ANALYSIS - RADIUM 226		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01
SUBCONTRACT ANALYSIS - RADIUM 228		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-5S
Collection Date: 14-Oct-2021 15:00

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-06
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	**0.0270**	J	**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	28-Oct-2021 15:49
Arsenic	U		0.000400	0.00200	mg/L	1	28-Oct-2021 15:49
Barium	**0.00732**		**0.00190**	**0.00400**	**mg/L**	1	28-Oct-2021 15:49
Beryllium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:49
Boron	**1.82**		**0.110**	**0.200**	**mg/L**	10	29-Oct-2021 14:24
Cadmium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:49
Calcium	**21.0**		**0.0340**	**0.500**	**mg/L**	1	28-Oct-2021 15:49
Chromium	U		0.000400	0.00400	mg/L	1	28-Oct-2021 15:49
Cobalt	U		0.000200	0.00500	mg/L	1	28-Oct-2021 15:49
Iron	**0.0270**	J	**0.0120**	**0.200**	**mg/L**	1	28-Oct-2021 15:49
Lead	U		0.000600	0.00200	mg/L	1	28-Oct-2021 15:49
Lithium	**0.0532**		**0.00100**	**0.00500**	**mg/L**	1	28-Oct-2021 15:49
Magnesium	**4.60**		**0.0100**	**0.200**	**mg/L**	1	28-Oct-2021 15:49
Molybdenum	**0.00387**	J	**0.000600**	**0.00500**	**mg/L**	1	28-Oct-2021 15:49
Potassium	**3.96**		**0.0180**	**0.200**	**mg/L**	1	28-Oct-2021 15:49
Selenium	U		0.00110	0.00200	mg/L	1	28-Oct-2021 15:49
Sodium	**243**		**0.140**	**2.00**	**mg/L**	10	29-Oct-2021 14:24
Thallium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:49
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	U		0.0120	0.200	mg/L	1	27-Oct-2021 19:48
Molybdenum	**0.00296**	J	**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 19:48
MERCURY BY SW7470A		**Method:SW7470A**			Prep:SW7470A / 27-Oct-2021		Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	27-Oct-2021 12:53
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**26.4**		**0.200**	**0.500**	**mg/L**	1	16-Oct-2021 13:18
Fluoride	**1.57**		**0.0500**	**0.100**	**mg/L**	1	16-Oct-2021 13:18
Nitrogen, Nitrate (As N)	**0.0984**	J	**0.0300**	**0.100**	**mg/L**	1	16-Oct-2021 13:18
Sulfate	**499**		**4.00**	**10.0**	**mg/L**	20	30-Oct-2021 07:17
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		**Method:E410.4**					Analyst: TH
Chemical Oxygen Demand	**6.00**	J	**5.00**	**15.0**	**mg/L**	1	26-Oct-2021 18:30
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**1,820**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:30

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-5S
Collection Date: 14-Oct-2021 15:00

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-06
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**1,140**		**5.00**	**10.0**	**mg/L**	1	20-Oct-2021 20:00
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**460**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:31
Alkalinity, Carbonate (As CaCO3)	**9.52**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:31
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	21-Oct-2021 23:31
Alkalinity, Total (As CaCO3)	**470**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:31
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: TH
Ferrous Iron	U		0.0200	0.0500	mg/L	1	16-Oct-2021 12:30
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	21-Oct-2021 16:45
PH BY SM4500H+ B-2011		**Method:SM4500H+ B**					Analyst: SH
pH	**8.16**	H	**0.100**	**0.100**	**pH Units**	1	29-Oct-2021 11:00
Temp Deg C @pH	**21.6**	H	**0**	**0**	**°C**	1	29-Oct-2021 11:00
SUBCONTRACT ANALYSIS - RADIUM 226		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01
SUBCONTRACT ANALYSIS - RADIUM 228		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-7S
Collection Date: 15-Oct-2021 11:16

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-07
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	**0.103**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	**0.134**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	28-Oct-2021 15:51
Arsenic	U		0.000400	0.00200	mg/L	1	28-Oct-2021 15:51
Barium	**0.0154**		**0.00190**	**0.00400**	**mg/L**	1	28-Oct-2021 15:51
Beryllium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:51
Boron	**2.18**		**0.110**	**0.200**	**mg/L**	10	29-Oct-2021 14:38
Cadmium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:51
Calcium	**97.1**		**0.0340**	**0.500**	**mg/L**	1	28-Oct-2021 15:51
Chromium	U		0.000400	0.00400	mg/L	1	28-Oct-2021 15:51
Cobalt	**0.000259**	J	**0.000200**	**0.00500**	**mg/L**	1	28-Oct-2021 15:51
Iron	**0.310**		**0.0120**	**0.200**	**mg/L**	1	28-Oct-2021 15:51
Lead	U		0.000600	0.00200	mg/L	1	28-Oct-2021 15:51
Lithium	**0.0645**		**0.00100**	**0.00500**	**mg/L**	1	28-Oct-2021 15:51
Magnesium	**12.2**		**0.0100**	**0.200**	**mg/L**	1	28-Oct-2021 15:51
Molybdenum	**0.00115**	J	**0.000600**	**0.00500**	**mg/L**	1	28-Oct-2021 15:51
Potassium	**5.14**		**0.0180**	**0.200**	**mg/L**	1	28-Oct-2021 15:51
Selenium	U		0.00110	0.00200	mg/L	1	28-Oct-2021 15:51
Sodium	**261**		**0.140**	**2.00**	**mg/L**	10	29-Oct-2021 14:38
Thallium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 15:51
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	**0.134**	J	**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 19:50
Molybdenum	**0.00121**	J	**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 19:50
MERCURY BY SW7470A		**Method:SW7470A**			Prep:SW7470A / 27-Oct-2021		Analyst: MSC
Mercury	U		0.0000300	0.000200	mg/L	1	27-Oct-2021 13:06
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**16.8**		**0.200**	**0.500**	**mg/L**	1	16-Oct-2021 13:40
Fluoride	**0.746**		**0.0500**	**0.100**	**mg/L**	1	16-Oct-2021 13:40
Nitrogen, Nitrate (As N)	**0.0940**	J	**0.0300**	**0.100**	**mg/L**	1	16-Oct-2021 13:40
Sulfate	**690**		**4.00**	**10.0**	**mg/L**	20	30-Oct-2021 07:39
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		**Method:E410.4**					Analyst: TH
Chemical Oxygen Demand	**7.00**	J	**5.00**	**15.0**	**mg/L**	1	26-Oct-2021 18:30
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**1,860**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:30

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-7S
Collection Date: 15-Oct-2021 11:16

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-07
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**1,290**		**5.00**	**10.0**	**mg/L**	1	21-Oct-2021 15:00
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**343**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:38
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	21-Oct-2021 23:38
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	21-Oct-2021 23:38
Alkalinity, Total (As CaCO3)	**343**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:38
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: TH
Ferrous Iron	**0.207**		**0.0200**	**0.0500**	**mg/L**	1	16-Oct-2021 12:30
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	21-Oct-2021 16:45
PH BY SM4500H+ B-2011		**Method:SM4500H+ B**					Analyst: SH
pH	**7.84**	H	**0.100**	**0.100**	**pH Units**	1	29-Oct-2021 11:00
Temp Deg C @pH	**21.6**	H	**0**	**0**	**°C**	1	29-Oct-2021 11:00
SUBCONTRACT ANALYSIS - RADIUM 226		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01
SUBCONTRACT ANALYSIS - RADIUM 228		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-13
Collection Date: 15-Oct-2021 13:07

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-08
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	28-Oct-2021 16:13
Arsenic	U		0.000400	0.00200	mg/L	1	28-Oct-2021 16:13
Barium	**0.0112**		**0.00190**	**0.00400**	**mg/L**	1	28-Oct-2021 16:13
Beryllium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 16:13
Boron	**1.43**		**0.110**	**0.200**	**mg/L**	10	29-Oct-2021 14:40
Cadmium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 16:13
Calcium	**237**		**0.340**	**5.00**	**mg/L**	10	29-Oct-2021 14:40
Chromium	U		0.000400	0.00400	mg/L	1	28-Oct-2021 16:13
Cobalt	U		0.000200	0.00500	mg/L	1	28-Oct-2021 16:13
Lead	U		0.000600	0.00200	mg/L	1	28-Oct-2021 16:13
Lithium	**0.163**		**0.00100**	**0.00500**	**mg/L**	1	28-Oct-2021 16:13
Molybdenum	**0.000917**	J	**0.000600**	**0.00500**	**mg/L**	1	28-Oct-2021 16:13
Selenium	U		0.00110	0.00200	mg/L	1	28-Oct-2021 16:13
Thallium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 16:13
MERCURY BY SW7470A		**Method:SW7470A**			Prep:SW7470A / 27-Oct-2021		Analyst: MSC
Mercury	**0.0000490**	J	**0.0000300**	**0.000200**	**mg/L**	1	27-Oct-2021 13:08
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**14.8**		**0.200**	**0.500**	**mg/L**	1	16-Oct-2021 14:03
Fluoride	**0.294**		**0.0500**	**0.100**	**mg/L**	1	16-Oct-2021 14:03
Nitrogen, Nitrate (As N)	**0.0613**	J	**0.0300**	**0.100**	**mg/L**	1	16-Oct-2021 14:03
Sulfate	**1,570**		**10.0**	**25.0**	**mg/L**	50	30-Oct-2021 07:47
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		**Method:E410.4**					Analyst: TH
Chemical Oxygen Demand	**5.00**	J	**5.00**	**15.0**	**mg/L**	1	26-Oct-2021 18:30
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**3,050**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:30
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**2,360**		**5.00**	**10.0**	**mg/L**	1	21-Oct-2021 15:00
PH BY SM4500H+ B-2011		**Method:SM4500H+ B**					Analyst: SH
pH	**7.57**	H	**0.100**	**0.100**	**pH Units**	1	29-Oct-2021 11:00
Temp Deg C @pH	**21.0**	H	**0**	**0**	**°C**	1	29-Oct-2021 11:00
SUBCONTRACT ANALYSIS - RADIUM 226		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01
SUBCONTRACT ANALYSIS - RADIUM 228		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-16
Collection Date: 14-Oct-2021 16:43

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-09
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	**0.178**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	**0.190**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	28-Oct-2021 16:15
Arsenic	**0.000417**	J	**0.000400**	**0.00200**	**mg/L**	1	28-Oct-2021 16:15
Barium	**0.0143**		**0.00190**	**0.00400**	**mg/L**	1	28-Oct-2021 16:15
Beryllium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 16:15
Boron	**1.61**		**0.110**	**0.200**	**mg/L**	10	29-Oct-2021 14:42
Cadmium	**0.000218**	J	**0.000200**	**0.00200**	**mg/L**	1	28-Oct-2021 16:15
Calcium	**158**		**0.0340**	**0.500**	**mg/L**	1	28-Oct-2021 16:15
Chromium	U		0.000400	0.00400	mg/L	1	28-Oct-2021 16:15
Cobalt	**0.000415**	J	**0.000200**	**0.00500**	**mg/L**	1	28-Oct-2021 16:15
Iron	**0.369**		**0.0120**	**0.200**	**mg/L**	1	28-Oct-2021 16:15
Lead	U		0.000600	0.00200	mg/L	1	28-Oct-2021 16:15
Lithium	**0.0466**		**0.00100**	**0.00500**	**mg/L**	1	28-Oct-2021 16:15
Magnesium	**7.38**		**0.0100**	**0.200**	**mg/L**	1	28-Oct-2021 16:15
Molybdenum	**0.163**		**0.000600**	**0.00500**	**mg/L**	1	28-Oct-2021 16:15
Potassium	**3.18**		**0.0180**	**0.200**	**mg/L**	1	28-Oct-2021 16:15
Selenium	U		0.00110	0.00200	mg/L	1	28-Oct-2021 16:15
Sodium	**295**		**0.140**	**2.00**	**mg/L**	10	29-Oct-2021 14:42
Thallium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 16:15
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	**0.190**	J	**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 19:52
Molybdenum	**0.189**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 19:52
MERCURY BY SW7470A		**Method:SW7470A**			Prep:SW7470A / 27-Oct-2021		Analyst: MSC
Mercury	**0.000158**	J	**0.0000300**	**0.000200**	**mg/L**	1	27-Oct-2021 13:10
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**16.2**		**0.200**	**0.500**	**mg/L**	1	16-Oct-2021 14:40
Fluoride	**0.964**		**0.0500**	**0.100**	**mg/L**	1	16-Oct-2021 14:40
Nitrogen, Nitrate (As N)	U		0.0300	0.100	mg/L	1	16-Oct-2021 14:40
Sulfate	**1,110**		**10.0**	**25.0**	**mg/L**	50	30-Oct-2021 07:54
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		**Method:E410.4**					Analyst: TH
Chemical Oxygen Demand	**7.00**	J	**5.00**	**15.0**	**mg/L**	1	26-Oct-2021 18:30
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**2,340**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:30

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-16
Collection Date: 14-Oct-2021 16:43

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-09
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**1,590**		**5.00**	**10.0**	**mg/L**	1	21-Oct-2021 15:00
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**264**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:44
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	21-Oct-2021 23:44
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	21-Oct-2021 23:44
Alkalinity, Total (As CaCO3)	**264**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:44
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: TH
Ferrous Iron	**0.191**		**0.0200**	**0.0500**	**mg/L**	1	16-Oct-2021 12:30
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	21-Oct-2021 16:45
PH BY SM4500H+ B-2011		**Method:SM4500H+ B**					Analyst: SH
pH	**7.75**	H	**0.100**	**0.100**	**pH Units**	1	29-Oct-2021 11:00
Temp Deg C @pH	**21.2**	H	**0**	**0**	**°C**	1	29-Oct-2021 11:00
SUBCONTRACT ANALYSIS - RADIUM 226		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01
SUBCONTRACT ANALYSIS - RADIUM 228		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-17
Collection Date: 14-Oct-2021 17:50

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-10
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	U		0.0200	0.0500	mg/L	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	28-Oct-2021 16:17
Arsenic	U		0.000400	0.00200	mg/L	1	28-Oct-2021 16:17
Barium	U		0.00190	0.00400	mg/L	1	28-Oct-2021 16:17
Beryllium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 16:17
Boron	**0.700**		**0.0110**	**0.0200**	**mg/L**	1	28-Oct-2021 16:17
Cadmium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 16:17
Calcium	**428**		**0.340**	**5.00**	**mg/L**	10	29-Oct-2021 14:44
Chromium	U		0.000400	0.00400	mg/L	1	28-Oct-2021 16:17
Cobalt	**0.000275**	J	**0.000200**	**0.00500**	**mg/L**	1	28-Oct-2021 16:17
Iron	U		0.0120	0.200	mg/L	1	28-Oct-2021 16:17
Lead	U		0.000600	0.00200	mg/L	1	28-Oct-2021 16:17
Lithium	**0.140**		**0.00100**	**0.00500**	**mg/L**	1	28-Oct-2021 16:17
Magnesium	**34.6**		**0.0100**	**0.200**	**mg/L**	1	28-Oct-2021 16:17
Molybdenum	U		0.000600	0.00500	mg/L	1	28-Oct-2021 16:17
Potassium	**4.94**		**0.0180**	**0.200**	**mg/L**	1	28-Oct-2021 16:17
Selenium	U		0.00110	0.00200	mg/L	1	28-Oct-2021 16:17
Sodium	**32.5**		**0.0140**	**0.200**	**mg/L**	1	28-Oct-2021 16:17
Thallium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 16:17
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	**0.0198**	J	**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 19:54
Molybdenum	U		0.000600	0.00500	mg/L	1	27-Oct-2021 19:54
MERCURY BY SW7470A		**Method:SW7470A**			Prep:SW7470A / 27-Oct-2021		Analyst: MSC
Mercury	**0.0000540**	J	**0.0000300**	**0.000200**	**mg/L**	1	27-Oct-2021 13:11
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**4.02**		**0.400**	**1.00**	**mg/L**	2	16-Oct-2021 14:47
Fluoride	**0.317**		**0.100**	**0.200**	**mg/L**	2	16-Oct-2021 14:47
Nitrogen, Nitrate (As N)	U		0.0600	0.200	mg/L	2	16-Oct-2021 14:47
Sulfate	**1,390**		**10.0**	**25.0**	**mg/L**	50	30-Oct-2021 08:02
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		**Method:E410.4**					Analyst: TH
Chemical Oxygen Demand	**7.00**	J	**5.00**	**15.0**	**mg/L**	1	26-Oct-2021 18:30
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**2,390**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:30

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-17
Collection Date: 14-Oct-2021 17:50

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-10
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**2,210**		**5.00**	**10.0**	**mg/L**	1	21-Oct-2021 15:00
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**288**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:50
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	21-Oct-2021 23:50
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	21-Oct-2021 23:50
Alkalinity, Total (As CaCO3)	**288**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:50
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: TH
Ferrous Iron	U		0.0200	0.0500	mg/L	1	16-Oct-2021 12:30
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	**1.12**		**1.00**	**1.00**	**mg/L**	1	21-Oct-2021 16:45
PH BY SM4500H+ B-2011		**Method:SM4500H+ B**					Analyst: SH
pH	**7.12**	H	**0.100**	**0.100**	**pH Units**	1	29-Oct-2021 11:00
Temp Deg C @pH	**22.0**	H	**0**	**0**	**°C**	1	29-Oct-2021 11:00
SUBCONTRACT ANALYSIS - RADIUM 226		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01
SUBCONTRACT ANALYSIS - RADIUM 228		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-18
Collection Date: 14-Oct-2021 19:15

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-11
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	U		0.0200	0.0500	mg/L	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	28-Oct-2021 16:21
Arsenic	**0.00299**		**0.000400**	**0.00200**	**mg/L**	1	28-Oct-2021 16:21
Barium	**0.00283**	J	**0.00190**	**0.00400**	**mg/L**	1	28-Oct-2021 16:21
Beryllium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 16:21
Boron	**4.61**		**0.110**	**0.200**	**mg/L**	10	29-Oct-2021 14:46
Cadmium	**0.000298**	J	**0.000200**	**0.00200**	**mg/L**	1	28-Oct-2021 16:21
Calcium	**19.3**		**0.0340**	**0.500**	**mg/L**	1	28-Oct-2021 16:21
Chromium	**0.000968**	J	**0.000400**	**0.00400**	**mg/L**	1	28-Oct-2021 16:21
Cobalt	U		0.000200	0.00500	mg/L	1	28-Oct-2021 16:21
Iron	U		0.0120	0.200	mg/L	1	28-Oct-2021 16:21
Lead	U		0.000600	0.00200	mg/L	1	28-Oct-2021 16:21
Lithium	**0.00301**	J	**0.00100**	**0.00500**	**mg/L**	1	28-Oct-2021 16:21
Magnesium	**0.152**	J	**0.0100**	**0.200**	**mg/L**	1	28-Oct-2021 16:21
Molybdenum	**0.209**		**0.000600**	**0.00500**	**mg/L**	1	28-Oct-2021 16:21
Potassium	**15.0**		**0.0180**	**0.200**	**mg/L**	1	28-Oct-2021 16:21
Selenium	**0.00137**	J	**0.00110**	**0.00200**	**mg/L**	1	28-Oct-2021 16:21
Sodium	**329**		**0.140**	**2.00**	**mg/L**	10	29-Oct-2021 14:46
Thallium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 16:21
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	U		0.0120	0.200	mg/L	1	27-Oct-2021 19:56
Molybdenum	**0.211**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 19:56
MERCURY BY SW7470A		**Method:SW7470A**			Prep:SW7470A / 27-Oct-2021		Analyst: MSC
Mercury	**0.000247**		**0.0000300**	**0.000200**	**mg/L**	1	27-Oct-2021 13:13
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**4.39**		**0.200**	**0.500**	**mg/L**	1	16-Oct-2021 14:55
Fluoride	**1.90**		**0.0500**	**0.100**	**mg/L**	1	16-Oct-2021 14:55
Nitrogen, Nitrate (As N)	**0.0606**	J	**0.0300**	**0.100**	**mg/L**	1	16-Oct-2021 14:55
Sulfate	**896**		**10.0**	**25.0**	**mg/L**	50	30-Oct-2021 08:09
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		**Method:E410.4**					Analyst: TH
Chemical Oxygen Demand	**9.00**	J	**5.00**	**15.0**	**mg/L**	1	26-Oct-2021 18:30
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**2,040**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:30

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-18
Collection Date: 14-Oct-2021 19:15

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-11
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**1,320**		**5.00**	**10.0**	**mg/L**	1	21-Oct-2021 15:00
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	U		5.00	5.00	mg/L	1	21-Oct-2021 23:57
Alkalinity, Carbonate (As CaCO3)	**55.8**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:57
Alkalinity, Hydroxide (As CaCO3)	**17.9**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:57
Alkalinity, Total (As CaCO3)	**73.8**		**5.00**	**5.00**	**mg/L**	1	21-Oct-2021 23:57
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: TH
Ferrous Iron	U		0.0200	0.0500	mg/L	1	16-Oct-2021 12:30
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	21-Oct-2021 16:45
PH BY SM4500H+ B-2011		**Method:SM4500H+ B**					Analyst: SH
pH	**9.95**	H	**0.100**	**0.100**	**pH Units**	1	29-Oct-2021 11:00
Temp Deg C @pH	**22.7**	H	**0**	**0**	**°C**	1	29-Oct-2021 11:00
SUBCONTRACT ANALYSIS - RADIUM 226		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01
SUBCONTRACT ANALYSIS - RADIUM 228		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-19S
Collection Date: 15-Oct-2021 12:02

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-12
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	U		0.0200	0.0500	mg/L	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	**0.0210**	J	**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	28-Oct-2021 16:23
Arsenic	**0.00689**		**0.000400**	**0.00200**	**mg/L**	1	28-Oct-2021 16:23
Barium	**0.0166**		**0.00190**	**0.00400**	**mg/L**	1	28-Oct-2021 16:23
Beryllium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 16:23
Boron	**5.88**		**0.220**	**0.400**	**mg/L**	20	29-Oct-2021 14:48
Cadmium	**0.000502**	J	**0.000200**	**0.00200**	**mg/L**	1	28-Oct-2021 16:23
Calcium	**41.6**		**0.0340**	**0.500**	**mg/L**	1	28-Oct-2021 16:23
Chromium	**0.000930**	J	**0.000400**	**0.00400**	**mg/L**	1	28-Oct-2021 16:23
Cobalt	U		0.000200	0.00500	mg/L	1	28-Oct-2021 16:23
Iron	**0.0509**	J	**0.0120**	**0.200**	**mg/L**	1	28-Oct-2021 16:23
Lead	U		0.000600	0.00200	mg/L	1	28-Oct-2021 16:23
Lithium	**0.00150**	J	**0.00100**	**0.00500**	**mg/L**	1	28-Oct-2021 16:23
Magnesium	**0.0415**	J	**0.0100**	**0.200**	**mg/L**	1	28-Oct-2021 16:23
Molybdenum	**0.407**		**0.000600**	**0.00500**	**mg/L**	1	28-Oct-2021 16:23
Potassium	**34.6**		**0.0180**	**0.200**	**mg/L**	1	28-Oct-2021 16:23
Selenium	**0.0113**		**0.00110**	**0.00200**	**mg/L**	1	28-Oct-2021 16:23
Sodium	**462**		**0.280**	**4.00**	**mg/L**	20	29-Oct-2021 14:48
Thallium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 16:23
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	**0.0210**	J	**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 19:58
Molybdenum	**0.440**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 19:58
MERCURY BY SW7470A		**Method:SW7470A**			Prep:SW7470A / 27-Oct-2021		Analyst: MSC
Mercury	**0.000113**	J	**0.0000300**	**0.000200**	**mg/L**	1	27-Oct-2021 13:15
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**13.6**		**0.400**	**1.00**	**mg/L**	2	16-Oct-2021 15:02
Fluoride	**1.57**		**0.100**	**0.200**	**mg/L**	2	16-Oct-2021 15:02
Nitrogen, Nitrate (As N)	U		0.0600	0.200	mg/L	2	16-Oct-2021 15:02
Sulfate	**1,570**		**10.0**	**25.0**	**mg/L**	50	30-Oct-2021 08:16
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		**Method:E410.4**					Analyst: TH
Chemical Oxygen Demand	**21.0**		**5.00**	**15.0**	**mg/L**	1	26-Oct-2021 18:30
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**3,370**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:30

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

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-19S
Collection Date: 15-Oct-2021 12:02

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-12
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**2,290**		**5.00**	**10.0**	**mg/L**	1	21-Oct-2021 15:00
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	U		5.00	5.00	mg/L	1	22-Oct-2021 00:05
Alkalinity, Carbonate (As CaCO3)	**77.3**		**5.00**	**5.00**	**mg/L**	1	22-Oct-2021 00:05
Alkalinity, Hydroxide (As CaCO3)	**73.0**		**5.00**	**5.00**	**mg/L**	1	22-Oct-2021 00:05
Alkalinity, Total (As CaCO3)	**150**		**5.00**	**5.00**	**mg/L**	1	22-Oct-2021 00:05
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: TH
Ferrous Iron	**0.0450**	J	**0.0200**	**0.0500**	**mg/L**	1	16-Oct-2021 12:30
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	21-Oct-2021 16:45
PH BY SM4500H+ B-2011		**Method:SM4500H+ B**					Analyst: SH
pH	**10.8**	H	**0.100**	**0.100**	**pH Units**	1	29-Oct-2021 11:00
Temp Deg C @pH	**22.0**	H	**0**	**0**	**°C**	1	29-Oct-2021 11:00
SUBCONTRACT ANALYSIS - RADIUM 226		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01
SUBCONTRACT ANALYSIS - RADIUM 228		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01

Client: Altamira
Project: WFEC CCR/Landfill
Sample ID: MW-20
Collection Date: 15-Oct-2021 10:00

ANALYTICAL REPORT
WorkOrder:HS21100884
Lab ID:HS21100884-13
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Antimony	U		0.000400	0.00200	mg/L	1	28-Oct-2021 16:27
Arsenic	U		0.000400	0.00200	mg/L	1	28-Oct-2021 16:27
Barium	**0.0124**		**0.00190**	**0.00400**	**mg/L**	1	28-Oct-2021 16:27
Beryllium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 16:27
Boron	**0.930**		**0.110**	**0.200**	**mg/L**	10	29-Oct-2021 14:50
Cadmium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 16:27
Calcium	**325**		**0.340**	**5.00**	**mg/L**	10	29-Oct-2021 14:50
Chromium	**0.000592**	J	**0.000400**	**0.00400**	**mg/L**	1	28-Oct-2021 16:27
Cobalt	**0.000234**	J	**0.000200**	**0.00500**	**mg/L**	1	28-Oct-2021 16:27
Lead	U		0.000600	0.00200	mg/L	1	28-Oct-2021 16:27
Lithium	**0.105**		**0.00100**	**0.00500**	**mg/L**	1	28-Oct-2021 16:27
Molybdenum	U		0.000600	0.00500	mg/L	1	28-Oct-2021 16:27
Selenium	U		0.00110	0.00200	mg/L	1	28-Oct-2021 16:27
Thallium	U		0.000200	0.00200	mg/L	1	28-Oct-2021 16:27
MERCURY BY SW7470A		**Method:SW7470A**			Prep:SW7470A / 27-Oct-2021		Analyst: MSC
Mercury	**0.000224**		**0.0000300**	**0.000200**	**mg/L**	1	27-Oct-2021 13:16
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**5.17**		**0.200**	**0.500**	**mg/L**	1	16-Oct-2021 15:10
Fluoride	**0.264**		**0.0500**	**0.100**	**mg/L**	1	16-Oct-2021 15:10
Nitrogen, Nitrate (As N)	**0.0434**	J	**0.0300**	**0.100**	**mg/L**	1	16-Oct-2021 15:10
Sulfate	**1,030**		**10.0**	**25.0**	**mg/L**	50	30-Oct-2021 08:24
CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993		**Method:E410.4**					Analyst: TH
Chemical Oxygen Demand	**10.0**	J	**5.00**	**15.0**	**mg/L**	1	26-Oct-2021 18:30
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**2,140**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:30
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**1,850**		**5.00**	**10.0**	**mg/L**	1	21-Oct-2021 15:00
PH BY SM4500H+ B-2011		**Method:SM4500H+ B**					Analyst: SH
pH	**7.94**	H	**0.100**	**0.100**	**pH Units**	1	29-Oct-2021 11:00
Temp Deg C @pH	**22.3**	H	**0**	**0**	**°C**	1	29-Oct-2021 11:00
SUBCONTRACT ANALYSIS - RADIUM 226		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01
SUBCONTRACT ANALYSIS - RADIUM 228		**Method:NA**					Analyst: SUBFC
Subcontract Analysis	See Attached		0		NA	1	20-Dec-2021 08:01

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

Revision: 2

Weight / Prep Log

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

Batch ID: 171793 **Start Date:** 27 Oct 2021 07:00 **End Date:** 27 Oct 2021 09:30
Method: MERCURY PREP BY 7470A- WATER **Prep Code:** HG_WPR

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS21100884-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-12		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-13		10 (mL)	10 (mL)	1	120 plastic HNO3

Batch ID: 171800 **Start Date:** 27 Oct 2021 12:00 **End Date:** 27 Oct 2021 16:00
Method: WATER - SW3010A **Prep Code:** 3010A

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS21100884-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-12		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-13		10 (mL)	10 (mL)	1	120 plastic HNO3

Batch ID: 171817 **Start Date:** 27 Oct 2021 12:30 **End Date:** 27 Oct 2021 16:30
Method: DISS METALS PREP - WATER - SW3010A **Prep Code:** 3010A DISS

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS21100884-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100884-12		10 (mL)	10 (mL)	1	120 plastic HNO3

Weight / Prep Log

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

Batch ID: 171897 **Start Date:** 26 Oct 2021 09:08 **End Date:**
Method: SAMPLE FILTRATION - 0.45 MICRON FILTER **Prep Code:** FILTRATION - WET CHEM

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS21100884-02		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100884-03		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100884-06		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100884-07		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100884-09		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100884-10		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100884-11		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100884-12		50 (mL)	50 (mL)	1	500 mL plastic, Neat

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 171793 (0)	**Test Name :** MERCURY BY SW7470A				**Matrix:** Water	
HS21100884-01	MW-3	13 Oct 2021 18:49		27 Oct 2021 07:00	27 Oct 2021 12:46	1
HS21100884-02	MW-14A	13 Oct 2021 19:17		27 Oct 2021 07:00	27 Oct 2021 12:48	1
HS21100884-03	MW-15A	13 Oct 2021 17:03		27 Oct 2021 07:00	27 Oct 2021 12:50	1
HS21100884-04	MW-21	13 Oct 2021 17:35		27 Oct 2021 07:00	27 Oct 2021 12:39	1
HS21100884-05	DUP 3	13 Oct 2021 17:35		27 Oct 2021 07:00	27 Oct 2021 12:51	1
HS21100884-06	MW-5S	14 Oct 2021 15:00		27 Oct 2021 07:00	27 Oct 2021 12:53	1
HS21100884-07	MW-7S	15 Oct 2021 11:16		27 Oct 2021 07:00	27 Oct 2021 13:06	1
HS21100884-08	MW-13	15 Oct 2021 13:07		27 Oct 2021 07:00	27 Oct 2021 13:08	1
HS21100884-09	MW-16	14 Oct 2021 16:43		27 Oct 2021 07:00	27 Oct 2021 13:10	1
HS21100884-10	MW-17	14 Oct 2021 17:50		27 Oct 2021 07:00	27 Oct 2021 13:11	1
HS21100884-11	MW-18	14 Oct 2021 19:15		27 Oct 2021 07:00	27 Oct 2021 13:13	1
HS21100884-12	MW-19S	15 Oct 2021 12:02		27 Oct 2021 07:00	27 Oct 2021 13:15	1
HS21100884-13	MW-20	15 Oct 2021 10:00		27 Oct 2021 07:00	27 Oct 2021 13:16	1

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 171800 (0)	**Test Name :** ICP-MS METALS BY SW6020A				**Matrix:** Water	
HS21100884-01	MW-3	13 Oct 2021 18:49		27 Oct 2021 16:00	29 Oct 2021 14:36	10
HS21100884-01	MW-3	13 Oct 2021 18:49		27 Oct 2021 16:00	28 Oct 2021 15:21	1
HS21100884-02	MW-14A	13 Oct 2021 19:17		27 Oct 2021 16:00	29 Oct 2021 14:12	10
HS21100884-02	MW-14A	13 Oct 2021 19:17		27 Oct 2021 16:00	28 Oct 2021 15:23	1
HS21100884-03	MW-15A	13 Oct 2021 17:03		27 Oct 2021 16:00	29 Oct 2021 14:14	10
HS21100884-03	MW-15A	13 Oct 2021 17:03		27 Oct 2021 16:00	28 Oct 2021 15:25	1
HS21100884-04	MW-21	13 Oct 2021 17:35		27 Oct 2021 16:00	29 Oct 2021 16:19	20
HS21100884-04	MW-21	13 Oct 2021 17:35		27 Oct 2021 16:00	28 Oct 2021 15:36	1
HS21100884-05	DUP 3	13 Oct 2021 17:35		27 Oct 2021 16:00	29 Oct 2021 14:22	10
HS21100884-05	DUP 3	13 Oct 2021 17:35		27 Oct 2021 16:00	28 Oct 2021 15:47	1
HS21100884-06	MW-5S	14 Oct 2021 15:00		27 Oct 2021 16:00	29 Oct 2021 14:24	10
HS21100884-06	MW-5S	14 Oct 2021 15:00		27 Oct 2021 16:00	28 Oct 2021 15:49	1
HS21100884-07	MW-7S	15 Oct 2021 11:16		27 Oct 2021 16:00	29 Oct 2021 14:38	10
HS21100884-07	MW-7S	15 Oct 2021 11:16		27 Oct 2021 16:00	28 Oct 2021 15:51	1
HS21100884-08	MW-13	15 Oct 2021 13:07		27 Oct 2021 16:00	29 Oct 2021 14:40	10
HS21100884-08	MW-13	15 Oct 2021 13:07		27 Oct 2021 16:00	28 Oct 2021 16:13	1
HS21100884-09	MW-16	14 Oct 2021 16:43		27 Oct 2021 16:00	29 Oct 2021 14:42	10
HS21100884-09	MW-16	14 Oct 2021 16:43		27 Oct 2021 16:00	28 Oct 2021 16:15	1
HS21100884-10	MW-17	14 Oct 2021 17:50		27 Oct 2021 16:00	29 Oct 2021 14:44	10
HS21100884-10	MW-17	14 Oct 2021 17:50		27 Oct 2021 16:00	28 Oct 2021 16:17	1
HS21100884-11	MW-18	14 Oct 2021 19:15		27 Oct 2021 16:00	29 Oct 2021 14:46	10
HS21100884-11	MW-18	14 Oct 2021 19:15		27 Oct 2021 16:00	28 Oct 2021 16:21	1
HS21100884-12	MW-19S	15 Oct 2021 12:02		27 Oct 2021 16:00	29 Oct 2021 14:48	20
HS21100884-12	MW-19S	15 Oct 2021 12:02		27 Oct 2021 16:00	28 Oct 2021 16:23	1
HS21100884-13	MW-20	15 Oct 2021 10:00		27 Oct 2021 16:00	29 Oct 2021 14:50	10
HS21100884-13	MW-20	15 Oct 2021 10:00		27 Oct 2021 16:00	28 Oct 2021 16:27	1
Batch ID: 171817 (0)	**Test Name :** DISSOLVED METALS BY SW6020A				**Matrix:** Water	
HS21100884-02	MW-14A	13 Oct 2021 19:17		27 Oct 2021 16:30	27 Oct 2021 19:40	1
HS21100884-03	MW-15A	13 Oct 2021 17:03		27 Oct 2021 16:30	27 Oct 2021 19:45	1
HS21100884-06	MW-5S	14 Oct 2021 15:00		27 Oct 2021 16:30	27 Oct 2021 19:48	1
HS21100884-07	MW-7S	15 Oct 2021 11:16		27 Oct 2021 16:30	27 Oct 2021 19:50	1
HS21100884-09	MW-16	14 Oct 2021 16:43		27 Oct 2021 16:30	27 Oct 2021 19:52	1
HS21100884-10	MW-17	14 Oct 2021 17:50		27 Oct 2021 16:30	27 Oct 2021 19:54	1
HS21100884-11	MW-18	14 Oct 2021 19:15		27 Oct 2021 16:30	27 Oct 2021 19:56	1
HS21100884-12	MW-19S	15 Oct 2021 12:02		27 Oct 2021 16:30	27 Oct 2021 19:58	1

Client: Altamira
Project: WFEC CCR/Landfill
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DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R393566 (0)	**Test Name :** FERROUS IRON BY SM3500 FE B				**Matrix:** Water	
HS21100884-06	MW-5S	14 Oct 2021 15:00			16 Oct 2021 12:30	1
HS21100884-07	MW-7S	15 Oct 2021 11:16			16 Oct 2021 12:30	1
HS21100884-09	MW-16	14 Oct 2021 16:43			16 Oct 2021 12:30	1
HS21100884-10	MW-17	14 Oct 2021 17:50			16 Oct 2021 12:30	1
HS21100884-11	MW-18	14 Oct 2021 19:15			16 Oct 2021 12:30	1
HS21100884-12	MW-19S	15 Oct 2021 12:02			16 Oct 2021 12:30	1
Batch ID: R393664 (0)	**Test Name :** ANIONS BY E300.0, REV 2.1, 1993				**Matrix:** Water	
HS21100884-01	MW-3	13 Oct 2021 18:49			15 Oct 2021 15:07	2
HS21100884-02	MW-14A	13 Oct 2021 19:17			15 Oct 2021 15:15	2
HS21100884-03	MW-15A	13 Oct 2021 17:03			15 Oct 2021 15:22	2
HS21100884-04	MW-21	13 Oct 2021 17:35			15 Oct 2021 15:29	2
HS21100884-05	DUP 3	13 Oct 2021 17:35			15 Oct 2021 15:52	2
Batch ID: R393740 (0)	**Test Name :** FERROUS IRON BY SM3500 FE B				**Matrix:** Water	
HS21100884-02	MW-14A	13 Oct 2021 19:17			15 Oct 2021 15:29	1
HS21100884-03	MW-15A	13 Oct 2021 17:03			15 Oct 2021 15:29	1
Batch ID: R393819 (0)	**Test Name :** SULFIDE BY SM4500 S2-F-2011				**Matrix:** Water	
HS21100884-02	MW-14A	13 Oct 2021 19:17			20 Oct 2021 12:50	1
HS21100884-03	MW-15A	13 Oct 2021 17:03			20 Oct 2021 12:50	1
Batch ID: R393922 (0)	**Test Name :** TOTAL DISSOLVED SOLIDS BY SM2540C-2011				**Matrix:** Water	
HS21100884-01	MW-3	13 Oct 2021 18:49			20 Oct 2021 20:00	1
HS21100884-02	MW-14A	13 Oct 2021 19:17			20 Oct 2021 20:00	1
HS21100884-03	MW-15A	13 Oct 2021 17:03			20 Oct 2021 20:00	1
HS21100884-04	MW-21	13 Oct 2021 17:35			20 Oct 2021 20:00	1
HS21100884-05	DUP 3	13 Oct 2021 17:35			20 Oct 2021 20:00	1
HS21100884-06	MW-5S	14 Oct 2021 15:00			20 Oct 2021 20:00	1
Batch ID: R393972 (0)	**Test Name :** ALKALINITY BY SM 2320B-2011				**Matrix:** Water	
HS21100884-02	MW-14A	13 Oct 2021 19:17			21 Oct 2021 23:12	1
HS21100884-03	MW-15A	13 Oct 2021 17:03			21 Oct 2021 23:24	1
HS21100884-06	MW-5S	14 Oct 2021 15:00			21 Oct 2021 23:31	1
HS21100884-07	MW-7S	15 Oct 2021 11:16			21 Oct 2021 23:38	1
HS21100884-09	MW-16	14 Oct 2021 16:43			21 Oct 2021 23:44	1
HS21100884-10	MW-17	14 Oct 2021 17:50			21 Oct 2021 23:50	1
HS21100884-11	MW-18	14 Oct 2021 19:15			21 Oct 2021 23:57	1
HS21100884-12	MW-19S	15 Oct 2021 12:02			22 Oct 2021 00:05	1

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R393988 (0)	**Test Name :** SULFIDE BY SM4500 S2-F-2011				**Matrix:** Water	
HS21100884-06	MW-5S	14 Oct 2021 15:00			21 Oct 2021 16:45	1
HS21100884-07	MW-7S	15 Oct 2021 11:16			21 Oct 2021 16:45	1
HS21100884-09	MW-16	14 Oct 2021 16:43			21 Oct 2021 16:45	1
HS21100884-10	MW-17	14 Oct 2021 17:50			21 Oct 2021 16:45	1
HS21100884-11	MW-18	14 Oct 2021 19:15			21 Oct 2021 16:45	1
HS21100884-12	MW-19S	15 Oct 2021 12:02			21 Oct 2021 16:45	1
Batch ID: R394028 (0)	**Test Name :** TOTAL DISSOLVED SOLIDS BY SM2540C-2011				**Matrix:** Water	
HS21100884-07	MW-7S	15 Oct 2021 11:16			21 Oct 2021 15:00	1
HS21100884-08	MW-13	15 Oct 2021 13:07			21 Oct 2021 15:00	1
HS21100884-09	MW-16	14 Oct 2021 16:43			21 Oct 2021 15:00	1
HS21100884-10	MW-17	14 Oct 2021 17:50			21 Oct 2021 15:00	1
HS21100884-11	MW-18	14 Oct 2021 19:15			21 Oct 2021 15:00	1
HS21100884-12	MW-19S	15 Oct 2021 12:02			21 Oct 2021 15:00	1
HS21100884-13	MW-20	15 Oct 2021 10:00			21 Oct 2021 15:00	1
Batch ID: R394252 (0)	**Test Name :** CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993				**Matrix:** Water	
HS21100884-01	MW-3	13 Oct 2021 18:49			26 Oct 2021 18:30	1
HS21100884-02	MW-14A	13 Oct 2021 19:17			26 Oct 2021 18:30	1
HS21100884-03	MW-15A	13 Oct 2021 17:03			26 Oct 2021 18:30	1
HS21100884-04	MW-21	13 Oct 2021 17:35			26 Oct 2021 18:30	1
HS21100884-05	DUP 3	13 Oct 2021 17:35			26 Oct 2021 18:30	1
HS21100884-06	MW-5S	14 Oct 2021 15:00			26 Oct 2021 18:30	1
HS21100884-07	MW-7S	15 Oct 2021 11:16			26 Oct 2021 18:30	1
HS21100884-08	MW-13	15 Oct 2021 13:07			26 Oct 2021 18:30	1
HS21100884-09	MW-16	14 Oct 2021 16:43			26 Oct 2021 18:30	1
HS21100884-10	MW-17	14 Oct 2021 17:50			26 Oct 2021 18:30	1
HS21100884-11	MW-18	14 Oct 2021 19:15			26 Oct 2021 18:30	1
HS21100884-12	MW-19S	15 Oct 2021 12:02			26 Oct 2021 18:30	1
HS21100884-13	MW-20	15 Oct 2021 10:00			26 Oct 2021 18:30	1
Batch ID: R394412 (0)	**Test Name :** ANIONS BY E300.0, REV 2.1, 1993				**Matrix:** Water	
HS21100884-06	MW-5S	14 Oct 2021 15:00			16 Oct 2021 13:18	1
HS21100884-07	MW-7S	15 Oct 2021 11:16			16 Oct 2021 13:40	1
HS21100884-08	MW-13	15 Oct 2021 13:07			16 Oct 2021 14:03	1
HS21100884-09	MW-16	14 Oct 2021 16:43			16 Oct 2021 14:40	1
HS21100884-10	MW-17	14 Oct 2021 17:50			16 Oct 2021 14:47	2
HS21100884-11	MW-18	14 Oct 2021 19:15			16 Oct 2021 14:55	1
HS21100884-12	MW-19S	15 Oct 2021 12:02			16 Oct 2021 15:02	2
HS21100884-13	MW-20	15 Oct 2021 10:00			16 Oct 2021 15:10	1

Client: Altamira
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DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R394421 (0)	**Test Name :** SPECIFIC CONDUCTANCE BY SM 2510B-2011				**Matrix:** Water	
HS21100884-01	MW-3	13 Oct 2021 18:49			28 Oct 2021 14:30	1
HS21100884-02	MW-14A	13 Oct 2021 19:17			28 Oct 2021 14:30	1
HS21100884-03	MW-15A	13 Oct 2021 17:03			28 Oct 2021 14:30	1
HS21100884-04	MW-21	13 Oct 2021 17:35			28 Oct 2021 14:30	1
HS21100884-05	DUP 3	13 Oct 2021 17:35			28 Oct 2021 14:30	1
HS21100884-06	MW-5S	14 Oct 2021 15:00			28 Oct 2021 14:30	1
HS21100884-07	MW-7S	15 Oct 2021 11:16			28 Oct 2021 14:30	1
HS21100884-08	MW-13	15 Oct 2021 13:07			28 Oct 2021 14:30	1
HS21100884-09	MW-16	14 Oct 2021 16:43			28 Oct 2021 14:30	1
HS21100884-10	MW-17	14 Oct 2021 17:50			28 Oct 2021 14:30	1
HS21100884-11	MW-18	14 Oct 2021 19:15			28 Oct 2021 14:30	1
HS21100884-12	MW-19S	15 Oct 2021 12:02			28 Oct 2021 14:30	1
HS21100884-13	MW-20	15 Oct 2021 10:00			28 Oct 2021 14:30	1
Batch ID: R394434 (0)	**Test Name :** FERROUS IRON BY SM3500 FE D				**Matrix:** Water	
HS21100884-02	MW-14A	13 Oct 2021 19:17			27 Oct 2021 20:36	1
HS21100884-03	MW-15A	13 Oct 2021 17:03			27 Oct 2021 20:36	1
HS21100884-06	MW-5S	14 Oct 2021 15:00			27 Oct 2021 20:36	1
HS21100884-07	MW-7S	15 Oct 2021 11:16			27 Oct 2021 20:36	1
HS21100884-09	MW-16	14 Oct 2021 16:43			27 Oct 2021 20:36	1
HS21100884-10	MW-17	14 Oct 2021 17:50			27 Oct 2021 20:36	1
HS21100884-11	MW-18	14 Oct 2021 19:15			27 Oct 2021 20:36	1
HS21100884-12	MW-19S	15 Oct 2021 12:02			27 Oct 2021 20:36	1
Batch ID: R394454 (0)	**Test Name :** FERRIC IRON - BY CALCULATION BY SM3500FED				**Matrix:** Water	
HS21100884-02	MW-14A	13 Oct 2021 19:17			28 Oct 2021 17:32	1
HS21100884-03	MW-15A	13 Oct 2021 17:03			28 Oct 2021 17:32	1
HS21100884-06	MW-5S	14 Oct 2021 15:00			28 Oct 2021 17:32	1
HS21100884-07	MW-7S	15 Oct 2021 11:16			28 Oct 2021 17:32	1
HS21100884-09	MW-16	14 Oct 2021 16:43			28 Oct 2021 17:32	1
HS21100884-10	MW-17	14 Oct 2021 17:50			28 Oct 2021 17:32	1
HS21100884-11	MW-18	14 Oct 2021 19:15			28 Oct 2021 17:32	1
HS21100884-12	MW-19S	15 Oct 2021 12:02			28 Oct 2021 17:32	1

Client: Altamira
Project: WFEC CCR/Landfill
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DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R394455 (0)	**Test Name :** FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED				**Matrix:** Water	
HS21100884-02	MW-14A	13 Oct 2021 19:17			28 Oct 2021 17:32	1
HS21100884-03	MW-15A	13 Oct 2021 17:03			28 Oct 2021 17:32	1
HS21100884-06	MW-5S	14 Oct 2021 15:00			28 Oct 2021 17:32	1
HS21100884-07	MW-7S	15 Oct 2021 11:16			28 Oct 2021 17:32	1
HS21100884-09	MW-16	14 Oct 2021 16:43			28 Oct 2021 17:32	1
HS21100884-10	MW-17	14 Oct 2021 17:50			28 Oct 2021 17:32	1
HS21100884-11	MW-18	14 Oct 2021 19:15			28 Oct 2021 17:32	1
HS21100884-12	MW-19S	15 Oct 2021 12:02			28 Oct 2021 17:32	1
Batch ID: R394509 (0)	**Test Name :** PH BY SM4500H+ B-2011				**Matrix:** Water	
HS21100884-01	MW-3	13 Oct 2021 18:49			29 Oct 2021 11:00	1
HS21100884-02	MW-14A	13 Oct 2021 19:17			29 Oct 2021 11:00	1
HS21100884-03	MW-15A	13 Oct 2021 17:03			29 Oct 2021 11:00	1
HS21100884-04	MW-21	13 Oct 2021 17:35			29 Oct 2021 11:00	1
HS21100884-05	DUP 3	13 Oct 2021 17:35			29 Oct 2021 11:00	1
HS21100884-06	MW-5S	14 Oct 2021 15:00			29 Oct 2021 11:00	1
HS21100884-07	MW-7S	15 Oct 2021 11:16			29 Oct 2021 11:00	1
HS21100884-08	MW-13	15 Oct 2021 13:07			29 Oct 2021 11:00	1
HS21100884-09	MW-16	14 Oct 2021 16:43			29 Oct 2021 11:00	1
HS21100884-10	MW-17	14 Oct 2021 17:50			29 Oct 2021 11:00	1
HS21100884-11	MW-18	14 Oct 2021 19:15			29 Oct 2021 11:00	1
HS21100884-12	MW-19S	15 Oct 2021 12:02			29 Oct 2021 11:00	1
HS21100884-13	MW-20	15 Oct 2021 10:00			29 Oct 2021 11:00	1
Batch ID: R394578 (0)	**Test Name :** ANIONS BY E300.0, REV 2.1, 1993				**Matrix:** Water	
HS21100884-01	MW-3	13 Oct 2021 18:49			30 Oct 2021 06:40	50
HS21100884-02	MW-14A	13 Oct 2021 19:17			30 Oct 2021 06:48	50
HS21100884-03	MW-15A	13 Oct 2021 17:03			30 Oct 2021 06:55	50
HS21100884-04	MW-21	13 Oct 2021 17:35			30 Oct 2021 07:02	50
HS21100884-05	DUP 3	13 Oct 2021 17:35			30 Oct 2021 07:10	50
HS21100884-06	MW-5S	14 Oct 2021 15:00			30 Oct 2021 07:17	20
HS21100884-07	MW-7S	15 Oct 2021 11:16			30 Oct 2021 07:39	20
HS21100884-08	MW-13	15 Oct 2021 13:07			30 Oct 2021 07:47	50
HS21100884-09	MW-16	14 Oct 2021 16:43			30 Oct 2021 07:54	50
HS21100884-10	MW-17	14 Oct 2021 17:50			30 Oct 2021 08:02	50
HS21100884-11	MW-18	14 Oct 2021 19:15			30 Oct 2021 08:09	50
HS21100884-12	MW-19S	15 Oct 2021 12:02			30 Oct 2021 08:16	50
HS21100884-13	MW-20	15 Oct 2021 10:00			30 Oct 2021 08:24	50

Client: Altamira
Project: WFEC CCR/Landfill
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DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R397954 (0)	**Test Name :** SUBCONTRACT ANALYSIS - RADIUM 228				**Matrix:** Water	
HS21100884-01	MW-3	13 Oct 2021 18:49			20 Dec 2021 08:01	1
HS21100884-01	MW-3	13 Oct 2021 18:49			20 Dec 2021 08:01	1
HS21100884-02	MW-14A	13 Oct 2021 19:17			20 Dec 2021 08:01	1
HS21100884-02	MW-14A	13 Oct 2021 19:17			20 Dec 2021 08:01	1
HS21100884-03	MW-15A	13 Oct 2021 17:03			20 Dec 2021 08:01	1
HS21100884-03	MW-15A	13 Oct 2021 17:03			20 Dec 2021 08:01	1
HS21100884-04	MW-21	13 Oct 2021 17:35			20 Dec 2021 08:01	1
HS21100884-04	MW-21	13 Oct 2021 17:35			20 Dec 2021 08:01	1
HS21100884-05	DUP 3	13 Oct 2021 17:35			20 Dec 2021 08:01	1
HS21100884-05	DUP 3	13 Oct 2021 17:35			20 Dec 2021 08:01	1
HS21100884-06	MW-5S	14 Oct 2021 15:00			20 Dec 2021 08:01	1
HS21100884-06	MW-5S	14 Oct 2021 15:00			20 Dec 2021 08:01	1
HS21100884-07	MW-7S	15 Oct 2021 11:16			20 Dec 2021 08:01	1
HS21100884-07	MW-7S	15 Oct 2021 11:16			20 Dec 2021 08:01	1
HS21100884-08	MW-13	15 Oct 2021 13:07			20 Dec 2021 08:01	1
HS21100884-08	MW-13	15 Oct 2021 13:07			20 Dec 2021 08:01	1
HS21100884-09	MW-16	14 Oct 2021 16:43			20 Dec 2021 08:01	1
HS21100884-09	MW-16	14 Oct 2021 16:43			20 Dec 2021 08:01	1
HS21100884-10	MW-17	14 Oct 2021 17:50			20 Dec 2021 08:01	1
HS21100884-10	MW-17	14 Oct 2021 17:50			20 Dec 2021 08:01	1
HS21100884-11	MW-18	14 Oct 2021 19:15			20 Dec 2021 08:01	1
HS21100884-11	MW-18	14 Oct 2021 19:15			20 Dec 2021 08:01	1
HS21100884-12	MW-19S	15 Oct 2021 12:02			20 Dec 2021 08:01	1
HS21100884-12	MW-19S	15 Oct 2021 12:02			20 Dec 2021 08:01	1
HS21100884-13	MW-20	15 Oct 2021 10:00			20 Dec 2021 08:01	1
HS21100884-13	MW-20	15 Oct 2021 10:00			20 Dec 2021 08:01	1

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: 171793 (0) **Instrument: HG03** **Method: MERCURY BY SW7470A**

MBLK Sample ID: **MBLKF1-171793** Units: **mg/L** Analysis Date: **27-Oct-2021 12:36**
Client ID: Run ID: **HG03_394267** SeqNo: **6340463** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200								

MBLK Sample ID: **MBLK-171793** Units: **mg/L** Analysis Date: **27-Oct-2021 12:29**
Client ID: Run ID: **HG03_394267** SeqNo: **6340460** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200								

LCS Sample ID: **LCS-171793** Units: **mg/L** Analysis Date: **27-Oct-2021 12:38**
Client ID: Run ID: **HG03_394267** SeqNo: **6340464** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00579	0.000200	0.005	0	116	80 - 120				

MS Sample ID: **HS21100884-04MS** Units: **mg/L** Analysis Date: **27-Oct-2021 12:41**
Client ID: **MW-21** Run ID: **HG03_394267** SeqNo: **6340466** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00577	0.000200	0.005	0.000021	115	75 - 125				

MSD Sample ID: **HS21100884-04MSD** Units: **mg/L** Analysis Date: **27-Oct-2021 12:45**
Client ID: **MW-21** Run ID: **HG03_394267** SeqNo: **6340467** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00607	0.000200	0.005	0.000021	121	75 - 125	0.00577	5.07	20	

The following samples were analyzed in this batch:

HS21100884-01	HS21100884-02	HS21100884-03	HS21100884-04
HS21100884-05	HS21100884-06	HS21100884-07	HS21100884-08
HS21100884-09	HS21100884-10	HS21100884-11	HS21100884-12
HS21100884-13			

Client: Altamira
Project: WFEC CCR/Landfill
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QC BATCH REPORT

Batch ID: 171800 (0) **Instrument: ICPMS06** **Method: ICP-MS METALS BY SW6020A**

MBLK Sample ID: **MBLK-171800** Units: **mg/L** Analysis Date: **28-Oct-2021 15:17**
Client ID: Run ID: **ICPMS06_394433** SeqNo: **6343749** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	U	0.00200								
Arsenic	U	0.00200								
Barium	U	0.00400								
Beryllium	U	0.00200								
Boron	U	0.0200								
Cadmium	U	0.00200								
Calcium	U	0.500								
Chromium	U	0.00400								
Cobalt	U	0.00500								
Iron	U	0.200								
Lead	U	0.00200								
Lithium	U	0.00500								
Magnesium	U	0.200								
Molybdenum	U	0.00500								
Potassium	U	0.200								
Selenium	U	0.00200								
Sodium	U	0.200								
Thallium	U	0.00200								

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: 171800 (0) **Instrument: ICPMS06** **Method: ICP-MS METALS BY SW6020A**

LCS Sample ID: **LCS-171800** Units: **mg/L** Analysis Date: **28-Oct-2021 15:19**
Client ID: Run ID: **ICPMS06_394433** SeqNo: **6343750** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Antimony	0.05	0.00200	0.05	0	100	80 - 120			
Arsenic	0.051	0.00200	0.05	0	102	80 - 120			
Barium	0.04925	0.00400	0.05	0	98.5	80 - 120			
Beryllium	0.0499	0.00200	0.05	0	99.8	80 - 120			
Cadmium	0.05166	0.00200	0.05	0	103	80 - 120			
Calcium	4.81	0.500	5	0	96.2	80 - 120			
Chromium	0.0509	0.00400	0.05	0	102	80 - 120			
Cobalt	0.0505	0.00500	0.05	0	101	80 - 120			
Iron	4.845	0.200	5	0	96.9	80 - 120			
Lead	0.04963	0.00200	0.05	0	99.3	80 - 120			
Magnesium	4.986	0.200	5	0	99.7	80 - 120			
Molybdenum	0.04913	0.00500	0.05	0	98.3	80 - 120			
Potassium	4.981	0.200	5	0	99.6	80 - 120			
Selenium	0.05297	0.00200	0.05	0	106	80 - 120			
Sodium	4.915	0.200	5	0	98.3	80 - 120			
Thallium	0.04976	0.00200	0.05	0	99.5	80 - 120			

LCS Sample ID: **LCS-171800** Units: **mg/L** Analysis Date: **29-Oct-2021 13:41**
Client ID: Run ID: **ICPMS06_394530** SeqNo: **6345985** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Boron	0.4303	0.0200	0.5	0	86.1	80 - 120			
Lithium	0.08772	0.00500	0.1	0	87.7	80 - 120			

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: 171800 (0) **Instrument: ICPMS06** **Method: ICP-MS METALS BY SW6020A**

MS Sample ID: **HS21100884-04MS** Units: **mg/L** Analysis Date: **28-Oct-2021 15:40**
Client ID: **MW-21** Run ID: **ICPMS06_394433** SeqNo: **6343940** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.05068	0.00200	0.05	0.000016	101	80 - 120				
Arsenic	0.05516	0.00200	0.05	0.000539	109	80 - 120				
Barium	0.06203	0.00400	0.05	0.01017	104	80 - 120				
Beryllium	0.0494	0.00200	0.05	0.000015	98.8	80 - 120				
Cadmium	0.05285	0.00200	0.05	0.00001	106	80 - 120				
Calcium	141.2	0.500	5	128.3	260	80 - 120				SO
Chromium	0.05086	0.00400	0.05	0.000288	101	80 - 120				
Cobalt	0.05087	0.00500	0.05	0.000126	101	80 - 120				
Iron	4.876	0.200	5	0.01204	97.3	80 - 120				
Lead	0.05022	0.00200	0.05	0.000026	100	80 - 120				
Magnesium	47.84	0.200	5	40.29	151	80 - 120				SO
Molybdenum	0.0535	0.00500	0.05	0.000677	106	80 - 120				
Potassium	14.38	0.200	5	8.883	110	80 - 120				
Selenium	0.0554	0.00200	0.05	0.000411	110	80 - 120				
Sodium	579.1	0.200	5	532.8	927	80 - 120				SEO
Thallium	0.04766	0.00200	0.05	0.000014	95.3	80 - 120				

MS Sample ID: **HS21100884-04MS** Units: **mg/L** Analysis Date: **29-Oct-2021 13:45**
Client ID: **MW-21** Run ID: **ICPMS06_394530** SeqNo: **6345986** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Boron	2.772	0.0200	0.5	2.239	107	80 - 120				EO
Lithium	0.2152	0.00500	0.1	0.1252	90.0	80 - 120				E

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: 171800 (0) **Instrument: ICPMS06** **Method: ICP-MS METALS BY SW6020A**

MSD Sample ID: **HS21100884-04MSD** Units: **mg/L** Analysis Date: **28-Oct-2021 15:44**
Client ID: **MW-21** Run ID: **ICPMS06_394433** SeqNo: **6343942** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.04921	0.00200	0.05	0.000016	98.4	80 - 120	0.05068	2.94	20	
Arsenic	0.0536	0.00200	0.05	0.000539	106	80 - 120	0.05516	2.85	20	
Barium	0.05977	0.00400	0.05	0.01017	99.2	80 - 120	0.06203	3.71	20	
Beryllium	0.04604	0.00200	0.05	0.000015	92.0	80 - 120	0.0494	7.05	20	
Cadmium	0.04931	0.00200	0.05	0.00001	98.6	80 - 120	0.05285	6.92	20	
Calcium	135.6	0.500	5	128.3	147	80 - 120	141.2	4.09	20	SO
Chromium	0.04966	0.00400	0.05	0.000288	98.7	80 - 120	0.05086	2.4	20	
Cobalt	0.0493	0.00500	0.05	0.000126	98.3	80 - 120	0.05087	3.13	20	
Iron	4.841	0.200	5	0.01204	96.6	80 - 120	4.876	0.717	20	
Lead	0.04832	0.00200	0.05	0.000026	96.6	80 - 120	0.05022	3.86	20	
Magnesium	46.34	0.200	5	40.29	121	80 - 120	47.84	3.19	20	SO
Molybdenum	0.0505	0.00500	0.05	0.000677	99.6	80 - 120	0.0535	5.78	20	
Potassium	13.83	0.200	5	8.883	98.9	80 - 120	14.38	3.95	20	
Selenium	0.05388	0.00200	0.05	0.000411	107	80 - 120	0.0554	2.78	20	
Sodium	561	0.200	5	532.8	565	80 - 120	579.1	3.18	20	SEO
Thallium	0.04525	0.00200	0.05	0.000014	90.5	80 - 120	0.04766	5.18	20	

MSD Sample ID: **HS21100884-04MSD** Units: **mg/L** Analysis Date: **29-Oct-2021 13:47**
Client ID: **MW-21** Run ID: **ICPMS06_394530** SeqNo: **6345987** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Boron	2.671	0.0200	0.5	2.239	86.4	80 - 120	2.772	3.72	20	EO
Lithium	0.2094	0.00500	0.1	0.1252	84.3	80 - 120	0.2152	2.71	20	E

PDS Sample ID: **HS21100884-04PDS** Units: **mg/L** Analysis Date: **29-Oct-2021 16:25**
Client ID: **MW-21** Run ID: **ICPMS06_394530** SeqNo: **6346162** PrepDate: **27-Oct-2021** DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Boron	7.906	0.400	5	2.533	107	75 - 125				
Sodium	755.2	4.00	200	565.7	94.7	75 - 125				

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: 171800 (0) **Instrument: ICPMS06** **Method: ICP-MS METALS BY SW6020A**

PDS Sample ID: **HS21100884-04PDS** Units: **mg/L** Analysis Date: **28-Oct-2021 15:46**
Client ID: **MW-21** Run ID: **ICPMS06_394433** SeqNo: **6343943** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	139.7	0.500	10	128.3	115	75 - 125				O
Magnesium	54.42	0.200	10	40.29	141	75 - 125				SO

SD Sample ID: **HS21100884-04SD** Units: **mg/L** Analysis Date: **28-Oct-2021 15:38**
Client ID: **MW-21** Run ID: **ICPMS06_394433** SeqNo: **6343939** PrepDate: **27-Oct-2021** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Antimony	U	0.0100					0.000016	0	10	
Arsenic	U	0.0100					0.000539	0	10	
Barium	0.01086	0.0200					0.01017	0	10	J
Beryllium	U	0.0100					0.000015	0	10	
Cadmium	U	0.0100					0.00001	0	10	
Calcium	125.7	2.50					128.3	2	10	
Chromium	U	0.0200					0.000288	0	10	
Cobalt	U	0.0250					0.000126	0	10	
Iron	U	1.00					0.01204	0	10	
Lead	U	0.0100					0.000026	0	10	
Lithium	0.1341	0.0250					0.1252	7.15	10	
Magnesium	41.6	1.00					40.29	3.26	10	
Molybdenum	U	0.0250					0.000677	0	10	
Potassium	9.223	1.00					8.883	3.83	10	
Selenium	U	0.0100					0.000411	0	10	
Thallium	U	0.0100					0.000014	0	10	

SD Sample ID: **HS21100884-04SD** Units: **mg/L** Analysis Date: **29-Oct-2021 16:23**
Client ID: **MW-21** Run ID: **ICPMS06_394530** SeqNo: **6346161** PrepDate: **27-Oct-2021** DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Boron	2.71	2.00					2.533	6.98	10	
Sodium	527.2	20.0					565.7	6.8	10	

The following samples were analyzed in this batch:

HS21100884-01	HS21100884-02	HS21100884-03	HS21100884-04
HS21100884-05	HS21100884-06	HS21100884-07	HS21100884-08
HS21100884-09	HS21100884-10	HS21100884-11	HS21100884-12
HS21100884-13			

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: 171817 (0) **Instrument: ICPMS06** **Method: DISSOLVED METALS BY SW6020A (DISSOLVED)**

MBLK Sample ID: **MBLK-171817** Units: **mg/L** Analysis Date: **27-Oct-2021 18:22**
Client ID: Run ID: **ICPMS06_394320** SeqNo: **6341637** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	U	0.200								
Molybdenum	U	0.00500								

LCS Sample ID: **LCS-171817** Units: **mg/L** Analysis Date: **27-Oct-2021 18:24**
Client ID: Run ID: **ICPMS06_394320** SeqNo: **6341638** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	4.966	0.200	5	0	99.3	80 - 120				
Molybdenum	0.04967	0.00500	0.05	0	99.4	80 - 120				

MS Sample ID: **HS21100769-09MS** Units: **mg/L** Analysis Date: **27-Oct-2021 19:11**
Client ID: Run ID: **ICPMS06_394320** SeqNo: **6341657** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	6.128	0.200	5	1.004	102	75 - 125				
Molybdenum	0.05395	0.00500	0.05	0.03278	42.4	75 - 125				S

MSD Sample ID: **HS21100769-09MSD** Units: **mg/L** Analysis Date: **27-Oct-2021 19:13**
Client ID: Run ID: **ICPMS06_394320** SeqNo: **6341658** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	6.115	0.200	5	1.004	102	75 - 125	6.128	0.218	20	
Molybdenum	0.05302	0.00500	0.05	0.03278	40.5	75 - 125	0.05395	1.75	20	S

PDS Sample ID: **HS21100769-09PDS** Units: **mg/L** Analysis Date: **27-Oct-2021 19:15**
Client ID: Run ID: **ICPMS06_394320** SeqNo: **6341659** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Molybdenum	0.1307	0.00500	0.1	0.03278	97.9	75 - 125				

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: 171817 (0) **Instrument:** ICPMS06 **Method:** DISSOLVED METALS BY SW6020A (DISSOLVED)

SD Sample ID: **HS21100769-09SD** Units: **mg/L** Analysis Date: **27-Oct-2021 19:09**
Client ID: Run ID: **ICPMS06_394320** SeqNo: **6341656** PrepDate: **27-Oct-2021** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Iron	1.041	1.00					1.004	3.62	10	
Molybdenum	0.03191	0.0250					0.03278	2.64	10	

The following samples were analyzed in this batch:

HS21100884-02	HS21100884-03	HS21100884-06	HS21100884-07
HS21100884-09	HS21100884-10	HS21100884-11	HS21100884-12

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R393566 (0) **Instrument:** UV-2450 **Method:** FERROUS IRON BY SM3500 FE B

MBLK Sample ID: **MBLK-R393566** Units: **mg/L** Analysis Date: **16-Oct-2021 12:30**
Client ID: Run ID: **UV-2450_393566** SeqNo: **6322634** PrepDate: DF: **1**

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-R393566** Units: **mg/L** Analysis Date: **16-Oct-2021 12:30**
Client ID: Run ID: **UV-2450_393566** SeqNo: **6322633** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	0.25	0.0500	0.25	0	100	80 - 120				

MS Sample ID: **HS21100884-06MS** Units: **mg/L** Analysis Date: **16-Oct-2021 12:30**
Client ID: **MW-5S** Run ID: **UV-2450_393566** SeqNo: **6322636** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	0.246	0.0500	0.25	0.009	94.8	75 - 125				

MSD Sample ID: **HS21100884-06MSD** Units: **mg/L** Analysis Date: **16-Oct-2021 12:30**
Client ID: **MW-5S** Run ID: **UV-2450_393566** SeqNo: **6322635** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	0.245	0.0500	0.25	0.009	94.4	75 - 125	0.246	0.407	20	

The following samples were analyzed in this batch: HS21100884-06 HS21100884-07 HS21100884-09 HS21100884-10 HS21100884-11 HS21100884-12

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R393664 (0) **Instrument:** ICS-Integrion **Method:** ANIONS BY E300.0, REV 2.1, 1993

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **15-Oct-2021 14:00**
Client ID: Run ID: **ICS-Integrion_393664** SeqNo: **6324764** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.500								
Fluoride	U	0.100								
Nitrogen, Nitrate (As N)	U	0.100								

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **15-Oct-2021 14:08**
Client ID: Run ID: **ICS-Integrion_393664** SeqNo: **6324765** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	19.88	0.500	20	0	99.4	90 - 110				
Fluoride	4.254	0.100	4	0	106	90 - 110				
Nitrogen, Nitrate (As N)	3.919	0.100	4	0	98.0	90 - 110				

MS Sample ID: **HS21100884-04MS** Units: **mg/L** Analysis Date: **15-Oct-2021 15:37**
Client ID: **MW-21** Run ID: **ICS-Integrion_393664** SeqNo: **6324772** PrepDate: DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	41.08	1.00	20	21.49	98.0	80 - 120				
Fluoride	4.591	0.200	4	0.4108	105	80 - 120				
Nitrogen, Nitrate (As N)	4.104	0.200	4	0.2074	97.4	80 - 120				

MS Sample ID: **HS21100876-02MS** Units: **mg/L** Analysis Date: **15-Oct-2021 20:41**
Client ID: Run ID: **ICS-Integrion_393664** SeqNo: **6324795** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	104.2	0.500	10	96.76	74.4	80 - 120				SEO
Fluoride	2.881	0.100	2	0.9764	95.2	80 - 120				
Nitrogen, Nitrate (As N)	1.913	0.100	2	0.0184	94.7	80 - 120				

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R393664 (0) **Instrument:** ICS-Integrion **Method:** ANIONS BY E300.0, REV 2.1, 1993

MSD Sample ID: **HS21100884-04MSD** Units: **mg/L** Analysis Date: **15-Oct-2021 15:44**
Client ID: **MW-21** Run ID: **ICS-Integrion_393664** SeqNo: **6324773** PrepDate: DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	40.92	1.00	20	21.49	97.2	80 - 120	41.08	0.4	20	
Fluoride	4.541	0.200	4	0.4108	103	80 - 120	4.591	1.1	20	
Nitrogen, Nitrate (As N)	4.101	0.200	4	0.2074	97.3	80 - 120	4.104	0.0731	20	

MSD Sample ID: **HS21100876-02MSD** Units: **mg/L** Analysis Date: **15-Oct-2021 20:49**
Client ID: Run ID: **ICS-Integrion_393664** SeqNo: **6324796** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	106.8	0.500	10	96.76	101	80 - 120	104.2	2.51	20	EO
Fluoride	2.951	0.100	2	0.9764	98.7	80 - 120	2.881	2.42	20	
Nitrogen, Nitrate (As N)	1.962	0.100	2	0.0184	97.2	80 - 120	1.913	2.52	20	

The following samples were analyzed in this batch: HS21100884-01 HS21100884-02 HS21100884-03 HS21100884-04 HS21100884-05

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R393740 (0) **Instrument:** UV-2450 **Method:** FERROUS IRON BY SM3500 FE B

MBLK Sample ID: **MBLK-R393740** Units: **mg/L** Analysis Date: **15-Oct-2021 15:29**
Client ID: Run ID: **UV-2450_393740** SeqNo: **6326907** PrepDate: DF: **1**

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-R393740** Units: **mg/L** Analysis Date: **15-Oct-2021 15:29**
Client ID: Run ID: **UV-2450_393740** SeqNo: **6326906** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	0.238	0.0500	0.25	0	95.2	80 - 120				

MS Sample ID: **HS21100884-03MS** Units: **mg/L** Analysis Date: **15-Oct-2021 15:29**
Client ID: **MW-15A** Run ID: **UV-2450_393740** SeqNo: **6326909** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	0.524	0.0500	0.25	0.284	96.0	75 - 125				

MSD Sample ID: **HS21100884-03MSD** Units: **mg/L** Analysis Date: **15-Oct-2021 15:29**
Client ID: **MW-15A** Run ID: **UV-2450_393740** SeqNo: **6326908** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	0.519	0.0500	0.25	0.284	94.0	75 - 125	0.524	0.959	20	

The following samples were analyzed in this batch: HS21100884-02 HS21100884-03

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R393819 (0) **Instrument:** WetChem_HS **Method:** SULFIDE BY SM4500 S2-F-2011

MBLK Sample ID: **MBLK-R393819** Units: **mg/L** Analysis Date: **20-Oct-2021 12:50**
Client ID: Run ID: **WetChem_HS_393819** SeqNo: **6328708** PrepDate: 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-R393819** Units: **mg/L** Analysis Date: **20-Oct-2021 12:50**
Client ID: Run ID: **WetChem_HS_393819** SeqNo: **6328707** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	22.08	1.00	25	0	88.3	85 - 115				

LCSD Sample ID: **LCSD-R393819** Units: **mg/L** Analysis Date: **20-Oct-2021 12:50**
Client ID: Run ID: **WetChem_HS_393819** SeqNo: **6328706** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	22.28	1.00	25	0	89.1	85 - 115	22.08	0.902	20	

MS Sample ID: **HS21100727-01MS** Units: **mg/L** Analysis Date: **20-Oct-2021 12:50**
Client ID: Run ID: **WetChem_HS_393819** SeqNo: **6328709** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	22.68	1.00	25	-0.92	94.4	80 - 120				

The following samples were analyzed in this batch: HS21100884-02 HS21100884-03

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R393922 (0) **Instrument:** Balance1 **Method:** TOTAL DISSOLVED SOLIDS BY SM2540C-2011

MBLK Sample ID: **WBLK-102021** Units: **mg/L** Analysis Date: **20-Oct-2021 20:00**
Client ID: Run ID: **Balance1_393922** SeqNo: **6331367** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	U	10.0								

LCS Sample ID: **WLCS-102021** Units: **mg/L** Analysis Date: **20-Oct-2021 20:00**
Client ID: Run ID: **Balance1_393922** SeqNo: **6331368** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	924	10.0	1000	0	92.4	85 - 115				

DUP Sample ID: **HS21100884-04DUP** Units: **mg/L** Analysis Date: **20-Oct-2021 20:00**
Client ID: **MW-21** Run ID: **Balance1_393922** SeqNo: **6331364** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	2682	10.0					2656	0.974	5	

DUP Sample ID: **HS21100781-01DUP** Units: **mg/L** Analysis Date: **20-Oct-2021 20:00**
Client ID: Run ID: **Balance1_393922** SeqNo: **6331347** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	716	10.0					726	1.39	5	

The following samples were analyzed in this batch: HS21100884-01 HS21100884-02 HS21100884-03 HS21100884-04 HS21100884-05 HS21100884-06

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R393972 (0) **Instrument:** ManTech01 **Method:** ALKALINITY BY SM 2320B-2011

MBLK Sample ID: **WBLKW2-211021** Units: **mg/L** Analysis Date: **21-Oct-2021 23:05**
Client ID: Run ID: **ManTech01_393972** SeqNo: **6332728** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	U	5.00								
Alkalinity, Carbonate (As CaCO3)	U	5.00								
Alkalinity, Hydroxide (As CaCO3)	U	5.00								
Alkalinity, Total (As CaCO3)	U	5.00								

LCS Sample ID: **WLCS2-211021** Units: **mg/L** Analysis Date: **21-Oct-2021 22:32**
Client ID: Run ID: **ManTech01_393972** SeqNo: **6332724** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Carbonate (As CaCO3)	994.3	5.00	1000	0	99.4	85 - 115				
Alkalinity, Total (As CaCO3)	1014	5.00	1000	0	101	85 - 115				

LCSD Sample ID: **WLCSD2-211021** Units: **mg/L** Analysis Date: **21-Oct-2021 22:41**
Client ID: Run ID: **ManTech01_393972** SeqNo: **6332725** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Carbonate (As CaCO3)	1007	5.00	1000	0	101	85 - 115	994.3	1.24	20	
Alkalinity, Total (As CaCO3)	1013	5.00	1000	0	101	85 - 115	1014	0.0878	20	

DUP Sample ID: **HS21100884-02DUP** Units: **mg/L** Analysis Date: **21-Oct-2021 23:18**
Client ID: **MW-14A** Run ID: **ManTech01_393972** SeqNo: **6332730** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	350.4	5.00					347.6	0.785	20	
Alkalinity, Carbonate (As CaCO3)	U	5.00					0	0	20	
Alkalinity, Hydroxide (As CaCO3)	U	5.00					0	0	20	
Alkalinity, Total (As CaCO3)	350.4	5.00					347.6	0.785	20	

The following samples were analyzed in this batch:

HS21100884-02	HS21100884-03	HS21100884-06	HS21100884-07
HS21100884-09	HS21100884-10	HS21100884-11	HS21100884-12

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R393988 (0) **Instrument:** WetChem_HS **Method:** SULFIDE BY SM4500 S2-F-2011

MBLK Sample ID: **MBLK-R393988** Units: **mg/L** Analysis Date: **21-Oct-2021 16:45**
Client ID: Run ID: **WetChem_HS_393988** SeqNo: **6333104** PrepDate: 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-R393988** Units: **mg/L** Analysis Date: **21-Oct-2021 16:45**
Client ID: Run ID: **WetChem_HS_393988** SeqNo: **6333103** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	22.12	1.00	25	0	88.5	85 - 115				

LCSD Sample ID: **LCSD-R393988** Units: **mg/L** Analysis Date: **21-Oct-2021 16:45**
Client ID: Run ID: **WetChem_HS_393988** SeqNo: **6333102** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	22.32	1.00	25	0	89.3	85 - 115	22.12	0.9	20	

MS Sample ID: **HS21101110-01MS** Units: **mg/L** Analysis Date: **21-Oct-2021 16:45**
Client ID: Run ID: **WetChem_HS_393988** SeqNo: **6333105** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	21.72	1.00	25	-1.48	92.8	80 - 120				

The following samples were analyzed in this batch: HS21100884-06 HS21100884-07 HS21100884-09 HS21100884-10 HS21100884-11 HS21100884-12

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R394028 (0) **Instrument:** Balance1 **Method:** TOTAL DISSOLVED SOLIDS BY SM2540C-2011

MBLK Sample ID: **WBLK-102121** Units: **mg/L** Analysis Date: **21-Oct-2021 15:00**
Client ID: Run ID: **Balance1_394028** SeqNo: **6333952** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	U	10.0								

LCS Sample ID: **WLCS-102121** Units: **mg/L** Analysis Date: **21-Oct-2021 15:00**
Client ID: Run ID: **Balance1_394028** SeqNo: **6333953** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	964	10.0	1000	0	96.4	85 - 115				

DUP Sample ID: **HS21100945-05DUP** Units: **mg/L** Analysis Date: **21-Oct-2021 15:00**
Client ID: Run ID: **Balance1_394028** SeqNo: **6333945** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	1714	10.0					1712	0.117	5	

DUP Sample ID: **HS21100884-07DUP** Units: **mg/L** Analysis Date: **21-Oct-2021 15:00**
Client ID: **MW-7S** Run ID: **Balance1_394028** SeqNo: **6333933** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	1292	10.0					1294	0.155	5	

The following samples were analyzed in this batch: HS21100884-07 HS21100884-08 HS21100884-09 HS21100884-10 HS21100884-11 HS21100884-12 HS21100884-13

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R394252 (0) **Instrument:** WetChem_HS **Method:** CHEMICAL OXYGEN DEMAND BY E410.4, REV 2.0, 1993

MBLK Sample ID: **MBLK-R394252** Units: **mg/L** Analysis Date: **26-Oct-2021 18:30**
Client ID: Run ID: **WetChem_HS_394252** SeqNo: **6339720** PrepDate: DF: **1**

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-R394252** Units: **mg/L** Analysis Date: **26-Oct-2021 18:30**
Client ID: Run ID: **WetChem_HS_394252** SeqNo: **6339719** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chemical Oxygen Demand	100	15.0	100	0	100	85 - 115				

MS Sample ID: **HS21100884-04MS** Units: **mg/L** Analysis Date: **26-Oct-2021 18:30**
Client ID: **MW-21** Run ID: **WetChem_HS_394252** SeqNo: **6339722** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chemical Oxygen Demand	52	15.0	50	2	100	80 - 120				

MSD Sample ID: **HS21100884-04MSD** Units: **mg/L** Analysis Date: **26-Oct-2021 18:30**
Client ID: **MW-21** Run ID: **WetChem_HS_394252** SeqNo: **6339721** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chemical Oxygen Demand	51	15.0	50	2	98.0	80 - 120	52	1.94	20	

The following samples were analyzed in this batch:

HS21100884-01	HS21100884-02	HS21100884-03	HS21100884-04
HS21100884-05	HS21100884-06	HS21100884-07	HS21100884-08
HS21100884-09	HS21100884-10	HS21100884-11	HS21100884-12
HS21100884-13			

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R394412 (0) **Instrument:** ICS-Integrion **Method:** ANIONS BY E300.0, REV 2.1, 1993

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **16-Oct-2021 11:46**
Client ID: Run ID: **ICS-Integrion_394412** SeqNo: **6343271** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.500								
Fluoride	U	0.100								
Nitrogen, Nitrate (As N)	U	0.100								

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **16-Oct-2021 11:53**
Client ID: Run ID: **ICS-Integrion_394412** SeqNo: **6343272** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	18.3	0.500	20	0	91.5	90 - 110				
Fluoride	3.861	0.100	4	0	96.5	90 - 110				
Nitrogen, Nitrate (As N)	3.604	0.100	4	0	90.1	90 - 110				

MS Sample ID: **HS21100884-07MS** Units: **mg/L** Analysis Date: **16-Oct-2021 13:48**
Client ID: **MW-7S** Run ID: **ICS-Integrion_394412** SeqNo: **6343279** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	26.48	0.500	10	16.77	97.1	80 - 120				
Fluoride	2.798	0.100	2	0.7461	103	80 - 120				
Nitrogen, Nitrate (As N)	2.155	0.100	2	0.094	103	80 - 120				

MS Sample ID: **HS21100884-06MS** Units: **mg/L** Analysis Date: **16-Oct-2021 13:26**
Client ID: **MW-5S** Run ID: **ICS-Integrion_394412** SeqNo: **6343276** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	35.63	0.500	10	26.4	92.3	80 - 120				
Fluoride	3.668	0.100	2	1.568	105	80 - 120				
Nitrogen, Nitrate (As N)	2.146	0.100	2	0.0984	102	80 - 120				

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R394412 (0) **Instrument:** ICS-Integrion **Method:** ANIONS BY E300.0, REV 2.1, 1993

MSD Sample ID: **HS21100884-07MSD** Units: **mg/L** Analysis Date: **16-Oct-2021 13:55**
Client ID: **MW-7S** Run ID: **ICS-Integrion_394412** SeqNo: **6343280** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	26.1	0.500	10	16.77	93.4	80 - 120	26.48	1.43	20	
Fluoride	2.744	0.100	2	0.7461	99.9	80 - 120	2.798	1.96	20	
Nitrogen, Nitrate (As N)	2.126	0.100	2	0.094	102	80 - 120	2.155	1.33	20	

MSD Sample ID: **HS21100884-06MSD** Units: **mg/L** Analysis Date: **16-Oct-2021 13:33**
Client ID: **MW-5S** Run ID: **ICS-Integrion_394412** SeqNo: **6343277** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	35.38	0.500	10	26.4	89.8	80 - 120	35.63	0.684	20	
Fluoride	3.609	0.100	2	1.568	102	80 - 120	3.668	1.61	20	
Nitrogen, Nitrate (As N)	2.13	0.100	2	0.0984	102	80 - 120	2.146	0.762	20	

The following samples were analyzed in this batch:

HS21100884-06	HS21100884-07	HS21100884-08	HS21100884-09
HS21100884-10	HS21100884-11	HS21100884-12	HS21100884-13

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R394421 (0) **Instrument:** WetChem_HS **Method:** SPECIFIC CONDUCTANCE BY SM 2510B-2011

MBLK Sample ID: **MBLK-R394421** Units: **umhos/cm @ 25.0 °C** Analysis Date: **28-Oct-2021 14:30**
Client ID: Run ID: **WetChem_HS_394421** SeqNo: **6343515** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductivity	U	5.00								

LCS Sample ID: **LCS-R394421** Units: **umhos/cm @ 25.0 °C** Analysis Date: **28-Oct-2021 14:30**
Client ID: Run ID: **WetChem_HS_394421** SeqNo: **6343514** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductivity	1398	5.00	1413	0	98.9	80 - 120				

DUP Sample ID: **HS21100884-04DUP** Units: **umhos/cm @ 25.0 °C** Analysis Date: **28-Oct-2021 14:30**
Client ID: **MW-21** Run ID: **WetChem_HS_394421** SeqNo: **6343516** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductivity	3630	5.00					3620	0.276	20	

The following samples were analyzed in this batch:

HS21100884-01	HS21100884-02	HS21100884-03	HS21100884-04
HS21100884-05	HS21100884-06	HS21100884-07	HS21100884-08
HS21100884-09	HS21100884-10	HS21100884-11	HS21100884-12
HS21100884-13			

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R394434 (0) **Instrument:** UV-2450 **Method:** FERROUS IRON BY SM3500 FE D (DISSOLVED)

MBLK Sample ID: **MBLK-R394434** Units: **mg/L** Analysis Date: **27-Oct-2021 20:36**
Client ID: Run ID: **UV-2450_394434** SeqNo: **6343864** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron, Dissolved	U	0.0500								

LCS Sample ID: **LCS-R394434** Units: **mg/L** Analysis Date: **27-Oct-2021 20:36**
Client ID: Run ID: **UV-2450_394434** SeqNo: **6343863** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron, Dissolved	0.247	0.0500	0.25	0	98.8	80 - 120				

MS Sample ID: **HS21100807-03MS** Units: **mg/L** Analysis Date: **27-Oct-2021 20:36**
Client ID: Run ID: **UV-2450_394434** SeqNo: **6343854** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron, Dissolved	0.25	0.0500	0.25	-0.001	100	80 - 120				

MSD Sample ID: **HS21100807-03MSD** Units: **mg/L** Analysis Date: **27-Oct-2021 20:36**
Client ID: Run ID: **UV-2450_394434** SeqNo: **6343853** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron, Dissolved	0.242	0.0500	0.25	-0.001	97.2	80 - 120	0.25	3.25	20	

The following samples were analyzed in this batch:

HS21100884-02	HS21100884-03	HS21100884-06	HS21100884-07
HS21100884-09	HS21100884-10	HS21100884-11	HS21100884-12

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R394509 (0) **Instrument:** WetChem_HS **Method:** PH BY SM4500H+ B-2011

DUP Sample ID: **HS21100884-04DUP** Units: **pH Units** Analysis Date: **29-Oct-2021 11:00**
Client ID: **MW-21** Run ID: **WetChem_HS_394509** SeqNo: **6345425** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.33	0.100					7.28	0.684	10	
Temp Deg C @pH	20.5	0					21.5	4.76	10	

The following samples were analyzed in this batch:

HS21100884-01	HS21100884-02	HS21100884-03	HS21100884-04
HS21100884-05	HS21100884-06	HS21100884-07	HS21100884-08
HS21100884-09	HS21100884-10	HS21100884-11	HS21100884-12
HS21100884-13			

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: HS21100884

QC BATCH REPORT

Batch ID: R394578 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY E300.0, REV 2.1, 1993**

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **30-Oct-2021 06:11**
Client ID: Run ID: **ICS-Integrion_394578** SeqNo: **6347118** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	U	0.500								

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **30-Oct-2021 06:18**
Client ID: Run ID: **ICS-Integrion_394578** SeqNo: **6347119** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	20.05	0.500	20	0	100	90 - 110				

MS Sample ID: **HS21101112-01MS** Units: **mg/L** Analysis Date: **30-Oct-2021 08:39**
Client ID: Run ID: **ICS-Integrion_394578** SeqNo: **6347136** PrepDate: DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	971.1	1.00	20	990.4	-96.9	80 - 120				SEO

MS Sample ID: **HS21101099-02MS** Units: **mg/L** Analysis Date: **30-Oct-2021 09:30**
Client ID: Run ID: **ICS-Integrion_394578** SeqNo: **6347142** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	297.4	5.00	100	204.9	92.5	80 - 120				

MSD Sample ID: **HS21101112-01MSD** Units: **mg/L** Analysis Date: **30-Oct-2021 08:46**
Client ID: Run ID: **ICS-Integrion_394578** SeqNo: **6347137** PrepDate: DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	1001	1.00	20	990.4	55.0	80 - 120	971.1	3.08	20	SEO

MSD Sample ID: **HS21101099-02MSD** Units: **mg/L** Analysis Date: **30-Oct-2021 09:38**
Client ID: Run ID: **ICS-Integrion_394578** SeqNo: **6347143** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	291.2	5.00	100	204.9	86.3	80 - 120	297.4	2.11	20	

The following samples were analyzed in this batch:

HS21100884-01	HS21100884-02	HS21100884-03	HS21100884-04
HS21100884-05	HS21100884-06	HS21100884-07	HS21100884-08
HS21100884-09	HS21100884-10	HS21100884-11	HS21100884-12
HS21100884-13			

Revision: 2

Client: Altamira
Project: WFEC CCR/Landfill
WorkOrder: **HS21100884**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	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

Unit Reported	Description
Date	

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	21-022-0	26-Mar-2022
Florida	E87611-33	30-Jun-2022
Illinois	2000322021-7	09-May-2022
Kansas	E-10352 2021-2022	31-Jul-2022
Kentucky	123043, 2021-2022	30-Apr-2022
Louisiana	03087, 2021-2022	30-Jun-2022
Texas	T104704231-21-28	30-Apr-2022

Client: Altamira
Project: WFEC CCR/Landfill
Work Order: HS21100884

SAMPLE TRACKING

Lab Samp ID	Client Sample ID	Action	Date	Person	New Location
HS21100884-01	MW-3	Login	10/15/2021 2:14:33 PM	JRM	WET054
HS21100884-01	MW-3	Login	10/15/2021 2:14:33 PM	JRM	MET003
HS21100884-01	MW-3	Login	10/15/2021 2:14:33 PM	JRM	Sub
HS21100884-01	MW-3	Login	10/15/2021 2:14:33 PM	JRM	Sub
HS21100884-01	MW-3	Login	10/15/2021 2:14:33 PM	JRM	WET054
HS21100884-02	MW-14A	Login	10/15/2021 2:14:33 PM	JRM	WET364
HS21100884-02	MW-14A	Login	10/15/2021 2:14:33 PM	JRM	MET003
HS21100884-02	MW-14A	Login	10/15/2021 2:14:33 PM	JRM	MET003
HS21100884-02	MW-14A	Login	10/15/2021 2:14:33 PM	JRM	Sub
HS21100884-02	MW-14A	Login	10/15/2021 2:14:33 PM	JRM	Sub
HS21100884-02	MW-14A	Login	10/15/2021 2:14:33 PM	JRM	WET364
HS21100884-02	MW-14A	Login	10/15/2021 2:14:33 PM	JRM	WET364
HS21100884-02	MW-14A	Login	10/15/2021 2:14:33 PM	JRM	WET364
HS21100884-03	MW-15A	Login	10/15/2021 2:19:02 PM	JML	Disposed
HS21100884-03	MW-15A	Login	10/15/2021 2:19:02 PM	JML	MET015
HS21100884-03	MW-15A	Login	10/15/2021 2:19:02 PM	JML	MET015
HS21100884-03	MW-15A	Login	10/15/2021 2:19:02 PM	JML	Sub
HS21100884-03	MW-15A	Login	10/15/2021 2:19:02 PM	JML	Sub
HS21100884-03	MW-15A	Login	10/15/2021 2:19:02 PM	JML	Disposed
HS21100884-03	MW-15A	Login	10/15/2021 2:19:02 PM	JML	Disposed
HS21100884-03	MW-15A	Login	10/15/2021 2:19:02 PM	JML	Disposed
HS21100884-04	MW-21	Login	10/15/2021 2:19:53 PM	JML	Disposed
HS21100884-04	MW-21	Login	10/15/2021 2:19:53 PM	JML	MET015
HS21100884-04	MW-21	Login	10/15/2021 2:19:53 PM	JML	Sub
HS21100884-04	MW-21	Login	10/15/2021 2:19:53 PM	JML	Sub
HS21100884-04	MW-21	Login	10/15/2021 2:19:53 PM	JML	Disposed
HS21100884-05	DUP 3	Login	10/15/2021 2:19:53 PM	JML	Disposed
HS21100884-05	DUP 3	Login	10/15/2021 2:19:53 PM	JML	MET015
HS21100884-05	DUP 3	Login	10/15/2021 2:19:53 PM	JML	Sub
HS21100884-05	DUP 3	Login	10/15/2021 2:19:53 PM	JML	Sub
HS21100884-05	DUP 3	Login	10/15/2021 2:19:53 PM	JML	Disposed
HS21100884-06	MW-5S	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-06	MW-5S	Login	10/16/2021 11:45:55 AM	JML	MET083
HS21100884-06	MW-5S	Login	10/16/2021 11:45:55 AM	JML	MET083
HS21100884-06	MW-5S	Login	10/16/2021 11:45:55 AM	JML	Sub
HS21100884-06	MW-5S	Login	10/16/2021 11:45:55 AM	JML	Sub
HS21100884-06	MW-5S	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-06	MW-5S	Login	10/16/2021 11:45:55 AM	JML	WET029
HS21100884-06	MW-5S	Login	10/16/2021 11:45:55 AM	JML	Disposed

Client: Altamira
Project: WFEC CCR/Landfill
Work Order: HS21100884

SAMPLE TRACKING

HS21100884-07	MW-7S	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-07	MW-7S	Login	10/16/2021 11:45:55 AM	JML	MET083
HS21100884-07	MW-7S	Login	10/16/2021 11:45:55 AM	JML	MET083
HS21100884-07	MW-7S	Login	10/16/2021 11:45:55 AM	JML	Sub
HS21100884-07	MW-7S	Login	10/16/2021 11:45:55 AM	JML	Sub
HS21100884-07	MW-7S	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-07	MW-7S	Login	10/16/2021 11:45:55 AM	JML	WET029
HS21100884-07	MW-7S	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-08	MW-13	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-08	MW-13	Login	10/16/2021 11:45:55 AM	JML	MET083
HS21100884-08	MW-13	Login	10/16/2021 11:45:55 AM	JML	Sub
HS21100884-08	MW-13	Login	10/16/2021 11:45:55 AM	JML	Sub
HS21100884-08	MW-13	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-09	MW-16	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-09	MW-16	Login	10/16/2021 11:45:55 AM	JML	MET083
HS21100884-09	MW-16	Login	10/16/2021 11:45:55 AM	JML	MET083
HS21100884-09	MW-16	Login	10/16/2021 11:45:55 AM	JML	Sub
HS21100884-09	MW-16	Login	10/16/2021 11:45:55 AM	JML	Sub
HS21100884-09	MW-16	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-09	MW-16	Login	10/16/2021 11:45:55 AM	JML	WET029
HS21100884-09	MW-16	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-10	MW-17	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-10	MW-17	Login	10/16/2021 11:45:55 AM	JML	MET083
HS21100884-10	MW-17	Login	10/16/2021 11:45:55 AM	JML	MET083
HS21100884-10	MW-17	Login	10/16/2021 11:45:55 AM	JML	Sub
HS21100884-10	MW-17	Login	10/16/2021 11:45:55 AM	JML	Sub
HS21100884-10	MW-17	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-10	MW-17	Login	10/16/2021 11:45:55 AM	JML	WET029
HS21100884-10	MW-17	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-11	MW-18	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-11	MW-18	Login	10/16/2021 11:45:55 AM	JML	MET083
HS21100884-11	MW-18	Login	10/16/2021 11:45:55 AM	JML	MET083
HS21100884-11	MW-18	Login	10/16/2021 11:45:55 AM	JML	Sub
HS21100884-11	MW-18	Login	10/16/2021 11:45:55 AM	JML	Sub
HS21100884-11	MW-18	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-11	MW-18	Login	10/16/2021 11:45:55 AM	JML	WET029
HS21100884-11	MW-18	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-12	MW-19S	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-12	MW-19S	Login	10/16/2021 11:45:55 AM	JML	MET083
HS21100884-12	MW-19S	Login	10/16/2021 11:45:55 AM	JML	MET083
HS21100884-12	MW-19S	Login	10/16/2021 11:45:55 AM	JML	Sub

Client: Altamira
Project: WFEC CCR/Landfill
Work Order: HS21100884

SAMPLE TRACKING

HS21100884-12	MW-19S	Login	10/16/2021 11:45:55 AM	JML	Sub
HS21100884-12	MW-19S	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-12	MW-19S	Login	10/16/2021 11:45:55 AM	JML	WET029
HS21100884-12	MW-19S	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-13	MW-20	Login	10/16/2021 11:45:55 AM	JML	Disposed
HS21100884-13	MW-20	Login	10/16/2021 11:45:55 AM	JML	MET083
HS21100884-13	MW-20	Login	10/16/2021 11:45:55 AM	JML	Sub
HS21100884-13	MW-20	Login	10/16/2021 11:45:55 AM	JML	Sub
HS21100884-13	MW-20	Login	10/16/2021 11:45:55 AM	JML	Disposed

ALS Houston, US Date: 14-Jan-22

Sample Receipt Checklist

Work Order ID: HS21100884 **Date/Time Received:** **15-Oct-2021 10:20**

Client Name: Enviro Clean Services-Tulsa **Received by:** **Jared R. Makan**

Completed By:	/S/ Jared R. Makan	14-Oct-2021 19:08	**Reviewed by:**	/S/ Ragen Giga	18-Oct-2021 12:54
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **Water** Carrier name: **FedEx Priority Overnight**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	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 ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	1.2°C, 0.9°C UC/C	IR31
Cooler(s)/Kit(s):	46334, 44481	
Date/Time sample(s) sent to storage:	10/14/2021 11:30	

Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

ALS Houston, US Date: 14-Jan-22

Sample Receipt Checklist

Work Order ID: HS21100884 **Date/Time Received:** **15-Oct-2021 10:20**

Client Name: Enviro Clean Services-Tulsa **Received by:** **Jared R. Makan**

Completed By:	/S/ Jared R. Makan	15-Oct-2021 13:29	**Reviewed by:**	/S/ Ragen Giga	18-Oct-2021 12:54
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **Water** Carrier name: **FedEx Priority Overnight**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	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 ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	0.9°C, 0.8°C UC/C	IR31
Cooler(s)/Kit(s):	44445, 47345	
Date/Time sample(s) sent to storage:	10/15/2021 13:35	

Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

ALS Houston, US Date: 14-Jan-22

Sample Receipt Checklist

Work Order ID: HS21100884 **Date/Time Received:** **15-Oct-2021 10:20**

Client Name: Enviro Clean Services-Tulsa **Received by:** **Jared R. Makan**

Completed By:	/S/ Jared R. Makan	16-Oct-2021 10:08	**Reviewed by:**	/S/ Ragen Giga	18-Oct-2021 12:54
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **Water** Carrier name: **FedEx Priority Overnight**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	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 ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	1.2°C, 1.7°C UC/C	IR31
Cooler(s)/Kit(s):	47419, 45672	
Date/Time sample(s) sent to storage:	10/16/2021 10:10	

Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY RECORD

ALTAMIRA
formerly known as Enviro Clean Cardinal

PROJECT NUMBER: WFEE160021/1003

PROJECT NAME: WFEC CCR / LANDFILL (ALL WELLS ON SAME WD)

COC: 1 of X

CLIENT CONTACT: HEATHER TIFFANY

CLIENT EMAIL: HEATHER.TIFFANY@ALTAMIRA-US.COM; LABDATA

CLIENT PHONE: 405.618.2021

LABORATORY / LAB PM: ALS / RAGEN GIGA

CLIENT ADDRESS: 525 CENTRAL PARK DR #500 OKC, OK 73105

TAT: STND

LAB ADDRESS: 10450 STANCLIFF RD #210 HOUSTON, TX 77099

SPECIAL INSTRUCTIONS: * SHORT HOLD * MW-14A is OK, didn't mean to cross out

SHIPMENT METHOD: FED EX

TRACKING:

PARAMETERS

NO.	SAMPLE DESCRIPTION	DATE	TIME	MATRIX	PRES.	NUMBER OF CONTAINERS	FIELD FILTERED (YES / NO)	APPENDIX A	APPENDIX B	NO3 as N *	COD	SPEC COND	Fe, TOTAL	FERROUS Fe *	DISSOLVED FERRIC Fe *	DISSOLVED Fe, Mn, FERRIC Fe	K, Mg, Na	SULFIDE	HCO3, CO3, TOTAL Alk, HYDROXIDE ALK	HOLD
1	MW-3			W	2,3,9	5	N	X	X	X	X	X								
2	~~MW-5S~~				1,2,3,4,9	8		X	X	X	X	X	X	X	X	X	X	X	X	
3	~~MW-7S~~				1,2,3,4,9	8		X	X	X	X	X	X	X	X	X	X	X	X	
4	~~MW-13~~				2,3,9	5		X	X	X	X	X								
5	~~MW-14A~~ OK	10/13/21	1917		1,2,3,4,9	8	Y	X	X	X	X	X	X	X	X	X	X	X	X	
6	MW-15A	10/13/21	1703				Y	X	X	X	X	X	X	X	X	X	X	X	X	
7	~~MW-16~~							X	X	X	X	X	X	X	X	X	X	X	X	
8	~~MW-17~~							X	X	X	X	X	X	X	X	X	X	X	X	
9	~~MW-18~~							X	X	X	X	X	X	X	X	X	X	X	X	
10	~~MW-19S~~							X	X	X	X	X	X	X	X	X	X	X	X	
11	~~MW-20~~				2,3,9	5		X	X	X	X	X								
12	MW-21	10/13/21	1735		2,3,9	5	N	X	X	X	X	X								
13	MW-21 MS	10/13/21	1735					X	X	X	X	X								
14	MW-21 MSD	10/13/21	1735					X	X	X	X	X								
15	Dup 3	10/13/21	1735					X	X	X	X	X								

HS21100884
Altamira
WFEC CCR/Landfill

SAMPLER(S) NAME: Bradley VanCleave

DATE: 10/14/21 TIME: 1400

Total # of Containers:

SAMPLER(S) SIGNATURE:

DATE: 10/14/21 TIME: 1400

RELINQUISHED BY:	DATE: TIME:	RECEIVED BY:	DATE: TIME:	LOGGED BY:	DATE: TIME:	COOLER TEMP:
Bradley VanCleave	10/14/21 1400	J. MUSGRAVE	10/15/21 10:20			

PRESERVATION KEY: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7- 4 Degrees C 8-9035 9-Other :

POINT OF ORIGIN: ☐ Norman ☒ Oklahoma City ☐ Tulsa ☐ Yukon ☐ Midland ☐ Other :

ALTAMIRA-US, LLC

Cooler 44445 0.9°C 47345 0.8°C
46495 1.1°C 11231 CFO

CHAIN OF CUSTODY RECORD

ALTAMIRA
formerly known as Enviro Clean Cardinal

PROJECT NUMBER: WFEE160021/1003
PROJECT NAME: WFEC/LANDFILL
COC: ____ of X
CLIENT CONTACT: HEATHER TIFFANY
CLIENT EMAIL: HEATHER.TIFFANY@ALTAMIRAUS.COM; LABDATA@ALTAMIRAUS.COM
CLIENT PHONE: 405.618.2021
LABORATORY / LAB PM: ALS / RAGEN GIGA
CLIENT ADDRESS: 525 CENTRAL PARK DR #500 OKC, OK 73105
TAT: STND
LAB ADDRESS: 10450 STANCLIFF RD STE 210 HOUSTON, TX 77099
SPECIAL INSTRUCTIONS: *SHORT HOLD*
SHIPMENT METHOD: FED EX
TRACKING:

PARAMETERS

NO.	SAMPLE DESCRIPTION	DATE	TIME	MATRIX	PRES.	NUMBER OF CONTAINERS	FIELD FILTERED (YES / NO)	APP A	APP B	NO3 as N *	COD	SPEC COND	Fe, Total	Fe, ferrous & ferric	Dissolved Fe	DISSOLVED Fe, Mn, FERRIC Fe	K, Mg, Na	SULFIDE	HCO3, CO3, TOTAL HYDROXIDE ALK	HOLD
1	~~MW-3~~			W	2,3,9	5	N	X	X	X	X	X								
2	MW-5S	10/14/21	1500		1,2,3,4,9	8	Y	X	X	X	X	X	X	X	X	X	X	X	X	
3	MW-7S	10/15/21	1116		1,2,3,4,9	8		X	X	X	X	X	X	X	X	X	X	X	X	
4	MW-13	10/15/21	1307		2,3,9	5		X	X	X	X	X								
5	~~MW-14A~~				1,2,3,4,9	8		X	X	X	X	X	X	X	X	X	X	X	X	
6	MW-45A							X	X	X	X	X	X	X	X	X	X	X	X	
7	MW-16	10/14/21	1643				Y	X	X	X	X	X	X	X	X	X	X	X	X	
8	MW-17	10/14/21	1750				Y	X	X	X	X	X	X	X	X	X	X	X	X	
9	MW-18	10/14/21	1915				Y	X	X	X	X	X	X	X	X	X	X	X	X	
10	MW-19S	10/15/21	1202		↓	↓		X	X	X	X	X	X	X	X	X	X	X	X	
11	MW-20	10/15/21	1000		2,3,9	5	N	X	X	X	X	X								
12	~~DUP-01~~				2,3,9	5		X	X	X	X	X								
13	Temp Blank																			
14																				
15																				

HS21100884
Altamira
WFEC CCR/Landfill

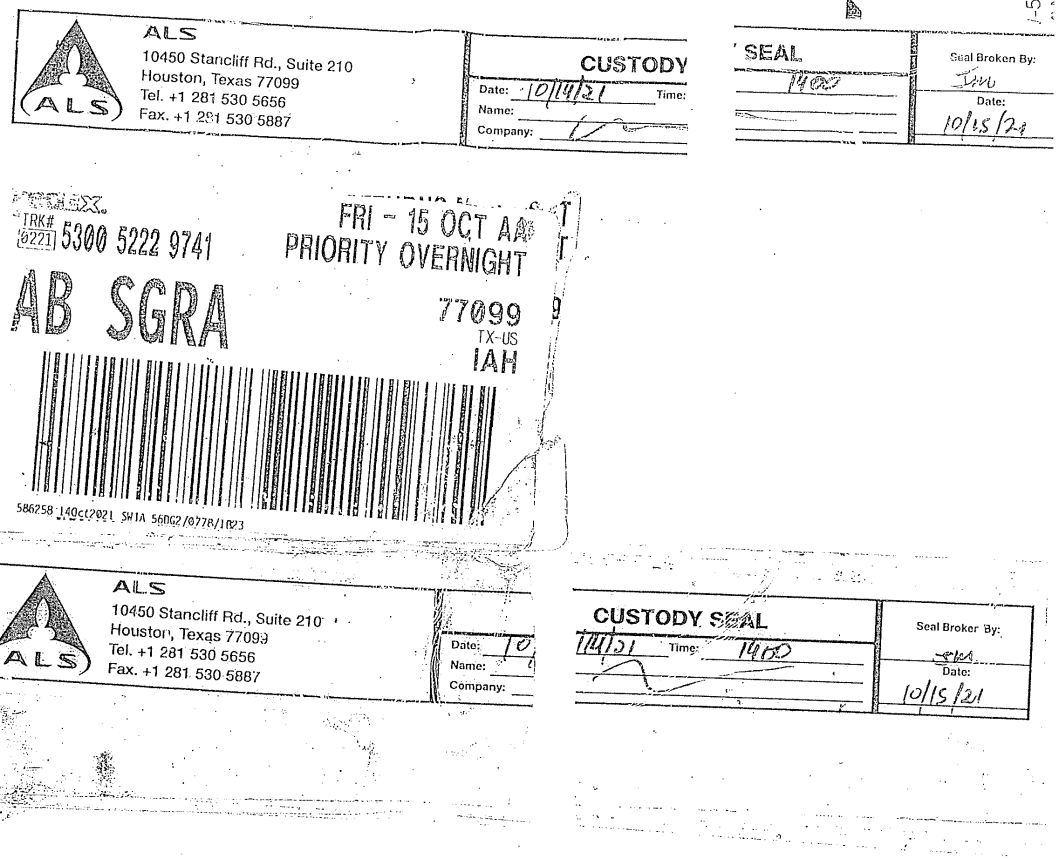
SAMPLER(S) NAME: Bradley Van Cleave
DATE: 10/15/21
TIME: 1930
Total # of Containers:
SAMPLER(S) SIGNATURE:
DATE: 10/15/21
TIME: 1930

RELINQUISHED BY:
DATE: 10/15/21
TIME: 1950
RECEIVED BY: JM
DATE: 10/16/21
TIME: 9:30
LOGGED BY:
DATE:
TIME:
COOLER TEMP: 1.2

PRESERVATION KEY: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7- 4 Degrees C 8-9035 9-Other :
POINT OF ORIGIN: ☐ Norman ☒ Oklahoma City ☐ Tulsa ☐ Yukon ☐ Midland ☐ Other :

ALTAMIRA-US, LLC

4771917 45672 1-2 clr-0
46825 1-5



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

CUSTODY
Date: 10/14/21 Time:
Name:
Company:

SEAL
1400
Seal Broken By:
Date:
10/15/21

FRI - 15 OCT A
PRIORITY OVERNIGHT
TRK# 5300 5222 9741
AB SGRA
77099
TX-US
IAH
586258 14Oct2021 SWIA 56002/0778/1023

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

Date:
Name:
Company:

CUSTODY SEAL
Time: 1400
Seal Broken By:
Date:
10/15/21

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

CU
Date: 10/14/21
Name:
Company:

STODY SEAL
Time: 1400
Seal Broken By:
Date: 10/15/21

FedEx
TRK# 6221 5300 5222 9719

FRI - 15 OCT AA
PRIORITY OVERNIGHT

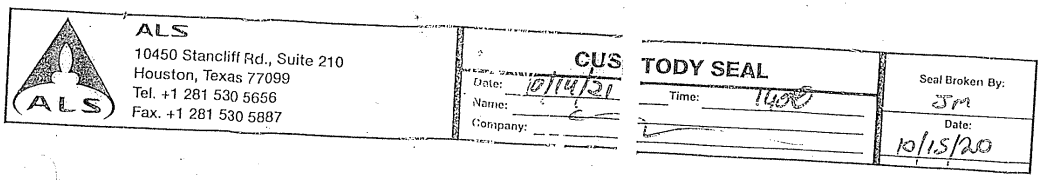
AB SGRA

77099
TX-US
IAH

586258 140cc2021 SW1A 56DG2/0778/1023

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

CUSTODY SEAL
Date: 10/14/21 Time: 1400
Name:
Company:
Seal Broken By:
Date: 10/15/21


ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887
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Date: 10/14/21
Name:
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TODY SEAL
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Date:
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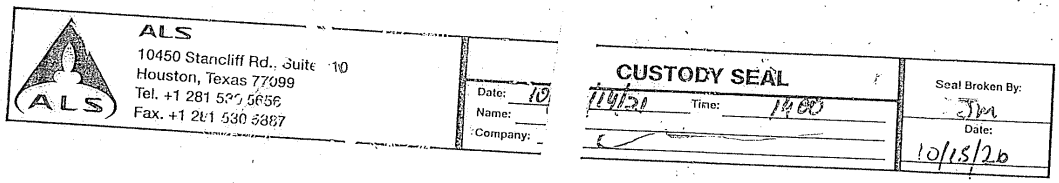
ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887
Date: 10
Name:
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CUSTODY SEAL
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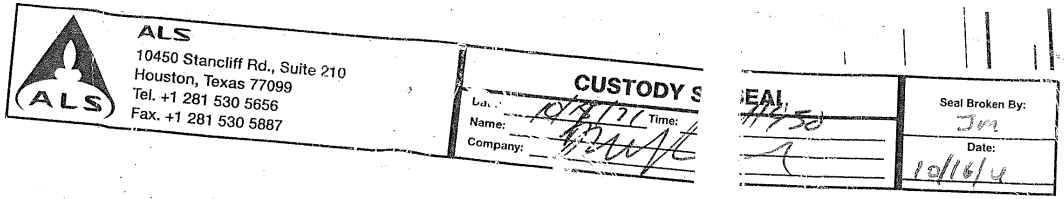
Date:
10/15/20


ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887
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10/16/4


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RETURNS MON-SAT
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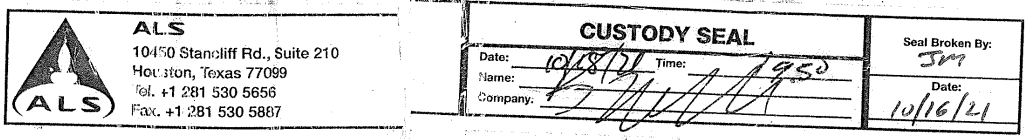
IAH
EXP 09/22
#4277271 10/15 56DJ3/14BA/FE4A


ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887
CUSTODY SEAL
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Company:
Seal Broken By:
Jm
Date:
10/16/21

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

CU
Date 10/15/21
Name:
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STODY SEAL
Time: 1930
Seal Broken By:
JM
Da'e:
10/16/21

RETURNS MON – SAT

FedEx
TRK# 0221 5300 5223 0182

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO SGRA

77099
TX-US IAH

EXP 09/22

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

CUSTODY SEAL
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Seal Broken By:
JM
Date:
10/16/21

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

CUS
Date: 10/15/21
Name:
Company:

CUSTODY SEAL
Time: 1930

Seal Broken By:
JM
Date:
10/16/21

FedEx
TRK# 0221 5300 5222 9763

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO SGRA

77099
TX-US IAH

EXP 09/22

#427771 10/15 56DJ3/14BA/FE4A

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

Date
Name
Company

CUSTODY SEAL
10/15/21 Time: 1930
e:
pany:

Seal Broken By:
JM
Date:
10/16/21

Tuesday, January 11, 2022

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

Re: ALS Workorder: 2112028
Project Name:
Project Number: HS21100884

Dear Mr. Giga:

Five water samples were received from ALS Environmental, on 10/18/2021. The samples were scheduled for the following analyses:

Radium-226
Radium-228

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

Accreditations: 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
PJLA (DoD ELAP/ISO 170250)	95377
PJLA (DOE-AP/ISO 17025)	95377
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

40 CFR Part 136: All analyses for Clean Water Act samples are analyzed using the 40 CFR Part 136 specified method and include all the QC requirements.

2112028

This is a re-log of work order 2110407.

Radium-228:
The samples were analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of EPA 904.0.

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.

ALS -- Fort Collins

Sample Number(s) Cross-Reference Table

OrderNum: 2112028
Client Name: ALS Environmental
Client Project Name:
Client Project Number: HS21100884
Client PO Number: HS21100884

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
MW-3	2112028-1		WATER	13-Oct-21	18:49
MW-14A	2112028-2		WATER	13-Oct-21	19:17
MW-15A	2112028-3		WATER	13-Oct-21	17:03
MW-21	2112028-4		WATER	13-Oct-21	17:35
DUP 3	2112028-5		WATER	13-Oct-21	17:35

2110407

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:** **17103**

SUBCONTRACT TO:

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

Phone: +1 970 490 1511

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:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS21100884
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS21100884-01**	**MW-3**	**Water**	**13 Oct 2021 18:49**
	Report as combined 226 & 228			29 Oct 2021
	Report as combined 226 & 228			29 Oct 2021
2.	**HS21100884-02**	**MW-14A**	**Water**	**13 Oct 2021 19:17**
	Report as combined 226 & 228			29 Oct 2021
	Report as combined 226 & 228			29 Oct 2021
3.	**HS21100884-03**	**MW-15A**	**Water**	**13 Oct 2021 17:03**
	Report as combined 226 & 228			29 Oct 2021
	Report as combined 226 & 228			29 Oct 2021
4.	**HS21100884-04**	**MW-21**	**Water**	**13 Oct 2021 17:35**
	Report as combined 226 & 228			29 Oct 2021
	Report as combined 226 & 228			29 Oct 2021
5.	**HS21100884-05**	**DUP 3**	**Water**	**13 Oct 2021 17:35**
	Report as combined 226 & 228			29 Oct 2021
	Report as combined 226 & 228			29 Oct 2021

Comments:

2110407

Subcontract Chain of Custody

SAMPLING STATE: **Oklahoma** **COC ID:** **17103**

Please analyze for the analysis listed above.
Send report to the emails shown above.

HS21100884-04 - MS/MSD

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

Relinquished By:	J. Mugerwa	Date/Time:	10/15/21 18:00
Received By:		Date/Time:	10/18/21 0850
Cooler ID(s):		Temperature(s):	

ALS Environmental - Fort Colllins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: ALS HOUSTON Workorder No: 2110407

Project Manager: JWS Initials: AXK Date: 10/18/2021

		N/A	YES	NO
1.	Are airbills / shipping documents present and/or removable?		X	
	Tracking number:			
2.	Are custody seals on **shipping** containers intact?		X	
3.	Are custody seals on **sample** containers intact?	X		
4.	Is there a COC (chain-of-custody) present?		X	
5.	Is the COC in agreement with samples received? (IDs, dates, times, # of samples, # of containers, matrix, requested analyses, etc.)			x
6.	Are short-hold samples present?			X
7.	Are all samples within holding times for the requested analyses?		X	
8.	Were all sample containers received intact? (not broken or leaking)		X	
9.	Is there sufficient sample for the requested analyses?		X	
10.	Are samples in proper containers for requested analyses? (form 250, *Sample Handling Guidelines*)		X	
11.	Are all aqueous samples preserved correctly, if required? (excluding volatiles)		x	
12.	Are all samples requiring no headspace (VOC, GRO, RSK/MEE, radon) free of bubbles > 6 mm (1/4 inch) diameter? (i.e. size of green pea)	X		
13.	Were the samples shipped on ice?			X
14.	Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #5	RAD ONLY		X

Cooler #:	1						
Temperature (°C):	AMB						
# of custody seals on cooler:	2						
External µR/hr reading:	11						
Background µR/hr reading:	10						

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **YES** (If no, see Form 008.)

*** Please provide details here for NO responses to boxes above - for 2 thru 5 & 7 thru 12, notify PM & continue w/ login.**

Received 2 extra bottles for sample 4

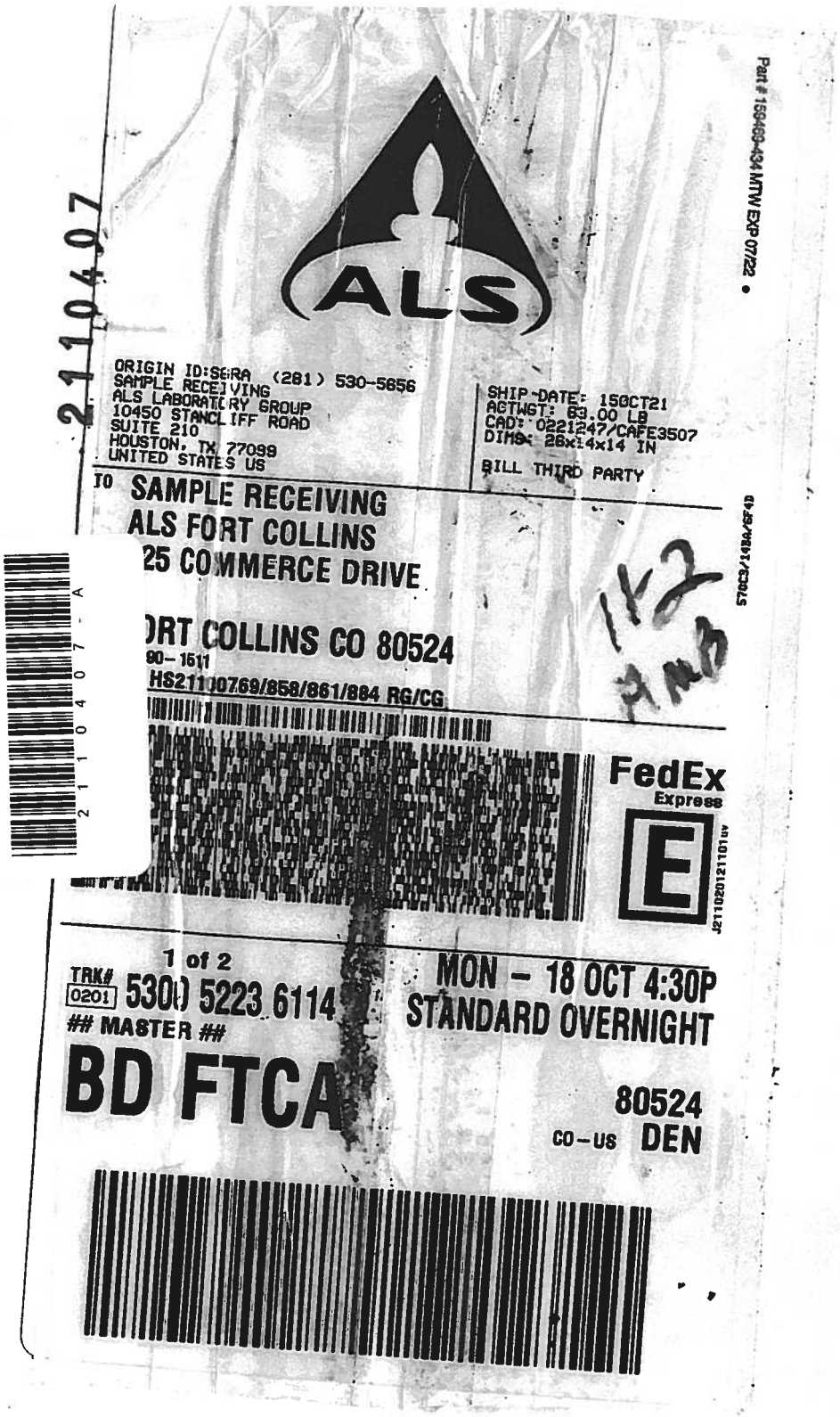
Were unpreserved bottles pH checked? NA All client bottle ID's vs ALS lab ID's double-checked by: AK

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: _____

Form 201r29.xls
(10/15/2019)

*IR Gun #3, VWR SN 170647571
*IR Gun #5, VWR SN 192272629



2110407

Part # 158469-434 MTW EXP 07/22

ORIGIN ID:SGRA (281) 530-5856
SAMPLE RECEIVING
ALS LABORATORY GROUP
10450 STANCLIFF ROAD
SUITE 210
HOUSTON, TX 77099
UNITED STATES US

SHIP DATE: 150CT21
ACTWGT: 69.00 LB
CAD: 0221247/CAFE3507
DIMS: 28x14x14 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
ALS FORT COLLINS
225 COMMERCE DRIVE

ORT COLLINS CO 80524
90-1511
HS21100769/858/861/884 RG/CG

1 of 2

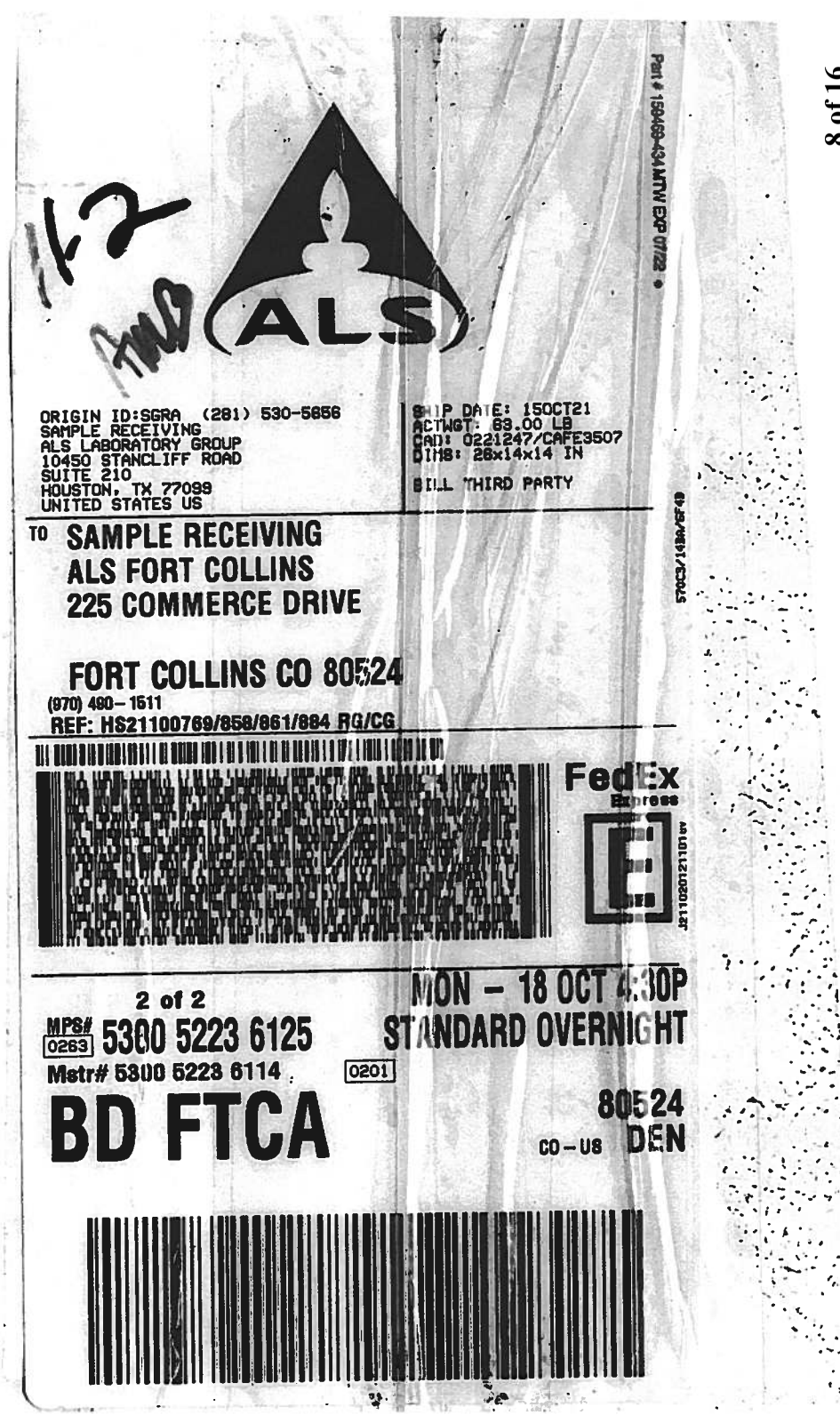
TRK# 0201 5300 5223 6114
MASTER

MON - 18 OCT 4:30P
STANDARD OVERNIGHT

BD FTCA

80524
CO-US DEN

1 of 2
7 MB



Part # 158469-434 MTW EXP 07/22

ORIGIN ID:SGRA (281) 530-5856
SAMPLE RECEIVING
ALS LABORATORY GROUP
10450 STANCLIFF ROAD
SUITE 210
HOUSTON, TX 77099
UNITED STATES US

SHIP DATE: 150CT21
ACTWGT: 69.00 LB
CAD: 0221247/CAFE3507
DIMS: 28x14x14 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
ALS FORT COLLINS
225 COMMERCE DRIVE

FORT COLLINS CO 80524
(970) 490-1511
REF: HS21100769/858/861/884 RG/CG

2 of 2

MPS# 0283 5300 5223 6125
Mstr# 5300 5223 6114

0201

MON - 18 OCT 4:30P
STANDARD OVERNIGHT

BD FTCA

80524
CO-US DEN

2 of 2
1 2
7 MB

Client:	ALS Environmental	**Date:**	*11-Jan-22*
Project:	HS21100884	**Work Order:**	2112028
Sample ID:	MW-3	**Lab ID:**	2112028-1
Legal Location:		**Matrix:**	WATER
Collection Date:	10/13/2021 18:49	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by Radon Emanation - Method 903.1			**SOP 783**		Prep Date: **12/13/2021**	PrepBy: **HLR**
Ra-226	0.06 (+/- 0.22)	U	0.42	pCi/l	NA	12/17/2021 11:40
Carr: BARIUM	*96*		*40-110*	*%REC*	DL = NA	12/17/2021 11:40
Radium-228 Analysis by GFPC			**SOP 724**		Prep Date: **12/6/2021**	PrepBy: **HLR**
COMBINED RADIUM (226+228)	0 (+/- 0)	U	0.96	pCi/l	NA	12/17/2021 09:46
Ra-228	0.49 (+/- 0.47)	U	0.96	pCi/l	NA	12/10/2021 09:46
Carr: BARIUM	*94.6*		*40-110*	*%REC*	DL = NA	12/10/2021 09:46

Client:	ALS Environmental	**Date:**	*11-Jan-22*
Project:	HS21100884	**Work Order:**	2112028
Sample ID:	MW-14A	**Lab ID:**	2112028-2
Legal Location:		**Matrix:**	WATER
Collection Date:	10/13/2021 19:17	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by Radon Emanation - Method 903.1		**SOP 783**			Prep Date: **12/13/2021**	PrepBy: **HLR**
Ra-226	0.11 (+/- 0.19)	U	0.33	pCi/l	NA	12/17/2021 11:40
Carr: BARIUM	*99.3*		*40-110*	*%REC*	DL = NA	12/17/2021 11:40
Radium-228 Analysis by GFPC		**SOP 724**			Prep Date: **12/6/2021**	PrepBy: **HLR**
COMBINED RADIUM (226+228)	**1.68 (+/- 0)**		**0.91**	**pCi/l**	NA	12/17/2021 09:46
Ra-228	**1.68 (+/- 0.62)**		**0.91**	**pCi/l**	NA	12/10/2021 09:46
Carr: BARIUM	*94.9*		*40-110*	*%REC*	DL = NA	12/10/2021 09:46

Client:	ALS Environmental	**Date:**	*11-Jan-22*
Project:	HS21100884	**Work Order:**	2112028
Sample ID:	MW-15A	**Lab ID:**	2112028-3
Legal Location:		**Matrix:**	WATER
Collection Date:	10/13/2021 17:03	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by Radon Emanation - Method 903.1			**SOP 783**		Prep Date: **12/13/2021**	PrepBy: **HLR**
Ra-226	0.28 (+/- 0.25)	U	0.33	pCi/l	NA	12/17/2021 11:40
Carr: BARIUM	*96.3*		*40-110*	*%REC*	DL = NA	12/17/2021 11:40
Radium-228 Analysis by GFPC			**SOP 724**		Prep Date: **12/6/2021**	PrepBy: **HLR**
COMBINED RADIUM (226+228)	**2.04 (+/- 0)**		**0.9**	**pCi/l**	NA	12/17/2021 09:46
Ra-228	**2.04 (+/- 0.68)**		**0.9**	**pCi/l**	NA	12/10/2021 09:46
Carr: BARIUM	*97.9*		*40-110*	*%REC*	DL = NA	12/10/2021 09:46

Client:	ALS Environmental	**Date:**	*11-Jan-22*
Project:	HS21100884	**Work Order:**	2112028
Sample ID:	MW-21	**Lab ID:**	2112028-4
Legal Location:		**Matrix:**	WATER
Collection Date:	10/13/2021 17:35	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by Radon Emanation - Method 903.1			**SOP 783**		Prep Date: **12/13/2021**	PrepBy: **HLR**
Ra-226	**0.55 (+/- 0.4)**		**0.51**	**pCi/l**	NA	12/17/2021 11:40
Carr: BARIUM	*87.8*		*40-110*	*%REC*	DL = NA	12/17/2021 11:40
Radium-228 Analysis by GFPC			**SOP 724**		Prep Date: **12/6/2021**	PrepBy: **HLR**
COMBINED RADIUM (226+228)	**2.94 (+/- 0)**		**0.92**	**pCi/l**	NA	12/17/2021 09:30
Ra-228	**2.39 (+/- 0.76)**		**0.92**	**pCi/l**	NA	12/10/2021 09:30
Carr: BARIUM	*94.5*		*40-110*	*%REC*	DL = NA	12/10/2021 09:30

Client:	ALS Environmental	**Date:**	*11-Jan-22*
Project:	HS21100884	**Work Order:**	2112028
Sample ID:	DUP 3	**Lab ID:**	2112028-5
Legal Location:		**Matrix:**	WATER
Collection Date:	10/13/2021 17:35	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by Radon Emanation - Method 903.1		**SOP 783**			Prep Date: **12/13/2021**	PrepBy: **HLR**
Ra-226	**0.51 (+/- 0.31)**		**0.32**	**pCi/l**	NA	12/17/2021 11:40
Carr: BARIUM	*93.9*		*40-110*	*%REC*	DL = NA	12/17/2021 11:40
Radium-228 Analysis by GFPC		**SOP 724**			Prep Date: **12/6/2021**	PrepBy: **HLR**
COMBINED RADIUM (226+228)	**2.58 (+/- 0)**		**0.9**	**pCi/l**	NA	12/17/2021 09:30
Ra-228	**2.07 (+/- 0.69)**		**0.9**	**pCi/l**	NA	12/10/2021 09:30
Carr: BARIUM	*94.3*		*40-110*	*%REC*	DL = NA	12/10/2021 09:30

Client:	ALS Environmental	**Date:**	*11-Jan-22*
Project:	HS21100884	**Work Order:**	2112028
Sample ID:	DUP 3	**Lab ID:**	2112028-5
Legal Location:		**Matrix:**	WATER
Collection Date:	10/13/2021 17:35	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

- "Report Limit" is the MDC

U or ND - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.

Y2 - Chemical Yield outside default limits.

W - DER is greater than Warning Limit of 1.42

* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.

- Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.

G - Sample density differs by more than 15% of LCS density.

D - DER is greater than Control Limit

M - Requested MDC not met.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

L - LCS Recovery below lower control limit.

H - LCS Recovery above upper control limit.

P - LCS, Matrix Spike Recovery within control limits.

N - Matrix Spike Recovery outside control limits

NC - Not Calculated for duplicate results less than 5 times MDC

B - Analyte concentration greater than MDC.

B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).

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

E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.

M - Duplicate injection precision was not met.

N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.

Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.

* - 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
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

Batch ID: **RE211213-10-1** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

DUP Sample ID: **2112028-4** Units: **pCi/l** Analysis Date: **12/17/2021 11:40**

Client ID: **MW-21** Run ID: **RE211213-10A** Prep Date: **12/13/2021** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	0.16 (+/- 0.16)	0.22						0.55	0.9	2.1	Y1,U
Carr: BARIUM	34700		34390		101	40-110		31020			Y1

LCS Sample ID: **RE211213-10** Units: **pCi/l** Analysis Date: **12/17/2021 11:12**

Client ID: Run ID: **RE211213-10A** Prep Date: **12/13/2021** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	49 (+/- 12)	1	46.42		105	67-120					P
Carr: BARIUM	33220		34390		96.6	40-110					

MB Sample ID: **RE211213-10** Units: **pCi/l** Analysis Date: **12/17/2021 11:12**

Client ID: Run ID: **RE211213-10A** Prep Date: **12/13/2021** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	0.03 (+/- 0.17)	0.35									U
Carr: BARIUM	33770		34380		98.2	40-110					

The following samples were analyzed in this batch:

2112028-1	2112028-2	2112028-3
2112028-4	2112028-5	

Client: ALS Environmental
Work Order: 2112028
Project: HS21100884

QC BATCH REPORT

Batch ID: **RA211206-1-1** Instrument ID **GASPROP** Method: **Radium-228 Analysis by GFPC**

DUP Sample ID: **2112028-4** Units: **ug** Analysis Date: **12/10/2021 09:46**
Client ID: **MW-21** Run ID: **RA211206-1A** Prep Date: **12/6/2021** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Carr: BARIUM	37070		38880		95.3	40-110		37610			
COMBINED RADIUM (226+228)	0 (+/- 0)	0.94						2.94			U
Ra-228	0.67 (+/- 0.48)	0.94						2.39	1.9	2.1	U

LCS Sample ID: **RA211206-1** Units: **ug** Analysis Date: **12/10/2021 09:46**
Client ID: Run ID: **RA211206-1A** Prep Date: **12/6/2021** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Carr: BARIUM	37030		38880		95.3	40-110					
Ra-228	26.8 (+/- 6.2)	0.8	22.82		117	70-130					P

MB Sample ID: **RA211206-1** Units: **ug** Analysis Date: **12/10/2021 09:46**
Client ID: Run ID: **RA211206-1A** Prep Date: **12/6/2021** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Carr: BARIUM	36730		38870		94.5	40-110					
Ra-228	0.57 (+/- 0.43)	0.84									U

The following samples were analyzed in this batch:

2112028-1	2112028-2	2112028-3
2112028-4	2112028-5	

Wednesday, January 12, 2022

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

Re: ALS Workorder: 2112513
Project Name:
Project Number: HS21100884

Dear Mr. Giga:

Eight water samples were received from ALS Environmental, on 10/19/2021. 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

Accreditations: 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
PJLA (DoD ELAP/ISO 170250)	95377
PJLA (DOE-AP/ISO 17025)	95377
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

40 CFR Part 136: All analyses for Clean Water Act samples are analyzed using the 40 CFR Part 136 specified method and include all the QC requirements.

2112513

This is a re-log of work order 2110431.

Radium-228:
The samples were analyzed for the presence of ^{228}Ra by low background gas flow proportional counting of ^{228}Ac, which is the ingrown progeny of ^{228}Ra, according to the current revision of EPA 904.0.

All acceptance criteria were met.

Radium-226:
The samples were prepared and analyzed according to the current revision of EPA 903.1, with procedure modifications outlined in QASS #452769.

All acceptance criteria were met.

ALS -- Fort Collins

Sample Number(s) Cross-Reference Table

OrderNum: 2112513
Client Name: ALS Environmental
Client Project Name:
Client Project Number: HS21100884
Client PO Number: Hs21100884

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
MW-5S	2112513-1		WATER	14-Oct-21	15:00
MW-7S	2112513-2		WATER	14-Oct-21	11:16
MW-13	2112513-3		WATER	14-Oct-21	13:07
MW-16	2112513-4		WATER	14-Oct-21	16:43
MW-17	2112513-5		WATER	14-Oct-21	17:50
MW-18	2112513-6		WATER	14-Oct-21	19:15
MW-19S	2112513-7		WATER	15-Oct-21	12:02
MW-20	2112513-8		WATER	15-Oct-21	10:00

2110431

JWS

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:** **17110**

SUBCONTRACT TO:

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

Phone: +1 970 490 1511

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:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS21100884
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS21100884-06**	**MW-5S**	**Water**	**14 Oct 2021 15:00**
	Report as combined 226 & 228			29 Oct 2021
	Report as combined 226 & 228			29 Oct 2021
2.	**HS21100884-07**	**MW-7S**	**Water**	**15 Oct 2021 11:16**
	Report as combined 226 & 228			29 Oct 2021
	Report as combined 226 & 228			29 Oct 2021
3.	**HS21100884-08**	**MW-13**	**Water**	**15 Oct 2021 13:07**
	Report as combined 226 & 228			29 Oct 2021
	Report as combined 226 & 228			29 Oct 2021
4.	**HS21100884-09**	**MW-16**	**Water**	**14 Oct 2021 16:43**
	Report as combined 226 & 228			29 Oct 2021
	Report as combined 226 & 228			29 Oct 2021
5.	**HS21100884-10**	**MW-17**	**Water**	**14 Oct 2021 17:50**
	Report as combined 226 & 228			29 Oct 2021
	Report as combined 226 & 228			29 Oct 2021
6.	**HS21100884-11**	**MW-18**	**Water**	**14 Oct 2021 19:15**
	Report as combined 226 & 228			29 Oct 2021
	Report as combined 226 & 228			29 Oct 2021

2110431

JWS

Subcontract Chain of Custody

SAMPLING STATE: **Oklahoma** **COC ID:** **17110**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
7.	**HS21100884-12**	**MW-19S**	**Water**	**15 Oct 2021 12:02**
	Report as combined 226 & 228			29 Oct 2021
	Report as combined 226 & 228			29 Oct 2021
8.	**HS21100884-13**	**MW-20**	**Water**	**15 Oct 2021 10:00**
	Report as combined 226 & 228			29 Oct 2021
	Report as combined 226 & 228			29 Oct 2021

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.

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

Relinquished By: _____ Date/Time: 10/18/2021 1800.

Received By: Karen Craven Date/Time: 10/19/2021 1515

Cooler ID(s): 5300 52236813 Temperature(s): AMB

ALS Environmental - Fort Colllins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: ALS TEXAS Workorder No: 2110431

Project Manager: JWS Initials: KC Date: 10/19/2021

		N/A	YES	NO
1.	Are airbills / shipping documents present and/or removable?		X	
	Tracking number: 5300 5223 6813			
2.	Are custody seals on **shipping** containers intact?		X	
3.	Are custody seals on **sample** containers intact?	X		
4.	Is there a COC (chain-of-custody) present?		X	
5.	Is the COC in agreement with samples received? (IDs, dates, times, # of samples, # of containers, matrix, requested analyses, etc.)		X	
6.	Are short-hold samples present?			X
7.	Are all samples within holding times for the requested analyses?		X	
8.	Were all sample containers received intact? (not broken or leaking)		X	
9.	Is there sufficient sample for the requested analyses?		X	
10.	Are samples in proper containers for requested analyses? (form 250, *Sample Handling Guidelines*)		X	
11.	Are all aqueous samples preserved correctly, if required? (excluding volatiles)		X	
12.	Are all samples requiring no headspace (VOC, GRO, RSK/MEE, radon) free of bubbles > 6 mm (1/4 inch) diameter? (i.e. size of green pea)	X		
13.	Were the samples shipped on ice?			X
14.	Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #5	RAD ONLY		

Cooler #:	1						
Temperature (°C):	AMB						
# of custody seals on cooler:	2						
External µR/hr reading:	11						
Background µR/hr reading:	10						

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **YES**

*** Please provide details here for NO responses to boxes above - for 2 thru 5 & 7 thru 12, notify PM & continue w/ login.**

Were unpreserved bottles pH checked? NA All client bottle ID's vs ALS lab ID's double-checked by: KC

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: _____ 10/21/21

Form 201r29.xls
(10/15/2019)

*IR Gun #3, VWR SN 170647571
*IR Gun #5, VWR SN 192272629

11-2

AM3

Part # 159469-434 MTW EXP 07/22

ORIGIN ID:SGRA (281) 530-5656
SAMPLE RECEIVING
ALS LABORATORY GROUP
10450 STANCLIFF ROAD
SUITE 210
HOUSTON, TX 77099
UNITED STATES US

SHIP DATE: 18OCT21
ACTWGT: 45.90 LB
CAD: 0221247/CAFE3507
DIMS: 26x14x14 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
ALS ENVIRONMENTAL
225 COMMERCE DRIVE

FORT COLLINS CO 80524
(970) 490-1511
REF: HS21100884 - RG

FedEx Express

TUE - 19 OCT 10:30A
PRIORITY OVERNIGHT

TRK# 0201 5300 5223 6813

NL FTCA

80524
CO-US DEN

S70C3/148A/5F4D

J211020121101 ev

Client:	ALS Environmental	**Date:**	*12-Jan-22*
Project:	HS21100884	**Work Order:**	2112513
Sample ID:	MW-5S	**Lab ID:**	2112513-1
Legal Location:		**Matrix:**	WATER
Collection Date:	10/14/2021 15:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by Radon Emanation - Method 903.1			**SOP 783**		Prep Date: **1/10/2022**	PrepBy: **HLR**
Ra-226	0.06 (+/- 0.24)	U	0.44	pCi/l	NA	1/12/2022 11:24
Carr: BARIUM	*92.3*		*40-110*	*%REC*	DL = NA	1/12/2022 11:24
Radium-228 Analysis by GFPC			**SOP 724**		Prep Date: **12/30/2021**	PrepBy: **MMS**
COMBINED RADIUM (226+228)	**1.28 (+/- 0)**		**0.92**	**pCi/l**	NA	1/12/2022 09:30
Ra-228	**1.28 (+/- 0.56)**		**0.92**	**pCi/l**	NA	1/7/2022 09:30
Carr: BARIUM	*89.2*		*40-110*	*%REC*	DL = NA	1/7/2022 09:30

Client:	ALS Environmental	**Date:**	*12-Jan-22*
Project:	HS21100884	**Work Order:**	2112513
Sample ID:	MW-7S	**Lab ID:**	2112513-2
Legal Location:		**Matrix:**	WATER
Collection Date:	10/14/2021 11:16	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by Radon Emanation - Method 903.1			**SOP 783**		Prep Date: **1/10/2022**	PrepBy: **HLR**
Ra-226	0.17 (+/- 0.31)	U	0.52	pCi/l	NA	1/12/2022 11:24
Carr: BARIUM	*90.5*		*40-110*	*%REC*	DL = NA	1/12/2022 11:24
Radium-228 Analysis by GFPC			**SOP 724**		Prep Date: **12/30/2021**	PrepBy: **MMS**
COMBINED RADIUM (226+228)	**1.95 (+/- 0)**		**0.91**	**pCi/l**	NA	1/12/2022 09:30
Ra-228	**1.95 (+/- 0.68)**		**0.91**	**pCi/l**	NA	1/7/2022 09:30
Carr: BARIUM	*91.2*		*40-110*	*%REC*	DL = NA	1/7/2022 09:30

Client:	ALS Environmental	**Date:**	*12-Jan-22*
Project:	HS21100884	**Work Order:**	2112513
Sample ID:	MW-13	**Lab ID:**	2112513-3
Legal Location:		**Matrix:**	WATER
Collection Date:	10/14/2021 13:07	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by Radon Emanation - Method 903.1		**SOP 783**			Prep Date: **1/10/2022**	PrepBy: **HLR**
Ra-226	0.22 (+/- 0.34)	U	0.56	pCi/l	NA	1/12/2022 11:24
Carr: BARIUM	*93.9*		*40-110*	*%REC*	DL = NA	1/12/2022 11:24
Radium-228 Analysis by GFPC		**SOP 724**			Prep Date: **12/30/2021**	PrepBy: **MMS**
COMBINED RADIUM (226+228)	**1.75 (+/- 0)**		**0.92**	**pCi/l**	NA	1/12/2022 09:30
Ra-228	**1.75 (+/- 0.64)**		**0.92**	**pCi/l**	NA	1/7/2022 09:30
Carr: BARIUM	*90.1*		*40-110*	*%REC*	DL = NA	1/7/2022 09:30

Client:	ALS Environmental	**Date:**	*12-Jan-22*
Project:	HS21100884	**Work Order:**	2112513
Sample ID:	MW-16	**Lab ID:**	2112513-4
Legal Location:		**Matrix:**	WATER
Collection Date:	10/14/2021 16:43	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by Radon Emanation - Method 903.1		**SOP 783**			Prep Date: **1/10/2022**	PrepBy: **HLR**
Ra-226	0.22 (+/- 0.3)	U	0.47	pCi/l	NA	1/12/2022 11:24
Carr: BARIUM	*95.1*		*40-110*	*%REC*	DL = NA	1/12/2022 11:24
Radium-228 Analysis by GFPC		**SOP 724**			Prep Date: **12/30/2021**	PrepBy: **MMS**
COMBINED RADIUM (226+228)	**1.82 (+/- 0)**		**0.91**	**pCi/l**	NA	1/12/2022 09:30
Ra-228	**1.82 (+/- 0.65)**		**0.91**	**pCi/l**	NA	1/7/2022 09:30
Carr: BARIUM	*92.9*		*40-110*	*%REC*	DL = NA	1/7/2022 09:30

Client:	ALS Environmental	**Date:**	*12-Jan-22*
Project:	HS21100884	**Work Order:**	2112513
Sample ID:	MW-17	**Lab ID:**	2112513-5
Legal Location:		**Matrix:**	WATER
Collection Date:	10/14/2021 17:50	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by Radon Emanation - Method 903.1		**SOP 783**			Prep Date: **1/10/2022**	PrepBy: **HLR**
Ra-226	0.03 (+/- 0.27)	U	0.51	pCi/l	NA	1/12/2022 11:24
Carr: BARIUM	*98.3*		*40-110*	*%REC*	DL = NA	1/12/2022 11:24
Radium-228 Analysis by GFPC		**SOP 724**			Prep Date: **12/30/2021**	PrepBy: **MMS**
COMBINED RADIUM (226+228)	**0.97 (+/- 0)**		**0.94**	**pCi/l**	NA	1/12/2022 09:30
Ra-228	**0.97 (+/- 0.52)**		**0.94**	**pCi/l**	NA	1/7/2022 09:30
Carr: BARIUM	*92.6*		*40-110*	*%REC*	DL = NA	1/7/2022 09:30

Client:	ALS Environmental	**Date:**	*12-Jan-22*
Project:	HS21100884	**Work Order:**	2112513
Sample ID:	MW-18	**Lab ID:**	2112513-6
Legal Location:		**Matrix:**	WATER
Collection Date:	10/14/2021 19:15	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by Radon Emanation - Method 903.1			**SOP 783**		Prep Date: **1/10/2022**	PrepBy: **HLR**
Ra-226	-0.04 (+/- 0.18)	U	0.34	pCi/l	NA	1/12/2022 11:24
Carr: BARIUM	*95.9*		*40-110*	*%REC*	DL = NA	1/12/2022 11:24
Radium-228 Analysis by GFPC			**SOP 724**		Prep Date: **12/30/2021**	PrepBy: **MMS**
COMBINED RADIUM (226+228)	**1.05 (+/- 0)**		**0.83**	**pCi/l**	NA	1/12/2022 09:13
Ra-228	**1.05 (+/- 0.49)**		**0.83**	**pCi/l**	NA	1/7/2022 09:13
Carr: BARIUM	*91.9*		*40-110*	*%REC*	DL = NA	1/7/2022 09:13

Client:	ALS Environmental	**Date:**	*12-Jan-22*
Project:	HS21100884	**Work Order:**	2112513
Sample ID:	MW-19S	**Lab ID:**	2112513-7
Legal Location:		**Matrix:**	WATER
Collection Date:	10/15/2021 12:02	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by Radon Emanation - Method 903.1			**SOP 783**		Prep Date: **1/10/2022**	PrepBy: **HLR**
Ra-226	0.19 (+/- 0.2)	U	0.27	pCi/l	NA	1/12/2022 11:24
Carr: BARIUM	*95.6*		*40-110*	*%REC*	DL = NA	1/12/2022 11:24
Radium-228 Analysis by GFPC			**SOP 724**		Prep Date: **12/30/2021**	PrepBy: **MMS**
COMBINED RADIUM (226+228)	0 (+/- 0)	U	0.84	pCi/l	NA	1/12/2022 09:13
Ra-228	0.67 (+/- 0.44)	U	0.84	pCi/l	NA	1/7/2022 09:13
Carr: BARIUM	*93.7*		*40-110*	*%REC*	DL = NA	1/7/2022 09:13

Client:	ALS Environmental	**Date:**	*12-Jan-22*
Project:	HS21100884	**Work Order:**	2112513
Sample ID:	MW-20	**Lab ID:**	2112513-8
Legal Location:		**Matrix:**	WATER
Collection Date:	10/15/2021 10:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Radium-226 by Radon Emanation - Method 903.1		**SOP 783**			Prep Date: **1/10/2022**	PrepBy: **HLR**
Ra-226	0.36 (+/- 0.3)	U	0.39	pCi/l	NA	1/12/2022 11:45
Carr: BARIUM	*93.4*		*40-110*	*%REC*	DL = NA	1/12/2022 11:45
Radium-228 Analysis by GFPC		**SOP 724**			Prep Date: **12/30/2021**	PrepBy: **MMS**
COMBINED RADIUM (226+228)	**0.91 (+/- 0)**		**0.87**	**pCi/l**	NA	1/12/2022 09:13
Ra-228	**0.91 (+/- 0.48)**		**0.87**	**pCi/l**	NA	1/7/2022 09:13
Carr: BARIUM	*92*		*40-110*	*%REC*	DL = NA	1/7/2022 09:13

Client:	ALS Environmental	**Date:**	*12-Jan-22*
Project:	HS21100884	**Work Order:**	2112513
Sample ID:	MW-20	**Lab ID:**	2112513-8
Legal Location:		**Matrix:**	WATER
Collection Date:	10/15/2021 10:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

- "Report Limit" is the MDC

U or ND - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.

Y2 - Chemical Yield outside default limits.

W - DER is greater than Warning Limit of 1.42

* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit

M - Requested MDC not met.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

L - LCS Recovery below lower control limit.

H - LCS Recovery above upper control limit.

P - LCS, Matrix Spike Recovery within control limits.

N - Matrix Spike Recovery outside control limits

NC - Not Calculated for duplicate results less than 5 times MDC

B - Analyte concentration greater than MDC.

B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).

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

E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.

M - Duplicate injection precision was not met.

N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.

Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.

* - 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
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

QC BATCH REPORT

Batch ID: **RE220110-1-1** Instrument ID **Alpha Scin** Method: **Radium-226 by Radon Emanation**

LCS Sample ID: **RE220110-1** Units: **pCi/l** Analysis Date: **1/12/2022 11:45**

Client ID: Run ID: **RE220110-1A** Prep Date: **1/10/2022** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	49 (+/- 12)	0	46.42		105	67-120					P
Carr: BARIUM	33420		36450		91.7	40-110					

LCSD Sample ID: **RE220110-1** Units: **pCi/l** Analysis Date: **1/12/2022 11:45**

Client ID: Run ID: **RE220110-1A** Prep Date: **1/10/2022** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	47 (+/- 12)	0	46.42		100	67-120		49	0.1	2.1	P
Carr: BARIUM	33120		36460		90.9	40-110		33420			

MB Sample ID: **RE220110-1** Units: **pCi/l** Analysis Date: **1/12/2022 11:45**

Client ID: Run ID: **RE220110-1A** Prep Date: **1/10/2022** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	-0.16 (+/- 0.2)	0.49									U
Carr: BARIUM	34680		36460		95.1	40-110					

The following samples were analyzed in this batch:

2112513-1	2112513-2	2112513-3
2112513-4	2112513-5	2112513-6
2112513-7	2112513-8	

QC BATCH REPORT

Batch ID: **RA211230-1-1** Instrument ID **GASPROP** Method: **Radium-228 Analysis by GFPC**

LCS Sample ID: **RA211230-1** Units: **ug** Analysis Date: **1/7/2022 09:13**
Client ID: Run ID: **RA211230-1A** Prep Date: **12/30/2021** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Carr: BARIUM	29600		32600		90.8	40-110					
Ra-228	20.4 (+/- 4.8)	0.8	22.61		90.3	70-130					P

LCSD Sample ID: **RA211230-1** Units: **ug** Analysis Date: **1/7/2022 09:13**
Client ID: Run ID: **RA211230-1A** Prep Date: **12/30/2021** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Carr: BARIUM	30100		32600		92.3	40-110		29600			
Ra-228	21.5 (+/- 5)	0.8	22.61		94.9	70-130		20.4	0.1	2.1	P

MB Sample ID: **RA211230-1** Units: **ug** Analysis Date: **1/7/2022 09:13**
Client ID: Run ID: **RA211230-1A** Prep Date: **12/30/2021** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Carr: BARIUM	30350		32600		93.1	40-110					
Ra-228	0.47 (+/- 0.42)	0.86									U

The following samples were analyzed in this batch:

2112513-1	2112513-2	2112513-3
2112513-4	2112513-5	2112513-6
2112513-7	2112513-8	

Generic LL8/LL6 2q

ALS

QUALITY ASSURANCE SUMMARY SHEET

ALS W.O. # / BATCH _____

TEST _____

METHOD _____

SOP/REV (PREP) _____

SOP/REV (ANAL) _____

Briefly document any QA or other problems or deviations associated with the analysis of samples. Problems could result from: log-in, color, odor, dilution, consistency, scheduling, equipment, or instrumentation, or may include documentation of minor deviations necessary due to unique DQO's or sample characteristics.

JKB 1/27/16

In order to establish an accurate chemical yield for samples prepped sequentially for Ra-226 by Radon Emanation from the Ra-228 protocol, the following procedure was followed:

1. After Ra-228 was plancheted, the 40mL of sample dissolved in EDTA and NaOH was diluted in a 200ml cup to approximately 150mL with DI water.
2. One mL of lead carrier, transfer pipette of phenolphthalein, and 10mL of 18N H_2SO_4 were added to the cup on a stirring hotplate.
3. 6N H_2SO_4 was added from a squeeze bottle until a pink color was achieved.
4. Additional 6N H_2SO_4 was added slowly until the pH dropped enough that the phenolphthalein lost color.
5. The pH was checked to ensure that the sample solution was slightly acidic.
6. After stirring for five minutes, the stir bar was removed, and the sample was allowed to settle for two hours.
7. The supernatant was decanted, and the precipitate was transferred with .1N H_2SO_4 to a 50mL centrifuge tube.
8. The precipitate was spun down, and the supernatant discarded.
9. The resultant precipitate pellet was dissolved in 25mL of EDTA.
10. A new final ICP aliquot of .1mL was taken and diluted to 10mL.
11. The barium recovery specific to Ra-226 by Radon Emanation was calculated from this new final ICP.

JKB 1/27/16

JKB 1/27/16

JKB 1/27/16

TECHNICIAN/ANALYST _____ DATE 1/27/16

DEPARTMENT MANAGER _____ DATE 1/27/16

FORM 302r6.doc (4/22/04)

452769

ATTACHMENT B

DATA SUMMARY TABLES
(LANDFILL CCR UNIT)

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-3 25-May-16	MW-3 27-Jul-16	MW-3 28-Sep-16	MW-3 1-Dec-16	MW-3 31-Jan-17	MW-3 5-Apr-17	MW-3 6-Jun-17	DUP 2 6-Jun-17	MW-3 8-Aug-17	MW-3 17-May-18	MW-3 (Shallow) 1-Aug-18	MW-3 (Deep) 9-Aug-18
Detection Monitoring Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Boron	None	1.896	Not Applicable	mg/L	1.09	1.17	1.1	1.7	1.28 J*	0.88	1.15	1.2	1.06	1.23	1.12	1.25
Calcium	None	670.30	Not Applicable	mg/L	255	296	242	405	227	357	315	309	371	227	205	255
Chloride	250	18.51	Not Applicable	mg/L	13.6	12.4	13.8	13.7	14.2 J*	14.9	13.7	13.3 J*	13.2	13.4	14.3	13.4
Fluoride	4	0.6359	Not Applicable	mg/L	0.211	0.442	0.407	0.392	0.399	0.3	0.384	0.354 J*	0.331	0.324	0.338	0.291
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	7.25	7.86	7.6	7.4	7.2	7.1	7.1	7	7	7.3	7.4	7.3
Sulfate	250	1,396	Not Applicable	mg/L	1350	1230	1230	1220	1140	1250	1230	1250	1070	1170	1190	1170
Total Dissolved Solids	500	2,191	Not Applicable	mg/L	2030	2060	1960	1990	2080	2090	2150	2200	2090	2180	2150	2160
Assessment Monitoring Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.000500	<0.000500	<0.000800	<0.00400	<0.000800	<0.000800	<0.000800	<0.00400	<0.000800	---	---	---
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.00196 J	0.00117 J	0.00103 J	<0.00200	0.000602 J	0.00136 J	<0.000400	<0.00400	0.00172 J	---	---	---
Barium	2	Not Applicable	2 (MCL)	mg/L	0.0122	0.0118	0.0114	0.0207	0.0115	0.0116	0.0114	0.0134	0.118	---	---	---
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.00100	<0.00100	<0.000100	<0.000500	<0.000100	<0.000100	<0.000100	<0.000500	<0.00100	---	---	---
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.000400	<0.000400	<0.000100	<0.000500	<0.000100	<0.000100	<0.000100	<0.00100	<0.00100	---	---	---
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	<0.000500	<0.000500	<0.000500	<0.00250	<0.000500	<0.000500	<0.000500	<0.00500	<0.000500	---	---	---
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	<0.000500	<0.000500	0.000239 J	<0.000500	0.000168 J	0.000138 J	<0.000100	<0.00100	0.000153 J	---	---	---
Fluoride	4	Not Applicable	4 (MCL)	mg/L	0.211	0.442	0.407	0.392	0.399	0.3	0.384	0.354 J*	0.331	0.324	0.338	0.291
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.000200	<0.000200	<0.000100	<0.000500	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100	---	---	---
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.158	0.138	0.141	0.247 J	0.148	0.137	0.14	0.151 J	0.165	---	0.125	0.129
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	---	---	---
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	<0.000500	<0.000500	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.0100	<0.00100	---	<0.00100	<0.00100
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.000600	<0.000600	<0.000300	<0.00150	0.000345 J	<0.000300	0.00353	<0.00300	<0.000300	---	---	---
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000500	<0.000500	<0.000800	<0.00400	<0.000800	<0.000800	<0.000800	<0.00400	<0.000800	---	---	---
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	1.07 +/- 0.292	0.868 +/- 0.271	1.05 +/- 0.330	1.67 +/- 0.473	1.09 +/- 0.303	0.899 +/- 0.276	2.03 +/- 0.371	0.843 +/- 0.246	0.967 +/- 0.277	---	---	---
Other Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	<5.00	---	---	---
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	299	---	---	---
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	<5.00	---	---	---
Iron, Total	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Magnesium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	23.1	---	---	---
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Potassium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	8.45	---	---	---
Sodium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	697	---	---	---
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	---	---	---	---	---	---	---	---	---	---	---	---
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Field Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Temperature	None	Not Applicable	Not Applicable	ºC	21.87	24.83	22.37	18.81	20.98	17.2	23.35	---	22.32	23.87	26.5	21.31
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.12	7.05	7.06	7.04	7.04	6.27	6.98	---	6.96	7.14	6.7	6.75
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	2342	2807	2804	2810	2804	2805	2767	---	2762	2758	2880	2864
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.49	0.26	0.09	0.2	0.3	0.59	0.36	---	0.09	0.7	2.1	3.76
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-27.5	-74.7	-92.1	-245.4	-171.1	241.7	-45	---	46.8	-46.3	-11.5	25
Turbidity	None	Not Applicable	Not Applicable	NTU	0.89	0.18	0.18	0.91	0.36	0.15	0.44	---	0.33	0.29	0.02	0.02
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	24.56	25.92	26.26	26.91	25.63	26.02	26.4	---	24.88	25.2	---	---
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	33.53	---	---	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID:	MW-3	MW-3		MW-3	MW-3	MW-3	MW-3	DUP 3	MW-3	MW-3
				Sample Date:	4-Oct-18	11-Jan-19		24-Apr-19	2-Oct-19	17-Jun-20	8-Oct-20		31-Mar-21	13-Oct-21
Detection Monitoring Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #1 UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5		ASSESSMENT MON. #6	ASSESSMENT MON. #7
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
Calcium	None	670.30	Not Applicable	mg/L	206	198	225	225	213	214	183	181	207	155
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
Fluoride	4	0.6359	Not Applicable	mg/L	0.318	0.373	0.52	0.396 J	0.319	0.203	0.328	0.337	0.376	0.258
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
Sulfate	250	1,396	Not Applicable	mg/L	1270	1220	1450	1150	1210	1240	1320	1290	1260	1,200
Total Dissolved Solids	500	2,191	Not Applicable	mg/L	2130	2110	2060	2100	2110	2150	2020	2010	2030	1,970
Assessment Monitoring Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #1 UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5		ASSESSMENT MON. #6	ASSESSMENT MON. #7
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
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
Barium	2	Not Applicable	2 (MCL)	mg/L	0.00954 J	0.0101	0.011	0.0128	0.0112	0.013	0.0159	0.0158	0.0141	0.0136
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
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	<0.005	<0.000400	<0.000400	<0.000400	0.00142 J	<0.000400	<0.000400	<0.000400	<0.000400	0.000467 J
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.000162 J	<0.000200	0.000208 J	0.000232 J	0.000259 J	0.000289 J	<0.000200	<0.000200	<0.000200	<0.000200
Fluoride	4	Not Applicable	4 (MCL)	mg/L	0.318	0.373	0.52	0.396 J	0.319	0.203	0.328	0.337	0.376	0.258
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	0.147 J	0.152	0.148	0.148	0.136	0.145	0.118	0.122	0.138	0.137
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0001	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.0000760 J	0.0000610 J
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	<0.001	0.000613 J	0.000622 J	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	0.000629 J
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.0003	<0.00110	<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	0.000560 J	0.000499 J	<0.000200	0.000466 J	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	1.45 +/- 0.444	<0.67	---	<0.69	<0.79	1.02	1.65	1.7	1.43	<0.96
Other Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #1 UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5		ASSESSMENT MON. #6	ASSESSMENT MON. #7
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
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
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
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---
Field Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #1 UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5		ASSESSMENT MON. #6	ASSESSMENT MON. #7
Temperature	None	Not Applicable	Not Applicable	ºC	23.1	13.1	---	18.31	24.37	23.62	23.8	---	15.9	20.4
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	6.95	6.93	---	7.31	7.18	7.15	7.22	---	7.04	7.11
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	2814	2699	---	2778	2797	2576	2670	---	2666	2,676
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.59	0.7	---	1.26	6.86	3.85	0.35	---	0.57	0.54
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-37	-12	---	-54.6	-34.4	-24.6	-102.6	---	-15.4	-47.3
Turbidity	None	Not Applicable	Not Applicable	NTU	4.23	1.8	1.04	0.57	1.14	3.36	1.3	---	3.11	2.50
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	---	24.55	---	27.57	26.04	24.35	25.28	---	24.3	25.28
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	---	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-5S 13-Dec-16	DUP 3 13-Dec-16	MW-5S 25-Jan-17	MW-5S 3-Feb-17	MW-5S 29-Mar-17	MW-5S 7-Apr-17	MW-5S 1-Jun-17	MW-5S 9-Jun-17	MW-5S 14-Aug-17	MW-5S 22-May-18	MW-5S (Shallow) 1-Aug-18	MW-5S (Deep) 10-Aug-18
Detection Monitoring Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
Boron	None	1.896	Not Applicable	mg/L	3.56	4.37	3.02	3.2	3.87	2.34	1.32	1.86	1.29	1.05	1.06	3.09
Calcium	None	670.30	Not Applicable	mg/L	32.9	28.1	27.8	29.9	30.8	37.9	54.7	58.2	46.6	74.7	59.1	24.9 J
Chloride	250	18.51	Not Applicable	mg/L	33.2	30.5	33.2	11.3	28.2	29.8	22.3	13.3	18.7	25	18.7	26.1
Fluoride	4	0.6359	Not Applicable	mg/L	1.84 J*	1.91	1.6	1.59	1.32	1.39	1.06	1.07	1.17	1.38	1.02	1.5
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	8.2	8.3	7.9	7.8	7.8	7.9	7.4	7.5	7.5	7.6	7.7	8
Sulfate	250	626	Not Applicable	mg/L	527	540	504	501	415	469	326	321	301	369	294	384
Total Dissolved Solids	500	1,334	Not Applicable	mg/L	1230	1180	1200	1210	1070	1060	948	1010	980	950	880	1150
Assessment Monitoring Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
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)	mg/L	0.00202 J	0.00132 J	0.00187 J	0.00209	0.00147 J	0.00117 J	0.00115 J	<0.00200	0.00564 J	---	---	---
Barium	2	Not Applicable	2 (MCL)	mg/L	0.0267	0.0165	0.0212	0.0192	0.0144	0.0177	0.0183	0.023	0.0186	---	---	---
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.000500	<0.000100	<0.000100	<0.000100	<0.00250	0.000419 U	<0.000100	<0.000500	<0.000100	---	---	---
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.000500	<0.000100	<0.000100	<0.000100	0.000111 J	<0.000100	<0.000100	<0.000500	<0.000100	---	---	---
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	<0.00250	0.000839 J	<0.000500	<0.00500	U (0.000520)	0.000761 J	<0.000500	<0.00250	U (0.00143)	---	---	---
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.000833 J	<0.000100	0.000214 J	<0.00100	0.00109 J	0.000123 J	<0.000100	0.00122 J	0.000338 J	---	---	---
Fluoride	4	Not Applicable	4 (MCL)	mg/L	1.84 J*	1.91	1.6	1.59	1.32	1.39	1.06	1.07	1.17	1.38	1.02	1.5
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.000500	<0.000100	0.000126 J	0.000238 J	0.000218 J	0.000177 J	0.000142 J	<0.000500	0.000110 J	---	---	---
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.0598 J	0.0582	0.0562	0.0617	0.0511	0.0523	0.0469 J	0.0588 J	0.0518	---	0.05	0.0486
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	---	---	---
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	0.00880 J	0.00781	0.00745	0.00606	0.0118 J*	0.00722	0.00828	0.00980 J	0.00737	---	0.00497	0.00387
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.00150	<0.00150	<0.000300	0.000938 J	0.00234 J	<0.000300	0.000449 J	<0.00150	<0.000300	---	---	---
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.00400	<0.000800	<0.000800	<0.000800	<0.000800	<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	1.71 +/- 0.392	0.684 +/- 0.239	0.827 +/- 0.274	---	---	---
Other Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
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 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	---	---	---	---	---	---	---	---	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				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
Temperature	None	Not Applicable	Not Applicable	ºC	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
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	6.83	---	7.64	8.82	9.36	9.36	9.1	9.1	7.47	9.69	---	---
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	20.8	---	---	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-5S 2-Oct-18	MW-5S 10-Jan-19		MW-5S 23-Apr-19	MW-5S 2-Oct-19	MW-5S 18-Jun-20	MW-5S 8-Oct-20	MW-5S 1-Apr-21	MW-5S 14-Oct-21
Detection Monitoring Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**FILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**
Boron	None	1.896	Not Applicable	mg/L	2.82	2.73	1.82	1.87	2.49	0.811	2.57	2.04	1.82
Calcium	None	670.30	Not Applicable	mg/L	25	27.7	27.8	57	22.5	68.2	19.6	33.4	21.0
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
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
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
Sulfate	250	626	Not Applicable	mg/L	447	457	472	394	434	408	485	477	499
Total Dissolved Solids	500	1,334	Not Applicable	mg/L	1140	1120	1210	1090	1180	904	1080	1140	1140
Assessment Monitoring Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**FILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.0008	0.00122 J	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.661	0.000737 J	0.000765 J	0.000523 J	0.000736 J	<0.000400	0.000453 J	<0.000400	<0.000400
Barium	2	Not Applicable	2 (MCL)	mg/L	0.012	0.012	0.0116	0.0141	0.00928	0.021	0.00787	0.00867	0.00732
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
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
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
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
Fluoride	4	Not Applicable	4 (MCL)	mg/L	1.54	1.54	1.5	1.11	1.54	0.824	1.51	1.24	1.57
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
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.0691 J	0.0644	0.0642	0.0604	0.0536	0.049	0.0546	0.0496	0.0532
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
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	<0.005	0.00512	0.00335 J	0.00485 J	0.00315 J	0.00361 J	0.00244 J	0.00234 J	0.00387 J
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
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
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
Other Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**FILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	<5.00	<5.00	---	<5.00	<5.00	---	<5.00	<5.00	6.00 J
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	mg/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 J
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	---	---	---	---	---	0.029(J)	<0.0200	<0.020	<0.0200
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	<0.020	<0.020 H
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	<0.020	0.0270 J
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/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(J)	0.00244 J	0.00287 J	0.00296 J
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.089 J	0.964	0.916	0.665	0.212	<0.0300	<0.0300	00287 J	0.0984 J
Potassium	None	Not Applicable	Not Applicable	mg/L	---	4.49	4.27	---	---	3.48	3.94	3.25	3.96
Sodium	None	Not Applicable	Not Applicable	mg/L	---	405	257	---	---	277	335	312	243
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	1730	1870	---	---	---	---	1960	1770	1820
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	<1	1.97	<1	<1.00
Field Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**FILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**
Temperature	None	Not Applicable	Not Applicable	ºC	25.3	13.4	---	18.78	25.18	24.37	21.5	14.7	23.7
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.61	7.56	---	7.95	7.91	7.9	7.83	7.74	7.85
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	1871	1791	---	1669	1826	1665	1794	1745	1,863
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.21	0.63	---	0.85	0.45	1.89	0.32	0.81	0.36
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-125.1	-30.9	---	19.7	-54.1	-48.2	168.1	283.3	-59.9
Turbidity	None	Not Applicable	Not Applicable	NTU	3.3	4.51	1.27	1.16	0.94	2.88	1.97	2.85	2.16
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	---	7.11	---	12.41	11.54	10.06	18.58	9.27	5.87
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-7S 13-Dec-16	MW-7S 25-Jan-17	MW-7S 3-Feb-17	MW-7S 29-Mar-17	MW-7S 7-Apr-17	MW-7S 31-May-17	DUP 1 31-May-17	MW-7S 9-Jun-17	MW-7S 10-Aug-17	MW-7S 17-May-18	MW-7S (Shallow) 3-Aug-18	DUP1 (Shallow) 3-Aug-18	MW-7S (Deep) 10-Aug-18
Detection Monitoring Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**		**VERIFICATION SAMPLE**
Boron	None	1.896	Not Applicable	mg/L	3.8	0.891	0.557	<0.875	0.382	1.7	1.92	1.84	2.21	1.25	0.283	0.279	3.31
Calcium	None	670.30	Not Applicable	mg/L	53.8	349	267	411	415	71	168	175	80.6	178	90.3	88.8	142
Chloride	250	18.51	Not Applicable	mg/L	17.7	23.8	19.8	17.5	21.8	14.9	15.5	16.3	16.2	17.6	16.4	16.5	17
Fluoride	4	0.6359	Not Applicable	mg/L	1.02 J*	0.569	0.497	0.368	0.425	0.607	0.58	0.579	0.744	0.509	0.771	0.733	0.664
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	8.4	7.3	7.3	7.2	7.5	7.5	7.4	7.3	7.4	7.6	7.6	7.8	7.7
Sulfate	250	1,281	Not Applicable	mg/L	465	907	893	893	1120	587	606	619	450	860	545	545	623
Total Dissolved Solids	500	1,863	Not Applicable	mg/L	1070	1570	1570	1530	1610	1220	1230	1300	1120	1600	1210	1180	1330
Assessment Monitoring Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**		**VERIFICATION SAMPLE**
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	0.00634 J	<0.000800	<0.000800	<0.000800	<0.000800	<0.000800	<0.000800	<0.00400	<0.000800	---	---	---	---
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.00201 J	0.000728 J	0.000766 J	0.00176 J	0.00176 J	0.00137 J	0.00128 J	0.00310 J	0.00150 J	---	---	---	---
Barium	2	Not Applicable	2 (MCL)	mg/L	0.0411	0.0462	0.0427	0.036	0.0335	0.0292	0.0346	0.0446	0.0308	---	---	---	---
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.000500	<0.000100	<0.000100	<0.00250	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100	---	---	---	---
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.000500	<0.000100	<0.000100	0.000115 J	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100	---	---	---	---
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	U (0.00333)	0.000680 J	<0.00500	<0.000500	<0.000500	0.000731 J	<0.000500	<0.00250	U (0.000637)	---	---	---	---
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.00120 J	0.000648 J	<0.00100	0.000735 J	0.000439 J	0.000349 J	0.000333 J	0.00208 J	0.000696 J	---	---	---	---
Fluoride	4	Not Applicable	4 (MCL)	mg/L	1.02 J*	0.569	0.497	0.368	0.425	0.607	0.58	0.579	0.744	0.509	0.771	0.733	0.664
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.000500	0.000333 J	<0.000100	0.000157 J	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100	---	---	---	---
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.0697 J	0.0462 J	0.0499 J	0.0395 J	0.0400 J	0.0637	0.07	0.0766 J	0.0609	---	0.0667	0.0656	0.0613
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000100	<0.000150	<0.000150	<0.000150	<0.000150	---	---	---	---
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	<0.00500	0.00174 J	0.00160 J	<0.00500	0.00153 J	0.00186 J	0.00179 J	<0.00500	0.00171 J	---	0.00127 J	0.00128 J	<0.00100
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	U (0.00158)	<0.000300	0.00103 J	<0.00150	<0.000300	<0.000300	<0.000300	<0.00150	<0.000300	---	---	---	---
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.00400	<0.000800	<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	1.13 +/- 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				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**		**VERIFICATION SAMPLE**
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	---	---	---	---	---	---	---	---	273	---	---	---	---
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	---	---	---	---	---	---	---	---	---	---	---	---	---
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---	---
Field Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**		**VERIFICATION SAMPLE**
Temperature	None	Not Applicable	Not Applicable	ºC	16.83	14.77	15.53	18.89	16.83	21.67	---	19.85	24.46	19.6	29.34	---	25.21
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.88	7.17	7.2	7.18	7.22	7.27	---	7.19	7.22	7.4	6.92	---	7.22
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	1614	2010	2029	2216	2205	1925	---	1929	1680	2101	1822	---	1932
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.47	0.43	0.19	0.27	0.25	0.09	---	0.05	0.08	0.22	1.61	---	2.95
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-165.8	-141	-164.4	-68	-104	-196	---	107.4	57.6	-58.8	-20.8	---	-30.7
Turbidity	None	Not Applicable	Not Applicable	NTU	81.8	33.7	3.34	1.12	8.31	1.82	---	1.12	3.45	2.29	3.37	---	1.76
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	4.04	3.69	4.5	3.41	3.41	5.45	---	5.45	5.81	5.5	---	---	---
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	18.84	---	---	---	---	---	---	---	---	---	---	---	---

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.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-7S 4-Oct-18	MW-7S 10-Jan-19		MW-7S 23-Apr-19	MW-7S 1-Oct-19	MW-7S 17-Jun-20	MW-7S 9-Oct-20	MW-7S 30-Mar-21	DUP 2 30-Mar-21	MW-7S 15-Oct-21
Detection Monitoring Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) FILTERED**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**		**ASSESSMENT MON. #7**
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
Calcium	None	670.30	Not Applicable	mg/L	76	277	293	271	81.1	160	90.2	254	219	97.1
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
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
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
Sulfate	250	1,281	Not Applicable	mg/L	1600	1200	1110	1040	633	970	759	1200	1190	690
Total Dissolved Solids	500	1,863	Not Applicable	mg/L	1230	1670	1890	1890	1270	1680	1340	2060	2000	1290
Assessment Monitoring Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) FILTERED**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**		
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	<0.004	0.000413 J	<0.000400	0.00116 J	0.000412 J	0.000650 J	<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
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
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	<0.005	<0.000400	<0.000400	<0.000400	0.000994 J	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.000222 J	0.000270 J	0.000304 J	0.00153 J	<0.000200	0.000838 J	<0.000200	<0.000200	<0.000200	0.000259 J
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
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	0.0714 J	0.0558	0.0606	0.0593	0.0608	0.0681	0.065	0.0472	0.0468	0.0645
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
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
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	2.07 +/- 0.453	1.34	---	0.9	<0.71	1.05	1.2	1.73	1.92	1.95
Other Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) FILTERED**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**		
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	<5	5.0 J	---	<5.00	<5.00	---	8.00 J	<5.00	<5.00	7.00 J
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	mg/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	mg/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	mg/L	---	---	---	---	---	---	---	<0.02	<0.02	<0.0200 H
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	<0.02	<0.02	0.103
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	<0.02	0.0234 J	0.134
Magnesium	None	Not Applicable	Not Applicable	mg/L	---	19	18.7	---	---	17.1	12	16.9	17.4	12.2
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	0.000987(J)	0.00103 J	0.000846 J	0.000941 J	0.00121 J
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.118	0.557	0.644	<0.0300	<0.0300	<0.0300	<0.0300	<0.0600	<0.0600	0.0940 J
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	mg/L	---	274	294	---	---	313	272	230	197	261
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	1610	2240	---	---	---	---	2110	2380	2380	1860
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	<1	1.48	<1	<1	<1.00
Field Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) FILTERED**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**		
Temperature	None	Not Applicable	Not Applicable	ºC	25	12.8	---	17.92	25.27	21.95	23.1	16.8	---	22.5
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
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	1887	2180	---	2326	1944	2097	1945	2377	---	1,973
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
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
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
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	---	3.49	---	7.99	5.77	6.83	6.39	3.78	---	4.45
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	---	----	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-13 25-May-16	DUP-2 25-May-16	MW-13 26-Jul-16	MW-13 27-Sep-16	MW-13 29-Nov-16	MW-13 30-Jan-17	MW-13 30-Mar-17	MW-13 6-Jun-17	MW-13 4-Aug-17	MW-13 21-May-18	MW-13 (Shallow) 1-Aug-18	MW-13 (Deep) 9-Aug-18
Detection Monitoring Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Boron	None	Background Well (Not Applicable)	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
Chloride	250		Not Applicable	mg/L	13.7	13.5	13.1	14.0 J	12.5	12.6	12.2	13	12.1 J*	13.4	13.6	33.2
Fluoride	4		Not Applicable	mg/L	0.192	0.183	0.389	0.674	0.324	0.395	0.181	0.329	0.248 J*	0.281	0.364	0.743
pH (laboratory)	6.5 - 8.5		Not Applicable	S.U.	7.16	7.28	7.84	7.7	7.3	7.1	7	6.9	6.9	7	7.5	7.7
Sulfate	250		Not Applicable	mg/L	1570	1,680 J*	1450	1360	1340	1320	1360	1320	1,350 J*	1320	1250	1440
Total Dissolved Solids	500		Not Applicable	mg/L	2220	2190	2340	2,380 J	2230	2230	2250	2410	2370	2400	2130	2560
Assessment Monitoring Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Antimony	0.006	Not Applicable	Background Well (Not Applicable)	mg/L	<0.000500	<0.000500	<0.000500	<0.000800	<0.000800	<0.000800	<0.00400	<0.000800	<0.000800	---	---	---
Arsenic	0.010	Not Applicable		mg/L	0.00394	0.00377	0.00244	0.00177 J	0.00180 J	0.00170 J	<0.00200	<0.000400	0.0057	---	---	---
Barium	2	Not Applicable		mg/L	0.0267	0.0263	0.0259	0.0198	0.0184	0.0182	0.033	0.0168	0.0177	---	---	---
Beryllium	0.004	Not Applicable		mg/L	<0.00100	<0.00100	<0.00100	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100	<0.000100	---	---	---
Cadmium	0.005	Not Applicable		mg/L	<0.000400	<0.000400	<0.000400	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100	<0.000100	---	---	---
Chromium	0.1	Not Applicable		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		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		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		mg/L	<0.000200	<0.000200	<0.000200	<0.000100	<0.000100	<0.000100	<0.000500	<0.000100	<0.000100	---	---	---
Lithium	None	Not Applicable		mg/L	0.176	0.179	0.184	0.156	0.156	0.173	0.0449 J	0.157	0.164	---	0.14	0.115
Mercury	0.002	Not Applicable		mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	---	---	---
Molybdenum	None	Not Applicable		mg/L	0.0097	0.0092	0.00557	0.029	0.00444	0.00393	0.00345	0.00316	0.00286	---	0.00211	0.0022
Selenium	0.05	Not Applicable		mg/L	<0.000600	<0.000600	<0.000600	<0.000300	0.000512 J	<0.000300	<0.00150	0.00402	U (0.00192)	---	---	---
Thallium	0.002	Not Applicable		mg/L	<0.000500	<0.000500	<0.000500	<0.000800	<0.000800	<0.000800	<0.00400	<0.000800	<0.000800	---	---	---
Ra-226 + Ra-228 (combined)	5	Not Applicable		pCi/L	1.96 +/- 0.373	1.57 +/- 0.321	1.50 +/- 0.327	1.43 +/- 0.352	1.75 +/- 0.486	1.41 +/- 0.357	1.73 +/- 0.350	1.75 +/- 0.389	1.51 +/- 0.320	---	---	---
Other Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	<5.00	---	---	---
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	307	---	---	---
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	<5.00	---	---	---
Iron, Total	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Magnesium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	26.4	---	---	---
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Potassium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	8.32	---	---	---
Sodium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	349	---	---	---
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	---	---	---	---	---	---	---	---	---	---	---	---
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Field Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									DETECTION MON. #1	EVALUATION SAMPLE	VERIFICATION SAMPLE
Temperature	None	Not Applicable	Not Applicable	ºC	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
Turbidity	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
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	25.13	---	25.46	26.07	25.48	26.86	25.95	26.11	26.05	25.64	---	---
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	39.46	---	---	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards. The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    - U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    - UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    - J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    - R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-13	MW-13		DUP 2		MW-13	MW-13	MW-13	MW-13	MW-13	MW-13
					4-Oct-18	11-Jan-19				25-Apr-19	3-Oct-19	17-Jun-20	14-Oct-20	31-Mar-21	15-Oct-21
Detection Monitoring Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	FILTERED	FILTERED	UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
Boron	None	Background Well (Not Applicable)	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
Calcium	None		Not Applicable	mg/L	299	270	360	334	348	130	182	243	242	284	237
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
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
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
Sulfate	250		Not Applicable	mg/L	1400	1450	1420	1450	1440	1450	1380	1390	1480	1470	1570
Total Dissolved Solids	500		Not Applicable	mg/L	2350	2350	2220	2270	2260	2590	2350	2450	2360	2320	2360
Assessment Monitoring Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	FILTERED	FILTERED	UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
Antimony	0.006	Not Applicable	Background Well (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
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
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
Beryllium	0.004	Not Applicable		mg/L	<0.001	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Cadmium	0.005	Not Applicable		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		mg/L	<0.005	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400
Cobalt	None	Not Applicable		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
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
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	<0.000600
Lithium	None	Not Applicable		mg/L	0.174 J	0.17	0.194	0.181	0.176	0.131	0.139	0.156	0.146	0.166	0.163
Mercury	0.002	Not Applicable		mg/L	<0.00015	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.0000990 J	0.0000490 J
Molybdenum	None	Not Applicable		mg/L	<0.01	0.00155 J	0.00178 J	0.00149 J	0.00176 J	0.00276 J	0.00210 J	0.000934 J	0.000865 J	0.000959 J	0.000917 J
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
Thallium	0.002	Not Applicable		mg/L	<0.0008	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Ra-226 + Ra-228 (combined)	5	Not Applicable		pCi/L	1.46 +/- 0.346	2.12	---	1.14	---	1.65	1.81	2.09	2.67	2.47	1.75
Other Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	FILTERED	FILTERED	UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
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
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	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	29.6	---	---	---	---	---	---
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.061 J	<0.03	<0.03	<0.03	<0.03	<0.150	0.191	<0.0300	<0.0600	<0.0600	0.0613 J
Potassium	None	Not Applicable	Not Applicable	mg/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
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Field Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	FILTERED	FILTERED	UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
Temperature	None	Not Applicable	Not Applicable	ºC	25.7	12.4	---	---	---	20.41	27	21.69	21.8	16.9	21.4
pH	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
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	3728	3569	---	---	---	3688	3751	3474	3576	3616	3,688
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
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
Turbidity	None	Not Applicable	Not Applicable	NTU	5.63	2.27	0.76	---	---	4.66	1.28	4.95	3.21	3.76	8.30
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	---	26.28	---	---	---	26.8	26.68	26.4	26.76	26.4	26.21
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	---	---	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards. The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-14A 25-May-16	MW-14A 23-Aug-16	MW-14A 28-Sep-16	MW-14A 30-Nov-16	MW-14A 31-Jan-17	DUP-2 31-Jan-17	MW-14A 30-Mar-17	MW-14A 2-Jun-17	MW-14A 9-Aug-17	MW-14A 17-May-18	MW-14A (Shallow) 1-Aug-18	MW-14A (Deep) 9-Aug-18	DUP1 (Deep) 9-Aug-18
Detection Monitoring Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**	
Boron	None	Background Well (Not Applicable)	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		Not Applicable	mg/L	500	380	327	328	544	503	451	530	672	313	341	746	358
Chloride	250		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	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 Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**	
Antimony	0.006	Not Applicable	Background Well (Not Applicable)	mg/L	<0.000500	<0.000800	<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	---	---	---	---
Cobalt	None	Not Applicable		mg/L	0.000730 J	0.000258 J	0.000708 J	<0.00100	0.000334 J	0.000342 J	<0.000500	<0.000100	0.000350 J	---	---	---	---
Fluoride	4	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
Lead	0.015	Not Applicable		mg/L	<0.000200	<0.000100	<0.000100	<0.00100	<0.000100	<0.000100	<0.000500	<0.000100	<0.000100	---	---	---	---
Lithium	None	Not Applicable		mg/L	0.167	0.147	0.147	0.175 J	0.16	0.164	0.235 J	0.147	0.16	---	0.149	0.328 J	0.134
Mercury	0.002	Not Applicable		mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	---	---	---	---
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		pCi/L	1.60 +/- 0.364	1.62 +/- 0.381	1.90 +/- 0.394	2.02 +/- 0.498	1.39 +/- 0.366	1.38 +/- 0.385	1.73 +/- 0.346	1.49 +/- 0.351	1.51 +/- 0.326	---	---	---	---
Other Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**	
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---	---
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	<5.00	---	---	---	---
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	280	---	---	---	---
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	<5.00	---	---	---	---
Iron, Total	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---	---
Magnesium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	24.4	---	---	---	---
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	---	---	---	---	---	---	---	---	7.88	---	---	---	---
Sodium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	518	---	---	---	---
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	---	---	---	---	---	---	---	---	---	---	---	---	---
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---	---
Field Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**	
Temperature	None	Not Applicable	Not Applicable	ºC	20.93	22.4	21.96	17.51	17.76	---	18.84	19.83	21.41	22.9	25.6	21.33	---
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	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	µmhos/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	---
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	14.72	16.45	15.7	15.85	14.59	---	15.98	15.35	15.03	15.92	---	---	---
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	28.34	---	---	---	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-14A 4-Oct-18	MW-14A 11-Jan-19		MW-14A 24-Apr-19	MW-14A 2-Oct-19	MW-14A 17-Jun-20	MW-14A 8-Oct-20	MW-14A 31-Mar-21	MW-14A 13-Oct-21
Detection Monitoring Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) FILTERED**	**ASSESSMENT MON. #1 UNFILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**
Boron	None	Background Well (Not Applicable)	Not Applicable	mg/L	1.18	1.42	1.16	1.23	0.98	0.907	0.882	0.839	0.857
Calcium	None		Not Applicable	mg/L	319	402	388	314	306	280	278	298	263
Chloride	250		Not Applicable	mg/L	14.2	14	14.8	13.5	14.2	13.3	14.9	14.3	12.8
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
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
Sulfate	250		Not Applicable	mg/L	1650	1660	1630	1540	1580	1650	1770	1680	1690
Total Dissolved Solids	500		Not Applicable	mg/L	2710	2590	2580	2680	2750	2780	2630	2680	2630
Assessment Monitoring Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) FILTERED**	**ASSESSMENT MON. #1 UNFILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**
Antimony	0.006	Not Applicable	Background Well (Not Applicable)	mg/L	<0.0008	<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
Barium	2	Not Applicable		mg/L	0.0232	0.017	0.0173	0.0147	0.0118	0.0132	0.0114	0.0117	0.0121
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
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
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
Cobalt	None	Not Applicable		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
Fluoride	4	Not Applicable		mg/L	0.281	0.269	0.375	0.377 J	0.286	0.23	0.254	0.284	0.221
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
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
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
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
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
Thallium	0.002	Not Applicable		mg/L	<0.0008	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Ra-226 + Ra-228 (combined)	5	Not Applicable		pCi/L	1.65 +/- 0.369	2.6	---	0.97	1.79	2.02	1.42	1.76	1.68
Other Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) FILTERED**	**ASSESSMENT MON. #1 UNFILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	<5	<5	---	<5.00	5.00 J	---	<5.00	<5.00	6.00 J
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	327	327	332	348
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	---	321	---	---	---	327	327	332	348
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L	---	<5	---	---	---	<5	<5	<5	<5.00
Iron, Total	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	0.771(J)	0.236	0.162 J	1.22
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	<0.0120	0.169 J	0.150 J	0.357
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	0.098	0.184	0.055	0.285
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	0.0340 J	<0.0200 H
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	0.107	0.935
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	0.116	0.357
Magnesium	None	Not Applicable	Not Applicable	mg/L	---	28.8	27.9	---	---	26.6	26.2	25.9	26.5
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	0.000768(J)	0.000621 J	0.00165 J	<0.000600
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.087 J	0.478	0.509	1.64	<0.0300	0.316	<0.150	<0.0600	<0.0600
Potassium	None	Not Applicable	Not Applicable	mg/L	---	8.64	8.37	---	---	7.66	7.94	7.87	7.84
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	---	---	---	---	3660	3260	3320
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	<1	<1	<1	3.08
Field Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) FILTERED**	**ASSESSMENT MON. #1 UNFILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**
Temperature	None	Not Applicable	Not Applicable	ºC	23.1	16.2	---	17.75	24.4	21	23.7	15.84	20.0
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	6.93	6.9	---	7.28	7.1	7.04	7.1	7.33	7.00
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	3491	3251	---	3386	3435	3107	3394	4453	2,989
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.31	0.19	---	1.45	0.62	0.79	0.59	0.34	0.40
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	13.1	19.5	---	4.6	27.7	-45.7	107.1	20.5	-128.9
Turbidity	None	Not Applicable	Not Applicable	NTU	3.17	4.89	0.94	2.06	3.88	4.71	2.96	3.52	9.38
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	---	14.98	---	19.11	16.26	17.01	18.15	16.7	16.32
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-15A 26-May-16	MW-15A 23-Aug-16	MW-15A 28-Sep-16	MW-15A 30-Nov-16	DUP 1 30-Nov-16	MW-15A 30-Jan-17	MW-15A 30-Mar-17	MW-15A 1-Jun-17	MW-15A 9-Aug-17	MW-15A 24-May-18	MW-15A (Shallow) 1-Aug-18	MW-15A (Deep) 10-Aug-18
Detection Monitoring Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
Boron	None	1.896	Not Applicable	mg/L	3.33	3.57	4.52	4.44	5.36	4.64	2.01	3.54	3.38	4.83	3.7	4.14
Calcium	None	670.30	Not Applicable	mg/L	152	154	181	209	279	151	117	183	156	160	93.4	129
Chloride	250	18.51	Not Applicable	mg/L	27.1	26.6	27.9	27	26.5	25.4	27.4	28.1	25.7	26.9	26.6	26.5
Fluoride	4	0.6359	Not Applicable	mg/L	1.23	1.32	1.49	1.32	1.33	1.4	1.15	1.09	1.37	1.76	1.2	1.17
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	7.66	8.1	8	7.6	7.7	7.6	7.4	7.5	7.5	7.6	7.8	7.8
Sulfate	250	1,824	Not Applicable	mg/L	1450	1570	1580	1630	1610	1580	1760	1610	1720	1690	1510	1490
Total Dissolved Solids	500	2,774	Not Applicable	mg/L	2470	2420	2410	2540	2530	2460	2640	2600	2710	2660	2490	2610
Assessment Monitoring Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.000500	<0.000800	<0.000800	<0.00800	<0.00400	<0.000800	<0.00400	<0.000800	<0.00400	---	---	---
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.00242	0.00218	0.00205	<0.00400	0.00407 J	0.00156 J	<0.00200	0.00218	0.00259 J	---	---	---
Barium	2	Not Applicable	2 (MCL)	mg/L	0.0269	0.0338	0.0273	0.026	0.0383	0.0255	0.0167	0.0232	0.0217	---	---	---
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.00100	<0.000100	<0.000100	<0.00100	<0.000500	<0.000100	<0.000500	<0.000100	<0.000500	---	---	---
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.000400	<0.000100	<0.000100	<0.00100	<0.000500	<0.000100	<0.000500	<0.000100	<0.000500	---	---	---
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	0.000638 J	<0.000500	<0.000500	<0.00500	<0.00250	<0.000500	<0.00250	<0.000500	<0.00250	---	---	---
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.000664 J	0.000467 J	0.000659 J	<0.00100	0.000661 J	0.000346 J	<0.000500	0.000215 J	<0.000500	---	---	---
Fluoride	4	Not Applicable	4 (MCL)	mg/L	1.23	1.32	1.49	1.32	1.33	1.4	1.15	1.09	1.37	1.76	1.2	1.17
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	0.000264 J	<0.000100	<0.000100	<0.00100	<0.000500	<0.000100	<0.000500	<0.000100	<0.000500	---	---	---
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.0748	0.0646	0.0575	0.0630 J	0.0766 J	0.059	0.0437 J	0.0552	0.0538 J	---	0.0669	0.0594
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	0.000175 J	<0.000150	<0.000100	---	---	---
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	0.306	0.208	0.256	0.276	0.343	0.261	0.182	0.235	0.255	---	0.202	0.182
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.000600	<0.000300	<0.000300	<0.00300	<0.00150	0.000357 J	<0.00150	0.000539 J	0.00161 J	---	---	---
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000500	<0.000800	<0.000800	<0.00800	<0.00400	<0.000800	<0.00400	<0.000800	<0.00400	---	---	---
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	1.01 +/- 0.268	0.846 +/- 0.371	0.636 +/- 0.292	1.38 +/- 0.431	1.33 +/- 0.426	1.21 +/- 0.359	1.36 +/- 0.333	1.86 +/- 0.390	2.19 +/- 0.392	---	---	---
Other Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	<5.00	---	---	---
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	130	---	---	---
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	<5.00	---	---	---
Iron, Total	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Magnesium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	9.36	---	---	---
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Potassium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	5.28	---	---	---
Sodium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	541	---	---	---
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	---	---	---	---	---	---	---	---	---	---	---	---
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Field Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
Temperature	None	Not Applicable	Not Applicable	ºC	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	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	µmhos/cm	3050	3373	3442	3430	---	3488	3520	3498	3524	3505	3548	3578
Dissolved Oxygen	None	Not Applicable	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	Not Applicable	mV	66.1	-61.7	-96.7	-211.9	---	-140.6	-81.1	-82.3	43.1	-101.3	133.1	140.8
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
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	8.73	10.74	9.93	10.53	---	8.72	10.18	9.32	9.05	10.01	---	---
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	28.39	---	---	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-15A 2-Oct-18	DUP 2 2-Oct-18	MW-15A 10-Jan-19		MW-15A 25-Apr-19	MW-15A 2-Oct-19	MW-15A 18-Jun-20	MW-15A 8-Oct-20	MW-15A 31-Mar-21	MW-15A 13-Oct-21
Detection Monitoring Parameters				***Units***	ASSESSMENT MON. #1		ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #1 UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
Boron	None	1.896	Not Applicable	mg/L	3.76	3.77	3.52	5.48	3.61	3.19	4.57	3.33	3.35	2.14
Calcium	None	670.30	Not Applicable	mg/L	170	171	129	187	92	82.4	141	89.8	78.6	96.6
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
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
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
Sulfate	250	1,824	Not Applicable	mg/L	1570	1580	1610	1540	1310	1510	1680	1650	1590	1580
Total Dissolved Solids	500	2,774	Not Applicable	mg/L	2650	2570	2590	2640	2570	2500	2520	2460	2420	2370
Assessment Monitoring Parameters				***Units***	ASSESSMENT MON. #1		ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #1 UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
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
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
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
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
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
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
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
Fluoride	4	Not Applicable	4 (MCL)	mg/L	1.21	1.2	1.22	1.46	1.02	1.24	0.86	1.14	1.13	1.01
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	0.000386 J	0.000145 J	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.0613	0.0598	0.0701	0.0582	0.0858	0.0743	0.111	0.0709	0.073	0.0627
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000100	<0.000100	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.0000420 J	<0.0000300
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	0.233	0.228	0.205	0.244	0.219	0.196	0.269	0.167	0.168	0.149
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	0.000459 J	0.000353 J	<0.0011	<0.0011	<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 J	0.000375 J	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	1.28 +/- 0.294	1.66 +/- 0.358	1.46	---	<0.87	2.03	1.67	1.72	1.45	2.04
Other Parameters				***Units***	ASSESSMENT MON. #1		ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #1 UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
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
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
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
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	3490	3480	3540	---	---	---	---	3780	3400	3370
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	1.12	<1	<1	<1.00
Field Parameters				***Units***	ASSESSMENT MON. #1		ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #1 UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
Temperature	None	Not Applicable	Not Applicable	ºC	23.1	---	18.5	---	20.72	27.05	24.09	22.2		22.4
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.53	---	7.45	---	7.82	7.71	7.73	7.71		7.61
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	3563	---	3449	---	3544	3575	3337	3422		3,431
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.21	---	0.41	---	1.24	0.71	1.39	0.28		0.38
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-69.9	---	98	---	-22.1	-79.5	-50.3	167.2		-59.9
Turbidity	None	Not Applicable	Not Applicable	NTU	4.11	---	1.13	1.09	0.55	0.84	2.6	1.73		3.34
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	---	---	8.89	---	13.25	10.54	11.19	12.08		11.17
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	---	---	---	---	---	---	---	---		---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-16 1-Jun-16	MW-16 23-Aug-16	MW-16 29-Sep-16	MW-16 6-Dec-16	MW-16 1-Feb-17	MW-16 6-Apr-17	MW-16 7-Jun-17	MW-16 11-Aug-17	DUP 3 11-Aug-17	MW-16 22-May-18	MW-16 (Shallow) 1-Aug-18	MW-16 (Deep) 10-Aug-18
Detection Monitoring Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**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 Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.00250	<0.000800	<0.000800	<0.00400	<0.000800	<0.000800	<0.00400	<0.000800	<0.000800	---	---	---
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	<0.00250	0.00101 J	U (0.00164)	<0.00200	0.000757 J	0.00122 J	<0.00400	0.000409 J	0.000453 J	---	---	---
Barium	2	Not Applicable	2 (MCL)	mg/L	0.027	0.0291	0.0262	0.0461	0.0235	0.0246	0.027	0.024	0.024	---	---	---
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.00500	<0.000100	<0.000100	<0.000500	<0.000100	U (0.000375)	<0.000500	<0.000100	<0.000100	---	---	---
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.00200	<0.000100	<0.000100	<0.000500	<0.000100	<0.000100	<0.00100	<0.000100	<0.000100	---	---	---
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	<0.000800	<0.000800	<0.00400	<0.000800	<0.000800	<0.00400	<0.000800	<0.000800	---	---	---
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				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
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				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
Temperature	None	Not Applicable	Not Applicable	ºC	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
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	4.81	6.73	6.3	4.36	2.91	2.9	5.5	5.24	---	5.8	---	---
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	23.4	---	---	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-16 2-Oct-18	MW-16 16-Jan-19		MW-16 23-Apr-19	MW-16 3-Oct-19	MW-16 18-Jun-20	MW-16 13-Oct-20	MW-16 1-Apr-21	MW-16 14-Oct-21
Detection Monitoring Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #1 UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
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
Calcium	None	670.30	Not Applicable	mg/L	221	215	215	192	149	186	166	140	158
Chloride	250	18.51	Not Applicable	mg/L	18	19	18.8	15.8	23.8	14.7	14.8	14.4	16.2
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
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
Sulfate	250	1,494	Not Applicable	mg/L	959	1020	1030	974	1020	1030	929	1070	1110
Total Dissolved Solids	500	1,883	Not Applicable	mg/L	1780	1740	1670	1740	1810	1610	1610	1790	1590
Assessment Monitoring Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #1 UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
Other Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #1 UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
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
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
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
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	<1	1.4	<1	<1.00
Field Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #1 UNFILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
Temperature	None	Not Applicable	Not Applicable	ºC	25.4	14.8	---	19.31	24.89	21.9	23.5	16.32	23.0
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
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	2816	2273	---	2330	2836	2438	2615	3178	2,699
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
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
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
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	---	2.38	---	7.59	6.61	6.76	7.51	4.75	5.45
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-17 1-Jun-16	MW-17 3-Aug-16	MW-17 30-Sep-16	MW-17 2-Dec-16	MW-17 1-Feb-17	MW-17 29-Mar-17	MW-17 1-Jun-17	MW-17 10-Aug-17	DUP 2 10-Aug-17	MW-17 21-May-18	MW-17 (Shallow) 1-Aug-18	MW-17 (Deep) 10-Aug-18
Detection Monitoring Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
Boron	None	1.896	Not Applicable	mg/L	0.634	0.586	0.854	0.838 J	0.817	<0.875	0.713	0.666	0.64	0.588	0.659	0.845 J
Calcium	None	670.30	Not Applicable	mg/L	750	529	540	535	441	727	564	528	537	436	549	787
Chloride	250	18.51	Not Applicable	mg/L	4.08	3.64	3.46	5.58 J*	3.45	3.04	3.11	3.28	3.37	3.15	3.84	3.27
Fluoride	4	0.6359	Not Applicable	mg/L	0.322	0.365	0.58	0.480 J*	0.488	0.266	0.361	0.328	0.323	0.324	0.47	0.317
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	6.82	6.8	7.5	7.6	7.1	6.9	6.8	6.9	6.8	6.9	7.2	7
Sulfate	250	1,557	Not Applicable	mg/L	1170	1300	1250	1470	1200	1140	1310	1450	1300	1140	1310	1340
Total Dissolved Solids	500	2,343	Not Applicable	mg/L	1980	2070	1980	2260	2050	1870	2180	2140	2140	2360	2340	2380
Assessment Monitoring Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.000500	<0.00100	<0.000800	<0.00800	<0.000800	<0.000800	<0.000800	<0.000800	<0.000800	---	---	---
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.00204	0.00154 J	0.00226	<0.00400	0.000663 J	0.00251	0.00154 J	<0.000400	<0.000400	---	---	---
Barium	2	Not Applicable	2 (MCL)	mg/L	0.00545	0.00299	0.00460 J	<0.00100	0.00344	U (0.00333)	0.00160 J	0.00236	0.00293	---	---	---
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.00100	<0.00200	<0.000100	<0.00100	<0.000100	<0.00250	<0.000100	<0.000100	<0.000100	---	---	---
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.000400	<0.000800	<0.000100	<0.00100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	---	---	---
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	<0.000500	<0.00100	<0.000500	<0.00500	0.00140 J	<0.000500	<0.000500	<0.000500	<0.000500	---	---	---
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	<0.000500	<0.00100	0.000225 J	<0.00100	<0.000100	<0.000500	<0.000100	<0.000100	<0.000100	---	---	---
Fluoride	4	Not Applicable	4 (MCL)	mg/L	0.322	0.365	0.58	0.480 J*	0.488	0.266	0.361	0.328	0.323	0.324	0.47	0.317
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.000200	<0.000200	<0.000100	<0.00100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	---	---	---
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.14	0.174	0.155 J	0.158 J	0.146	0.121	0.133	0.148	0.143	---	0.128	0.131
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	---	---	---
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	0.000840 J	<0.00100	0.00135 J	<0.0100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	---	<0.00100	<0.00100
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.000600	<0.00120	U (0.000709)	<0.00300	0.000526 J	<0.00150	<0.000300	<0.000300	<0.000300	---	---	---
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000500	<0.00100	<0.000800	<0.00800	<0.000800	<0.000800	<0.000800	<0.000800	<0.000800	---	---	---
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	0.539 +/- 0.261	0.265 +/- 0.260 U	1.32 +/- 0.425	0.536 +/- 0.356	0.195 +/- 0.273 U	0.311 +/- 0.238 U	0.479 +/- 0.271	0.531 +/- 0.221	0.183 +/- 0.207 U	---	---	---
Other Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	<5.00	<5.00	---	---	---
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	260	259	---	---	---
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	<5.00	<5.00	---	---	---
Iron, Total	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Magnesium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	36.6	36	---	---	---
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Potassium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	5.15	5.14	---	---	---
Sodium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	34.5	34.4	---	---	---
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	---	---	---	---	---	---	---	---	---	---	---	---
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Field Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
Temperature	None	Not Applicable	Not Applicable	ºC	20.98	23.28	20.36	19.58	21.96	20.3	20.57	21.98	---	20.98	25.04	22.3
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	6.91	6.71	6.83	6.79	6.84	6.88	6.68	6.69	---	6.92	6.64	6.8
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	2052	2230	2402	2405	2386	2396	2443	2417	---	2416	2606	2569
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	1.07	3.66	0.43	0.95	0.63	0.79	0.22	0.29	---	0.21	5.57	4.59
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	42.5	4	-99.6	-183.4	-84	-55.9	-87.3	65.7	---	-49.2	172.9	209.4
Turbidity	None	Not Applicable	Not Applicable	NTU	0.53	0.92	0.4	0.43	0.11	0.21	0.24	0.81	---	0.52	4.63	14.5
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	14.07	15.67	15.8	16.08	14.52	15.7	15.23	14.35	---	14.5	---	---
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	23.44	---	---	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-17 3-Oct-18	MW-17 10-Jan-19		MW-17 25-Apr-19	MW-17 3-Oct-19	MW-17 18-Jun-20	MW-17 12-Oct-20	MW-17 31-Mar-21	MW-17 14-Oct-21
Detection Monitoring Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
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
Calcium	None	670.30	Not Applicable	mg/L	461	591	499	499	555	494	453	467	428
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
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
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
Sulfate	250	1,557	Not Applicable	mg/L	821	1480	1200	1100	1310	1390	1,220 H	1310	1390
Total Dissolved Solids	500	2,343	Not Applicable	mg/L	1670	2300	1870	2400	2160	2230	2160	2200	2210
Assessment Monitoring Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
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
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
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
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
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
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
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
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
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
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.122	0.159	0.148	0.151	0.138	0.147	0.123	0.114	0.140
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000100	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.000142 J	0.0000540 J
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	<0.001	<0.000600	<0.000600	0.000671 J	<0.000600	<0.000600	<0.000600	0.000950 J	<0.000600
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	0.000675 J	<0.0011	<0.0011	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0008	<0.000200	<0.000200	<0.000200	0.000539 J	<0.000200	<0.000200	<0.000200	<0.000200
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	1.27 +/- 0.335	<0.78	---	<0.75	<0.76	<0.68	<0.69	<0.84	0.97
Other Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	6.13 J	<5.00	---	<5.00	<5.00	---	<5.00	<5.00	7.00 J
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	284	273	269	288
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	<0.0120
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	<0.0120	<0.0120	<0.0120	0.0198 J
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	0.02(J)	<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	mg/L	---	---	---	---	---	---	---	0.0541	<0.0200
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	<0.02	<0.0200
Magnesium	None	Not Applicable	Not Applicable	mg/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
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
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	<1	<1	<1	1.12
Field Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	ASSESSMENT MON. #1 (RESAMPLE) FILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
Temperature	None	Not Applicable	Not Applicable	ºC	23.3	15.9	---	19.26	23.63	21.2	23.2	21.04	22.9
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
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	2548	2416	---	2470	2458	2344	2393	3321	2,467
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
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
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
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	---	12.5	---	15.54	15.59	13	14.21	13.54	14.9
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-18 1-Jun-16	MW-18 3-Aug-16	MW-18 30-Sep-16	DUP 2 30-Sep-16	MW-18 2-Dec-16	MW-18 31-Jan-17	MW-18 5-Apr-17	MW-18 7-Jun-17	MW-18 10-Aug-17	MW-18 18-May-18	MW-18 (Shallow) 2-Aug-18	MW-18 (Deep) 10-Aug-18
Detection Monitoring Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									**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 Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/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 (MCL)	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	0.282 +/- 0.201 U	0.146 +/- 0.228 U	0.445 +/- 0.200	---	---	---
Other Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
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, 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	---	---	---	---	---	---	---	---	<0.220	---	---	---
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	---	---	---	---	---	---	---	---	22	---	---	---
Sodium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	523	---	---	---
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	---	---	---	---	---	---	---	---	---	---	---	---
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Field Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									**DETECTION MON. #1**	**EVALUATION SAMPLE**	**VERIFICATION SAMPLE**
Temperature	None	Not Applicable	Not Applicable	ºC	19.74	24.14	19.59	---	18.78	18.45	18.46	22.5	22.11	21.12	24.1	22.37
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	10.88	10.45	10.95	---	10.88	10.67	10.6	10.55	10.54	10.74	9.71	10.41
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	2622	2884	2900	---	2854	2764	2698	2685	2716	2530	2568	2658
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	2.65	0.15	0.05	---	0.2	0.21	0.09	0.06	0.03	0.17	4.03	0.9
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-22.2	-41.7	-100	---	-225.5	-192.6	62.6	-11	28.2	-139.8	-65.1	-119.7
Turbidity	None	Not Applicable	Not Applicable	NTU	0.33	0.61	0.33	---	0.15	0.39	0.36	1.03	1.21	0.22	0.02	0.02
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	11.58	13.17	13.24	---	12.91	12.09	12.09	12.9	11.85	11.84	---	---
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	25.46	---	---	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-18 3-Oct-18	MW-18 14-Jan-19		MW-18 25-Apr-19	MW-18 1-Oct-19	MW-18 17-Jun-20	MW-18 12-Oct-20	MW-18 31-Mar-21	MW-18 14-Oct-21
Detection Monitoring Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**FILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**
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
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
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
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
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
Sulfate	250	1,820	Not Applicable	mg/L	1090	1110	1120	933	1020	888	794	904	896
Total Dissolved Solids	500	2,006	Not Applicable	mg/L	1760	1630	1660	1680	1550	1340	1270	1260	1320
Assessment Monitoring Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**FILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**
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
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
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
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
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
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
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
Fluoride	4	Not Applicable	4 (MCL)	mg/L	1.37	1.32	1.44	1.25	1.47	1.28	1.66	1.71	1.90
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
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.0105 J	0.00290 J	0.00258 J	0.00173 J	0.00372 J	0.00226 J	0.00276 J	0.00339 J	0.00301 J
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000100	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.0000500 J	0.000247
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
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
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0008	0.000323 J	0.000563 J	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
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
Other Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**FILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**
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
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
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	0.18	0.166	0.215	0.211
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.053 J	0.075 J	<0.03	<0.150	<0.0300	<0.0600	<0.0300	<0.0300	0.0606 J
Potassium	None	Not Applicable	Not Applicable	mg/L	---	22.3	21.9	---	---	15.9	14.6	13.6	15.0
Sodium	None	Not Applicable	Not Applicable	mg/L	---	603	510	---	---	376	348	324	329
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	2590	2520	---	---	---	---	2200	2090	2040
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	<1	<1	<1	<1.00
Field Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**FILTERED**	**ASSESSMENT MON. #2**	**ASSESSMENT MON. #3**	**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**
Temperature	None	Not Applicable	Not Applicable	ºC	23.6	14	---	17.89	24.8	22.45	23.5	17	20.7
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	10.45	10.47	---	10.93	10.4	10.65	10.4	10.39	10.46
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	2632	2442	---	2486	2350	1998	1986	1999	2,041
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.21	0.36	---	1.44	0.33	0.55	0.24	0.39	0.36
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	130.1	174.9	---	-152.8	-71.2	-140.3	-80.5	-49.7	-9.7
Turbidity	None	Not Applicable	Not Applicable	NTU	2.04	2.79	1.47	0.49	0.92	2.43	0.34	1	1.99
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	---	9.91	---	11.72	12.39	9.89	10.78	10.46	12.00
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-19S 13-Dec-16	MW-19S 26-Jan-17	DUP-1 26-Jan-17	MW-19S 3-Feb-17	MW-19S 28-Mar-17	MW-19S 7-Apr-17	MW-19S 31-May-17	MW-19S 9-Jun-17	MW-19S 10-Aug-17	MW-19S 18-May-18	DUP 1 18-May-18	MW-19S (Shallow) 2-Aug-18	MW-19S (Deep) 10-Aug-18
Detection Monitoring Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									DETECTION MON. #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 Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									DETECTION MON. #1	EVALUATION SAMPLE		VERIFICATION SAMPLE
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.00400	<0.000800	<0.000800	<0.000800	<0.000800	<0.00400	<0.000800	<0.00400	<0.000800	---	---	---	---
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.00920 J	0.0073	0.00683	0.00728 J	0.0073	0.00837 J	0.00702	0.00681 J	0.00756	---	---	---	---
Barium	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	U (0.00108)	<0.000500	<0.00250	<0.000500	<0.00250	<0.000500	---	---	---	---
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	0.000568 J	<0.000100	<0.000100	0.000237 J	0.000103 J	<0.000500	<0.000100	0.000872 J	<0.000100	---	---	---	---
Fluoride	4	Not Applicable	4 (MCL)	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
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	0.000621 J	<0.000100	<0.000100	0.000589 J	<0.000100	<0.000500	<0.000100	<0.000500	0.000114 J	---	---	---	---
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	<0.0150	<0.00300	<0.00300	<0.00300	<0.00300	<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)	mg/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)	pCi/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				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									DETECTION MON. #1	EVALUATION SAMPLE		VERIFICATION SAMPLE
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	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	---	---	---	---	---	---	---	---	<0.220	---	---	---	---
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	---	---	---	---	---	---	---	---	35.9	---	---	---	---
Sodium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	697	---	---	---	---
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	---	---	---	---	---	---	---	---	---	---	---	---	---
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---	---
Field Parameters				***Units***	INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND									DETECTION MON. #1	EVALUATION SAMPLE		VERIFICATION SAMPLE
Temperature	None	Not Applicable	Not Applicable	ºC	17.71	15.41	---	15.44	18.96	18.56	21.58	20.76	24.37	20.38	---	26.67	24.71
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	11.14	11.16	---	11.16	11.09	11.08	10.8	10.95	10.72	11.09	---	10.55	10.56
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	3576	3585	---	3389	3602	3575	3546	3526	3552	3530	---	3587	3563
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.37	0.26	---	0.18	0.22	0.18	0.02	0.02	0.02	0.24	---	4.64	1.32
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-347.7	-310.2	---	-267.7	-299.3	-270.6	-235.7	-125.3	-215.4	-312.1	---	-227.4	-249
Turbidity	None	Not Applicable	Not Applicable	NTU	103	1.1	---	0.32	0.34	0.4	0.62	0.43	1.26	0.47	---	0.02	4.16
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	3.5	2.78	---	3.45	2.66	2.66	3.93	3.93	3.59	3.67	---	---	---
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	17.88	---	---	---	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID:	MW-19S	MW-19S		MW-19S	MW-19S	MW-19S	DUP 2	MW-19S	MW-19S	DUP 3	MW-19S
				Sample Date:	3-Oct-18	15-Jan-19		25-Apr-19	1-Oct-19	17-Jun-20		12-Oct-20	31-Mar-21		15-Oct-21
Detection Monitoring Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	FILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4		ASSESSMENT MON. #5	ASSESSMENT MON. #6		ASSESSMENT MON. #7
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	5..88
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
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
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
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
Sulfate	250	1,708	Not Applicable	mg/L	1950	1640	1580	1520	1580	1490	1590	1640	1560	1560	1570
Total Dissolved Solids	500	2,505	Not Applicable	mg/L	2490	2500	2470	2440	2460	2300	2290	2340	2360	2310	2290
Assessment Monitoring Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	FILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4		ASSESSMENT MON. #5	ASSESSMENT MON. #6		
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	<0.008	0.00634	0.00643	0.00673	0.00624	0.0061	0.00577	0.00588	0.00554	0.00452	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
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
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
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
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
Fluoride	4	Not Applicable	4 (MCL)	mg/L	1.24	1.27	1.59	1.13	1.37	1.15	1.04	1.38	1.46	1.54	1.57
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	0.000116 J	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	<0.06	0.00148 J	0.00128 J	0.00192 J	0.00169 J	0.00134 J	0.00114 J	0.00102 J	0.00121 J	0.00144 J	0.00150 J
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	<0.0000300	0.0000450 J	0.0000460 J	0.000113 J
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	0.439	0.472	0.463	0.462	0.377	0.402	0.394	0.367	0.398	0.351	0.407
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	0.00889	0.011	0.00631	0.0141	0.0124	0.00655	0.0064	0.0113	0.00857	0.00743	0.0113
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0008	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	0.933 +/- 0.391	<0.98	---	<0.79	<0.74	<0.73	<0.72	<0.73	<0.87	<0.82	<0.84
Other Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	FILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4		ASSESSMENT MON. #5	ASSESSMENT MON. #6		
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	26.2	25	---	21	23	---	---	19	16	14.0 J	21.0
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	128	130	132	135	133	150
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 J
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	mg/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	mg/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
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
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	1.52	<1	1.8	<1	<1	<1.00
Field Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	FILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3	ASSESSMENT MON. #4		ASSESSMENT MON. #5	ASSESSMENT MON. #6		
Temperature	None	Not Applicable	Not Applicable	ºC	25.4	13.4	---	17.92	25.86	22.99	---	23.8	18.3	---	21.8
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	10.63	11.01	---	11.26	10.65	10.97	---	10.92	11.09	---	10.84
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	3610	3438	---	3524	3552	3309	---	3433	3406	---	3,342
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.33	0.21	---	1.5	0.5	0.36	---	0.16	0.27	---	0.21
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	172.1	-162	---	-281.7	-252.4	-588.1	---	209.2	-191.7	---	-237.2
Turbidity	None	Not Applicable	Not Applicable	NTU	2.05	5.19	2.24	0.57	0.61	2.86	---	1.24	0.73	---	2.77
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	---	2.45	---	2.53	1.49	3.63	---	3.26	2.7	---	3.19
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	---	---	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-20 31-May-16	MW-20 23-Aug-16	MW-20 29-Sep-16	DUP 1 29-Sep-16	MW-20 2-Dec-16	MW-20 31-Jan-17	MW-20 5-Apr-17	MW-20 7-Jun-17	MW-20 9-Aug-17	MW-20 21-May-18	MW-20 (Deep) 1-Aug-18
Detection Monitoring Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**VERIFICATION SAMPLE**
Boron	None	1.896	Not Applicable	mg/L	0.704	1.11	1.06	0.945	1.02	1	0.58	0.784	0.643	0.813	1.2
Calcium	None	670.30	Not Applicable	mg/L	434	563	416	391	451	528	583	611 J*	382	355	552
Chloride	250	18.51	Not Applicable	mg/L	5.99 J*	5.79	4.85	4.8	4.44	5.4	6.77	6.00 J*	5.08	6.14	4.96
Fluoride	4	0.6359	Not Applicable	mg/L	0.322 J*	0.41	0.424	0.416	0.397	0.362	0.248	0.340 J*	0.349	0.323	0.309
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	6.94	7.6	7.4	7.3	7.3	7	6.8	6.7	6.7	6.8	6.9
Sulfate	250	1,363	Not Applicable	mg/L	1140	1110	1100	1110	1290	949	907	1020	1180	839	1060
Total Dissolved Solids	500	2,066	Not Applicable	mg/L	1710	1980	1860	1810	1980	1870	1750	1770	1760	1760	1980
Assessment Monitoring Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**VERIFICATION SAMPLE**
Antimony	0.006	Not Applicable	0.006 (MCL)	mg/L	<0.000500	<0.000800	<0.000800	<0.000800	<0.00800	<0.000800	<0.000800	<0.00400	<0.000800	---	---
Arsenic	0.010	Not Applicable	0.01 (MCL)	mg/L	0.00222	0.00101 J	0.00198 J	0.00199 J	<0.00400	0.000732 J	0.00174 J	<0.00400	0.000598 J	---	---
Barium	2	Not Applicable	2 (MCL)	mg/L	0.0136	0.0151	0.0116	0.0109	0.0100 J	0.0122	0.0108	0.0128	0.00216	---	---
Beryllium	0.004	Not Applicable	0.004 (MCL)	mg/L	<0.00100	<0.000100	<0.000100	<0.000100	<0.00100	<0.000100	<0.000100	<0.000500	<0.000100	---	---
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.000400	<0.000100	<0.000100	<0.000100	<0.00100	<0.000100	<0.000100	<0.00100	<0.000100	---	---
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	<0.000500	<0.000500	<0.000500	<0.000500	<0.00500	<0.000500	<0.000500	<0.00500	<0.00250	---	---
Cobalt	None	Not Applicable	0.006 (ACL)	mg/L	<0.000500	0.000327 J	0.000383 J	0.000366 J	<0.00100	0.000642 J	0.000215 J	<0.00100	<0.000500	---	---
Fluoride	4	Not Applicable	4 (MCL)	mg/L	0.322 J*	0.41	0.424	0.416	0.397	0.362	0.248	0.340 J*	0.349	0.323	0.309
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.000200	<0.000100	<0.000100	<0.000100	<0.00100	<0.000100	<0.000100	<0.000500	<0.000500	---	---
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.123	0.117	0.124	0.114	0.126 J	0.12	0.0962	0.112 J	0.110 J	---	0.109
Mercury	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000150	<0.000100	---	---
Molybdenum	None	Not Applicable	0.1 (ACL)	mg/L	0.00120 J	0.00121 J	<0.00500	0.00126 J	<0.0100	<0.00100	<0.00100	<0.0100	<0.00500	---	<0.00100
Selenium	0.05	Not Applicable	0.05 (MCL)	mg/L	<0.000600	<0.000300	<0.000300	<0.000300	<0.00300	0.000633 J	<0.000300	<0.00300	<0.00150	---	---
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000500	<0.000800	<0.000800	<0.000800	<0.00800	<0.000800	<0.000800	<0.00400	<0.00400	---	---
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	1.04 +/- 0.357	1.61 +/- 0.395	1.10 +/- 0.359	1.66 +/- 0.377	1.46 +/- 0.421	0.863 +/- 0.381	1.29 +/- 0.322	0.969 +/- 0.294	0.670 +/- 0.261	---	---
Other Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**VERIFICATION SAMPLE**
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	---	---	---	---	---	---	---	---	259	---	---
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	<5.00	---	---
Iron, Total	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Magnesium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	20.9	---	---
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Potassium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	5.54	---	---
Sodium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	86.1	---	---
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	---	---	---	---	---	---	---	---	---	---	---
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Field Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**VERIFICATION SAMPLE**
Temperature	None	Not Applicable	Not Applicable	ºC	21.43	21.4	18.92	---	17.06	19.18	18.75	20.84	21.17	20.26	21.05
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	6.85	6.94	6.79	---	6.75	6.76	6.67	6.69	6.62	6.89	6.51
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	1742	2245	2332	---	2364	2259	2057	2088	2083	1999	2345
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.47	1.76	0.05	---	0.25	0.21	0.35	0.07	0.1	0.27	1.43
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	-4.6	935	-101	---	-211.5	-167.1	60.7	-7.7	62.1	-57	54.1
Turbidity	None	Not Applicable	Not Applicable	NTU	1.2	2.96	3.23	---	2.55	1.85	0.38	1.01	1.82	1.95	4.38
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	17.92	18.82	19.12	---	18.69	18.22	18.59	19.01	18.17	17.97	---
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	28.46	---	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID:	MW-20	MW-20		MW-20	MW-20	Dup 1	MW-20	MW-20	MW-20	MW-20
				Sample Date:	4-Oct-18	10-Jan-19		23-Apr-19	30-Sep-19		17-Jun-20	12-Oct-20	31-Mar-21	15-Oct-21
Detection Monitoring Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	FILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3		ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
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
Calcium	None	670.30	Not Applicable	mg/L	448	398	386	327	368	331	320	312	309	325
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
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
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
Sulfate	250	1,363	Not Applicable	mg/L	1110	977	892	794	1060	1080	870	989	782	1030
Total Dissolved Solids	500	2,066	Not Applicable	mg/L	1900	1630	1530	1690	1890	1850	1560	1710	1490	1850
Assessment Monitoring Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	FILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3		ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
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	<0.004	<0.000400	<0.000400	0.00107 J	<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
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
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	<0.005	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	0.000401 J	0.000592 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
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
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
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
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
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
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
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	0.888 +/- 0.291	<0.72	---	0.91	0.82	<0.74	<0.72	1.33	0.85	0.91
Other Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	FILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3		ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	<5	<5.00	---	<5.00	<5.00	<5.00	---	6.00 J	5.00 J	10.0 J
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	<5	---	---	---	---	---	---	---	---
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	359	---	---	---	---	---	---	---	---
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L	---	<5	---	---	---	---	---	---	---	---
Iron, Total	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---
Magnesium	None	Not Applicable	Not Applicable	mg/L	---	29.2	26.3	---	---	---	---	---	---	---
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	<0.049	<0.03	<0.03	<0.0300	0.105	0.0616 J	<0.0300	<0.0300	<0.0300	0.0434 J
Potassium	None	Not Applicable	Not Applicable	mg/L	---	6.72	6.01	---	---	---	---	---	---	---
Sodium	None	Not Applicable	Not Applicable	mg/L	---	70.2	84.7	---	---	---	---	---	---	---
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	2050	1960	---	---	---	---	---	2230	1890	2140
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---
Field Parameters				***Units***	ASSESSMENT MON. #1	ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED	FILTERED	ASSESSMENT MON. #2	ASSESSMENT MON. #3		ASSESSMENT MON. #4	ASSESSMENT MON. #5	ASSESSMENT MON. #6	ASSESSMENT MON. #7
Temperature	None	Not Applicable	Not Applicable	ºC	24.9	15.2	---	21.57	23.46	---	22.06	21.3	18.61	20.9
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	6.71	6.65	---	7	6.83	---	6.86	6.81	7.07	6.80
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	2330	1979	---	1937	2240	---	1795	1981	2605	2,140
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
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	29.7	-13	---	-4.3	-15.7	---	-32.8	29	7.6	58.8
Turbidity	None	Not Applicable	Not Applicable	NTU	8.14	37.7	2.09	0.38	2.9	---	4.04	2.79	3.99	2.44
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	---	17.42	---	20.72	19.81	---	18.15	18.83	18.15	18.36
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	---	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID: / Sample Date:	MW-21 26-May-16	MW-21 27-Jul-16	DUP 1 27-Jul-16	MW-21 28-Sep-16	MW-21 1-Dec-16	MW-21 31-Jan-17	MW-21 5-Apr-17	MW-21 6-Jun-17	MW-21 8-Aug-17	MW-21 17-May-18	MW-21 (Deep) 10-Aug-18
Detection Monitoring Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**VERIFICATION SAMPLE**
Boron	None	1.896	Not Applicable	mg/L	2.9	2.76	2.86	2.59	3.98	4.41	3.43	3.36	3.07 J	2.95	2.99
Calcium	None	670.30	Not Applicable	mg/L	148	186	205	156	251	176	214	149	165	136	147
Chloride	250	18.51	Not Applicable	mg/L	22.9	22.2	21.8	23.1	22.3	21.5	20.5	21.4	17.8	22	21.9
Fluoride	4	0.6359	Not Applicable	mg/L	0.594	0.752	0.801	0.582	0.564	0.498	0.49	0.559	0.779	0.53	0.453
pH (laboratory)	6.5 - 8.5	6.485 - 8.018	Not Applicable	S.U.	7.56	7.98	8.02	7.9	7.9	7.5	7.4	7.3	7.4	7.5	7.5
Sulfate	250	1,591	Not Applicable	mg/L	1370	1350	1420	1500	1500	1360	1470	1400	1250	1480	1410
Total Dissolved Solids	500	2,546	Not Applicable	mg/L	2410	2380	2360	2510	2430	2440	2320	2430	2320	2570	2560
Assessment Monitoring Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**VERIFICATION SAMPLE**
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	---	---
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.000500	<0.000500	<0.000500	<0.000800	<0.00400	<0.000800	<0.000800	<0.000800	<0.000800	---	---
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	1.99 +/- 0.327	1.62 +/- 0.384	1.91 +/- 0.376	2.17 +/- 0.422	1.87 +/- 0.494	2.19 +/- 0.444	1.26 +/- 0.315	2.06 +/- 0.383	0.973 +/- 0.258	---	---
Other Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**VERIFICATION SAMPLE**
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Total Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Carbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	<5.00	---	---
Bicarbonate Alkalinity as CaCO3	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	312	---	---
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	<5.00	---	---
Iron, Total	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Magnesium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	35.1	---	---
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Potassium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	9.21	---	---
Sodium	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	791	---	---
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	---	---	---	---	---	---	---	---	---	---	---
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---
Field Parameters				***Units***	**INITIAL EIGHT SAMPLES TO ESTABLISH BACKGROUND**									**DETECTION MON. #1**	**VERIFICATION SAMPLE**
Temperature	None	Not Applicable	Not Applicable	ºC	20.64	22.37	---	21.75	19.28	20.91	18.26	22.05	20.69	21.36	25.09
pH	6.5 - 8.5	Not Applicable	Not Applicable	S.U.	7.37	7.32	---	7.32	7.28	7.26	6.19	7.2	7.11	7.28	6.91
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	3111	3578	---	3600	3586	3625	3555	3493	3421	3504	3544
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.24	0.45	---	0.07	0.17	0.27	0.32	0.12	0.07	0.16	1.45
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	62.8	-72.7	---	-92.6	-239	-182	247.3	-12.6	59.8	-45.2	99
Turbidity	None	Not Applicable	Not Applicable	NTU	2.1	0.32	---	0.3	0.29	0.27	0.84	0.74	1.07	0.28	0.5
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	22.94	23.28	---	23.84	23.54	23.62	23.92	24.02	24.65	23.04	---
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	32.96	---	---	---	---	---	---	---	---	---	---

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.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.

ATTACHMENT B
GROUNDWATER SAMPLE DATA TO DATE FOR LANDFILL CCR UNIT
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

Parameters	MCL or SMCL	Established Background (Det. Mon.)	Established GWPS (Ass. Mon.)	Sample ID:	MW-21	MW-21		MW-21	DUP-2	MW-21	DUP-2	MW-21	MW-21	MW-21	MW-21	DUP 3
				Sample Date:	3-Oct-18	15-Jan-19		24-Apr-19		2-Oct-19		17-Jun-20	12-Oct-20	31-Mar-21	13-Oct-21	
Detection Monitoring Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**FILTERED**	**ASSESSMENT MON. #2**		**ASSESSMENT MON. #3**		**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**	
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
Calcium	None	670.30	Not Applicable	mg/L	152	187	187	145	142	146	155	139	141	154	128	135
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
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
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
Sulfate	250	1,591	Not Applicable	mg/L	1610	1670	1710	1440	1530	1560	1530	1470	1780	1660	1670	1520
Total Dissolved Solids	500	2,546	Not Applicable	mg/L	2650	2740	2720	2550	2650	2700	2720	2470	2660	2650	2660	2560
Assessment Monitoring Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**FILTERED**	**ASSESSMENT MON. #2**		**ASSESSMENT MON. #3**		**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**	
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
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
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
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
Cadmium	0.005	Not Applicable	0.005 (MCL)	mg/L	<0.0001	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Chromium	0.1	Not Applicable	0.1 (MCL)	mg/L	<0.01	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400	<0.000400
Cobalt	None	Not Applicable	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
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
Lead	0.015	Not Applicable	0.015 (MCL)	mg/L	<0.0001	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600
Lithium	None	Not Applicable	0.235 (UTL)	mg/L	0.164 J	0.157	0.16	0.14	0.134	0.118	0.129	0.14	0.123	0.137	0.125	0.114
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
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
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
Thallium	0.002	Not Applicable	0.002 (MCL)	mg/L	<0.0008	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Ra-226 + Ra-228 (combined)	5	Not Applicable	5 (MCL)	pCi/L	3.41 +/- 0.496	6.29	---	2.24	1.67	1.59	2.57	3.09	2.38	2.44	2.94	2.58
Other Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**FILTERED**	**ASSESSMENT MON. #2**		**ASSESSMENT MON. #3**		**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**	
Chemical Oxygen Demand (COD)	None	Not Applicable	Not Applicable	mg/L	<5	<5	---	<5.00	<5.00	<5.00	7.00 J	---	<5.00	<5.00	<5.00	7.00 J
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	---	393	---	---	---	---	---	---	---	---	---	---
Hydroxide Alkalinity	None	Not Applicable	Not Applicable	mg/L	---	<5	---	---	---	---	---	---	---	---	---	---
Iron, Total	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferrous, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Iron, Ferric, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Magnesium	None	Not Applicable	Not Applicable	mg/L	---	62.1	62.3	---	---	---	---	---	---	---	---	---
Molybdenum, Dissolved	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Nitrate as N	10	Not Applicable	Not Applicable	mg/L	0.449	0.14	0.145	1.16	1.36	0.329	0.467	<0.150	<0.150	0.961	0.207	0.168 J
Potassium	None	Not Applicable	Not Applicable	mg/L	---	12	11.8	---	---	---	---	---	---	---	---	---
Sodium	None	Not Applicable	Not Applicable	mg/L	---	684	688	---	---	---	---	---	---	---	---	---
Specific Conductance (laboratory)	None	Not Applicable	Not Applicable	umhos/cm	3120	3610	---	---	---	---	---	---	3940	3550	3620	3480
Sulfide	None	Not Applicable	Not Applicable	mg/L	---	---	---	---	---	---	---	---	---	---	---	---
Field Parameters				***Units***	**ASSESSMENT MON. #1**	**ASSESSMENT MON. #1 (RESAMPLE) UNFILTERED**	**FILTERED**	**ASSESSMENT MON. #2**		**ASSESSMENT MON. #3**		**ASSESSMENT MON. #4**	**ASSESSMENT MON. #5**	**ASSESSMENT MON. #6**	**ASSESSMENT MON. #7**	
Temperature	None	Not Applicable	Not Applicable	ºC	24	13.8	---	18.12	---	24.38	---	23.17	23.2	15.44	21.3	---
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	---
Specific Conductance	None	Not Applicable	Not Applicable	µmhos/cm	3627	3585	---	3533	---	3633	---	3352	3516	4806	3,262	---
Dissolved Oxygen	None	Not Applicable	Not Applicable	mg/L	0.43	0.59	---	1.23	---	0.64	---	0.65	0.48	5	0.31	---
Oxidation-Reduction Potential	None	Not Applicable	Not Applicable	mV	45.9	-67.1	---	84	---	91.9	---	-38	119.3	25.6	-212.1	---
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	---
Depth to Water from TOC	None	Not Applicable	Not Applicable	ft	---	23.46	---	25.72	---	23.66	---	23.89	24.38	23.9	23.41	---
Total Depth from TOC	None	Not Applicable	Not Applicable	ft	---	---	---	---	---	---	---	---	---	---	---	---

Notes:

1. MCL : Maximum Contaminant Level: Values obtained from EPA Primary/Secondary Drinking Water Standards.
   The MCL value for lead is the EPA's Action Level.
2. mg/L : milligrams per liter.
3. pCi/L : picoCuries per liter.
4. S.U. : Standard Units.
5. ºC : degrees Celsius.
6. µmhos/cm : micromhos per centimeter.
7. mV : millivolts.
8. NTU : Nephelometric Turbidity Unit.
9. < : Analyte not detected at the laboratory method detection limit (MDL).
10. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
11. Cells shaded in blue indicate results that are above the laboratory MDL.
12. The sulfate value for sample MW-25R collected June 9, 2017 was originally reported by the laboratory as 331 mg/L. The laboratory reprepared and analyzed the sample. The value for sulfate on this table is the result of the reanalysis.
13. --- : no analysis performed.
14. Data validation based on USEPA "National Functional Guidelines", OSWER 9355.0-132, EPA-540-R-014-002, Revision August 2014 for Organics and OSWER 9355.0-131, EPA-540-R-013-001, Revision August 2014 for Inorganics.
    U ( ) : The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
    UJ : The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
    J* : The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
    R : The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
15. TOC : Top of Casing.
16. ft : feet.
17. Water levels for Sampling (November-December 2016) were collected on November 28, 2016 with the exception of the new wells (MW-5S, MW-7S, MW-19S, MW-25R) where water levels were taken on December 8, 2016.
18. New pumps were installed in MW-5S, MW-7S, MW-19S, and MW-25R in January 2017.