



REPORT

2023 First Semiannual Groundwater Monitoring Report

*Class 2 Landfill North CAMU - 1st and 2nd Quarter Events
Frisco Community Development Corporation Site
7471 Old 5th Street, Frisco, Texas, TCEQ SWR No. 30516*

Submitted to:

Mr. Mack Borchardt

City of Frisco
6101 Frisco Square Boulevard
Frisco, Texas 75034

Submitted by:

WSP USA, Inc.

701 Emerson Road, Suite 250
Creve Coeur, Missouri, 63141
+1 314 984 8800

GL2040906201

July 19, 2023

Distribution List

TCEQ Austin - 1 hard copy, 1 electronic

TCEQ Region 4 - 1 hard copy

Wes Pierson - Frisco City Manager (City of Frisco), 1 electronic copy

Paul Knippel - Director of Engineering Services (City of Frisco), 1 electronic copy

Brad Weaver - City of Frisco, 1 electronic copy

Matt Dubois - Development Manager, Engineering Services (City of Frisco) - 1 electronic copy

Table of Contents

1.0 INTRODUCTION4

1.1 Site Description4

1.2 Uppermost Groundwater-Bearing Unit.....4

1.3 Monitoring Well System4

2.0 FIELD SAMPLING ACTIVITIES5

2.1 Groundwater Sampling5

2.2 Well Inspection and Purging Summary.....5

2.2.1 First Quarter Event (March 2023)5

2.2.2 Second Quarter Event (May-June 2023)6

3.0 RESULTS.....6

3.1 Groundwater Flow6

3.2 Analytical Results.....6

3.3 QA/QC Samples.....6

3.4 Data Validation6

4.0 CLOSING7

5.0 REFERENCES8

TABLES

Table 1	Summary of Monitoring Well Data – First Quarter 2023
Table 2	Summary of Monitoring Well Data – Second Quarter 2023
Table 3	Summary of Groundwater Analytical Results – First Quarter 2023
Table 4	Summary of Groundwater Analytical Results – Second Quarter 2023

FIGURES

Figure 1	Site Location Map
Figure 2	Monitoring Well Location Map
Figure 3	Potentiometric Surface Map – First Quarter 2023
Figure 4	Potentiometric Surface Map – Second Quarter 2023

APPENDICES**APPENDIX A**

Monitoring Well Inspection Forms

APPENDIX B

Groundwater Sampling Forms

APPENDIX C

Groundwater Laboratory Analytical Results

APPENDIX D

Data Usability Summaries

1.0 INTRODUCTION

WSP USA Inc. (WSP), is pleased to submit this report summarizing first and second quarter 2023 groundwater monitoring activities for the Class 2 Landfill North Corrective Action Management Unit (hereafter, the Landfill or North CAMU) located at the Frisco Community Development Corporation (Frisco CDC) Site located at 7471 Old 5th Street, Frisco, Collin County, Texas (Site). This report summarizes groundwater sampling methods, laboratory analyses and results for groundwater monitoring which was conducted in general accordance with the Revised Class 2 Landfill Groundwater Monitoring Plan (Monitoring Plan), by Pastor, Behling & Wheeler, dated July 31, 2013 [1], the Texas Commission on Environmental Quality (TCEQ) Approval with Modifications, dated April 4, 2014 [2] and subsequent correspondence with the TCEQ. The Site is currently regulated by the TCEQ Industrial and Hazardous Waste – Corrective Action (IHW-CA) Program under Solid Waste Registration (SWR) No. 30516.

1.1 Site Description

A location map of the Landfill is provided as Figure 1. The locations of the groundwater monitoring wells in the Landfill vicinity are shown on Figure 2. Initial notification for construction of an on-site Class 2 industrial landfill, including engineering plans and a landfill operations plan, was provided to the Texas Natural Resource Conservation Commission (TNRCC) by GNB Technologies, Inc. in August 1995. TNRCC acknowledgement of receipt and review of the notification was provided in a September 14, 1995, letter. Landfill construction commenced thereafter, and Site records indicate that the Landfill operations began in 1996. The Landfill currently consists of fifteen cells, nine of which (cells 1 through 9) have been closed and capped. The closed cells of the Landfill consist of treated slag monofills [1]. The active cells of the Landfill currently contain treated slag, but also contain Class 2 wastes generated during the demolition and remediation activities at the Site [1] and remediation activities at the Undeveloped Buffer Property (UBP) initiated in early 2017. In June 2018, a temporary cover was installed at the Landfill following completion of remediation activities at the UBP.

1.2 Uppermost Groundwater-Bearing Unit

The uppermost groundwater bearing unit (GWBU) in the vicinity of the Landfill consists of clay-rich alluvial soils of Quaternary age situated unconformably above the Late Cretaceous age Eagle Ford Formation [1]. As indicated in boring logs for the groundwater monitoring wells surrounding the Landfill, the Eagle Ford Formation occurs at depths ranging from approximately 14 to 24 feet below ground surface (bgs). Groundwater within the upper GWBU generally occurs under unconfined conditions at depths between approximately 10 and 25 feet bgs. Monitoring well locations are shown on Figure 2.

1.3 Monitoring Well System

The current monitoring well network for the Landfill consists of eleven monitoring wells. Based on the groundwater potentiometric surfaces shown on Figure 3 and Figure 4 and the projected groundwater flow paths near the Landfill, the Landfill groundwater monitoring network can be classified as follows:

- Up-gradient monitoring wells: PMW-19R and MW-45
- Cross-gradient monitoring wells: LMW-8 and LMW-9R
- Down-gradient monitoring wells: LMW-5, LMW-17, PMW-20R, LMW-21, LMW-22, MW-41, and MW-47

Well construction information for these wells is summarized in Table 1 and Table 2.

2.0 FIELD SAMPLING ACTIVITIES

2.1 Groundwater Sampling

Eleven monitoring wells included in the Landfill monitoring well network, MW-45, PMW-19R, LMW-9R, LMW-8, LMW-17, LMW-22, LMW-5, LMW-21, PMW-20R, MW-41 and MW-47 were sampled during the first and second quarter sampling events during 2023.

Prior to sampling, monitoring wells were inspected and the condition of the protective covers, concrete pads, riser pipes and well caps were recorded on monitoring well inspection forms, which are included in Appendix A. Next, monitoring well depths to water and total well depths were noted on field forms which are summarized on Table 1 for the first quarter event and Table 2 for the second quarter event. The electronic water level probe was decontaminated with Alconox® solution and a distilled water rinse prior to use and between sampling at each monitoring well.

The monitoring wells were then purged until stabilization parameters (temperature, pH and specific conductivity) were within 10% on three consecutive readings or three well volumes had been removed from the monitoring well. Monitoring wells were purged using a peristaltic pump and new polyethylene tubing at each sample location. A flow rate of less than 0.4 liters per minute was sustained during purging. Groundwater sample collection forms are provided in Appendix B.

After purging was completed, groundwater samples were collected using a peristaltic pump with new polyethylene tubing. Groundwater sampled for dissolved metals analysis were field filtered using disposable (one-time use) 0.45-micron filters and transferred into laboratory-supplied containers pre-preserved with nitric acid. Groundwater sampled for total metals analysis was collected into laboratory-supplied containers pre-preserved with nitric acid directly from the pump discharge tubing. One duplicate sample and one matrix spike/matrix spike duplicate (MS/MSD) sample was collected for Quality Assurance/Quality Control (QA/QC) during the sampling events.

After collection in the field, groundwater and QA/QC samples were labeled with the sample identification number, requested analysis, collection date and sampler's initials and placed on ice in a cooler and shipped by WSP under chain-of-custody protocol via FedEx overnight transport to the ALS Environmental Laboratory (ALS) in Houston, Texas for analysis of dissolved and total metals by US Environmental Protection Agency (EPA) SW-846 Method 6020A and EPA SW-846 Method 7470A. Antimony, arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc were reported for the first quarter sampling event. Arsenic, cadmium, lead, and selenium were reported for the second quarter sampling event.

Purged groundwater and decontamination water were containerized in 55-gallon steel drums and staged as directed by Frisco CDC personnel. Approximately 18.65 gallons of purged groundwater were containerized during the quarterly sampling events, respectively. The monitoring wells were locked prior to demobilization from the Site.

2.2 Well Inspection and Purging Summary

2.2.1 First Quarter Event (March 2023)

Each of the monitoring wells sampled at the Landfill were purged and sampled on either March 15 or March 16 as described in Section 2.1. Each monitoring well was found locked upon arrival. At the time of sampling, the weather was sunny with daytime temperatures ranging from 45 to 70° Fahrenheit. During the March sampling

event, all monitoring wells stabilized within four parameter readings, except for MW-45 that stabilized in five parameter readings. All wells and well pads appeared to be in good condition at the time of sampling.

2.2.2 Second Quarter Event (May-June 2023)

Each of the monitoring wells sampled at the Landfill were purged and sampled on either May 30 or 31 as described in Section 2.1. Each monitoring well was found locked upon arrival. At the time of sampling, the weather was sunny with daytime high temperatures ranging from 74 to 95° Fahrenheit. During the May sampling event, monitoring wells MW-41, LMW-5, LMW-8, LMW-17, LMW-21, and PMW-19R stabilized within four parameter readings and monitoring wells MW-47, LMW-9R, LMW-22, PMW-20R, and MW-45 stabilized within five parameter readings. All wells and well pads appeared to be in good condition at the time of sampling.

3.0 RESULTS

3.1 Groundwater Flow

Monitoring well water level data for the first and second quarter events are summarized in Table 1 and Table 2, respectively. In the Landfill area, the potentiometric surfaces shown on Figures 3 and 4 generally slope toward the southwest at a gradient of approximately 0.03 to 0.04 feet per foot (ft/ft). The groundwater levels and gradients measured during the first and second quarter sampling events are generally consistent with past groundwater monitoring events.

3.2 Analytical Results

Analytical results are summarized in Table 3 (first quarter event) and Table 4 (second quarter event), and laboratory reports are included in Appendix C. The laboratory analytical results for dissolved metals and total metals were below the applicable Texas Risk Reduction Program (TRRP) Residential Assessment Levels (RALs) or Protective Concentration Levels (PCLs) for both sampling events.

3.3 QA/QC Samples

The laboratory analytical results for the duplicates are presented in Table 3 and Table 4 for the first and second quarter events, respectively.

3.4 Data Validation

WSP completed a review of the above chemical analysis data for conformance with the requirements of the Texas Risk Reduction Program (TRRP) guidance document, Review and Reporting of COC Concentration Data (RGG-366/TRRP-13 Revised May 2010) and for adherence to project objectives. The results of the review are discussed in the data usability summary (DUS) which is included as Appendix D. All data are usable for determining concentrations of metals in groundwater.

4.0 CLOSING

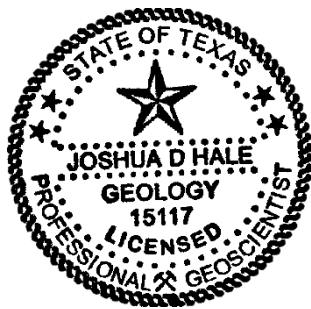
WSP appreciates the opportunity to serve as your consultant on this project. If you have any questions concerning this report or need additional information, please contact the undersigned at 314-984-8800.

Sincerely,

WSP USA Inc.

A handwritten signature in black ink that reads "Josh Hale". The signature is fluid and cursive, with the first name "Josh" and last name "Hale" clearly distinguishable.

Joshua Hale, PG
Senior Geologist



5.0 REFERENCES

- [1] Pastor, Behling & Wheeler, LLC. (July 31, 2013). Revised Class 2 Landfill Groundwater Monitoring Plan.
- [2] Texas Commission on Environmental Quality (April 4, 2014). Approval with Modifications, Class 2 Landfill Groundwater Monitoring Plan, dated July 31, 2013.

Tables

TABLE 1
FIRST QUARTER 2023
SUMMARY OF MONITORING WELL DATA
NORTH CAMU
FRISCO COMMUNITY DEVELOPMENT CORPORATION SITE
FRISCO, TEXAS

Well ID	Date Drilled	Ground Surface Elevation ¹ (feet AMSL)	Top of Casing Elevation ¹ (feet AMSL)	Depth to Water (feet BTOC)	Groundwater Elevation ² (feet AMSL)	Depth of Well (feet BTOC)	Screened Interval (feet BGS)	Well Diameter (inches)	Water Column Length (feet)	Well Casing Volume ³ (gallons)	Actual Volume Purged (gallons)
MW-45	1/14/2014	657.90	660.86	12.09	648.77	22.55	10-20	2	10.46	1.7	NM
PMW-19R	2/26/2013	678.45	681.79	19.08	662.71	22.68	4-19	2	3.60	0.59	NM
LMW-9R	3/1/2016	661.39	664.31	8.67	655.64	32.90	15-30	2	24.23	4.0	0.8
LMW-8	2/4/1995	645.57	648.72	10.26	638.46	24.05	7-21.5	2	13.79	2.2	NM
LMW-22	2/27/2013	643.32	646.99	10.28	636.71	23.15	5-20	2	12.87	2.1	0.8
LMW-17	7/24/1995	646.34	648.70	11.78	636.92	25.45	10-20	4	13.67	8.9	0.8
LMW-5	2/3/1995	643.27	646.07	10.03	636.04	25.26	7-21.5	2	15.23	2.5	0.8
LMW-21	2/27/2013	645.12	648.28	12.08	636.20	28.07	10-25	2	15.99	2.6	0.8
PMW-20R	2/26/2013	645.20	648.09	11.77	636.32	28.25	10-25	2	16.48	2.7	0.8
MW-41	1/14/2014	639.17	642.17	9.51	632.66	19.15	6-16	2	9.64	1.6	0.8
MW-47	5/2/2017	635.65	638.28	3.31	634.97	17.95	7.5-15	2	14.64	2.4	0.8
MW-42	1/14/2014	638.71	642.24	6.97	635.27	NS	5-15	2	NS	NS	NS
P-1	5/8/1990	645.95	647.24	8.86	638.38	NS	10-20	2	NS	NS	NS

Notes

¹ - Ground surface elevations and top of casing elevations were surveyed in 2013 & 2014 by Sparr Surveys of McKinney, Texas.
Ground surface elevation and top of casing elevation for LMW-9R was surveyed on March 7, 2016 by Brittain & Crawford, LLC of Fort Worth, Texas.
Ground surface elevations and top of casing elevations for MW-47 and MW-41 were surveyed on June 13, 2017 by Brittain & Crawford, LLC of Fort Worth, Texas.

² - Groundwater elevation obtained by subtracting the depth to water from the top of casing elevation.

³ - Well casing volume = $\frac{\pi D^2}{4} * 7.5 * \text{Water Column Height}$ where 7.5 is a factor conversion from cubic feet to gallons, and D is the diameter of the casing.

Groundwater level measurements collected on March 15, 2023.
AMSL - above mean sea level
BTOC - below top of casing
BGS - below ground surface
NS - not sampled
CAMU - Corrective Action Management Unit

Prepared by: JDH 7/3/2023
Checked by: TCJ 7/11/2023
Reviewed by: THR 7/14/2023



TABLE 2
SECOND QUARTER 2023
SUMMARY OF MONITORING WELL DATA
NORTH CAMU
FRISCO COMMUNITY DEVELOPMENT CORPORATION SITE
FRISCO, TEXAS

Well ID	Date Drilled	Ground Surface Elevation ¹ (feet AMSL)	Top of Casing Elevation ¹ (feet AMSL)	Depth to Water (feet BTOC)	Groundwater Elevation ² (feet AMSL)	Depth of Well (feet BTOC)	Screened Interval (feet BGS)	Well Diameter (inches)	Water Column Length (feet)	Well Casing Volume ³ (gallons)	Actual Volume Purged (gallons)
MW-45	1/14/2014	657.90	660.86	13.03	647.83	22.57	10-20	2	9.54	1.6	1.25
PMW-19R	2/26/2013	678.45	681.79	19.98	661.81	22.69	4-19	2	2.71	0.4	1.00
LMW-9R	3/1/2016	661.39	664.31	16.47	647.84	32.92	15-30	2	16.45	2.7	1.25
LMW-8	2/4/1995	645.57	648.72	14.41	634.31	24.05	7-21.5	2	9.64	1.6	1.00
LMW-22	2/27/2013	643.32	646.99	15.56	631.43	23.15	5-20	2	7.59	1.2	1.25
LMW-17	7/24/1995	646.34	648.70	16.09	632.61	25.44	10-20	4	9.35	6.1	1.00
LMW-5	2/3/1995	643.27	646.07	14.23	631.84	25.26	7-21.5	2	11.03	1.8	1.00
LMW-21	2/27/2013	645.12	648.28	16.59	631.69	28.07	10-25	2	11.48	1.9	1.00
PMW-20R	2/26/2013	645.20	648.09	16.32	631.77	28.26	10-25	2	11.94	1.9	1.25
MW-41	1/14/2014	639.17	642.17	10.21	631.96	19.15	6-16	2	8.94	1.5	1.00
MW-47	5/2/2017	635.65	638.28	5.83	632.45	17.94	7.5-15	2	12.11	2.0	1.25
MW-42	1/14/2014	638.71	642.24	6.99	635.25	NS	5-15	2	NS	NS	NM
P-1	5/8/1990	645.95	647.24	10.74	636.50	NS	10-20	2	NS	NS	NM

Notes

¹ - Ground surface elevations and top of casing elevations were surveyed in 2013 & 2014 by Sparr Surveys of McKinney, Texas.
Ground surface elevation and top of casing elevation for LMW-9R was surveyed on March 7, 2016 by Brittain & Crawford, LLC of Fort Worth, Texas.
Ground surface elevations and top of casing elevations for MW-47 and MW-41 were surveyed on June 13, 2017 by Brittain & Crawford, LLC of Fort Worth, Texas.

² - Groundwater elevation obtained by subtracting the depth to water from the top of casing elevation.

³ - Well casing volume = $\frac{\pi D^2}{4} * 7.5 * \text{Water Column Height}$ where 7.5 is a factor conversion from cubic feet to gallons, and D is the diameter of the casing.

Groundwater levels measurements collected on May 30, 2023.

AMSL - above mean sea level

BGS - below ground surface

BTOC - below top of casing

CAMU - Corrective Action Management Unit

NS - not sampled

Prepared by: JDH 7/3/2023

Checked by: MM 7/5/2023

Reviewed by: THR 7/14/2023



TABLE 3
FIRST QUARTER 2023
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
CLASS 2 LANDFILL NORTH CAMU
FRISCO COMMUNITY DEVELOPMENT CORPORATION SITE
FRISCO, TEXAS

Monitoring Well				PMW-20R	SDL	LMW-5	SDL	LMW-21	SDL	MW-45	SDL	MW-41	SDL	PMW-19R	SDL
Lab Sample ID				HS23031023-07		HS23031023-05		HS23031023-06		HS23031023-01		HS23031023-08		HS23031023-02	
Date Sampled				3/15/2023		3/15/2023		3/15/2023		3/15/2023		3/15/2023		3/15/2023	
Time Sampled				13:00		11:35		12:25		9:25		13:40		10:00	
Metals (USEPA Method 6020A) Total Recoverable															
Date Prepared				3/23/2023				3/23/2023				3/23/2023			
Date Analyzed				3/23/2023		3/23/2023		3/23/2023		3/23/2023		3/23/2023		3/23/2023	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Antimony	7440-36-0	0.006	0.006	0.000400	U	0.000400	0.000400	U	0.000400	0.000400	U	0.000400	0.000400	0.000400	0.000400
Arsenic	7440-38-2	0.01	0.01	0.000400	U	0.000400	0.00067	J	0.000400	0.000621	J	0.000400	0.000533	J	0.000400
Barium	7440-39-3	2	2	0.0562		0.00190	0.0571		0.00190	0.0295		0.00190	0.0727		0.00190
Cadmium	7440-43-9	0.005	0.005	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200
Chromium	7440-47-3	0.1	0.1	0.000400	U	0.000400	0.000400	U	0.000400	0.000400	U	0.000400	0.000400	U	0.000400
Copper	7440-50-8	1.3	1.3	0.00145	J	0.00100	0.00155	J	0.00100	0.00299		0.00100	0.00136	J	0.00100
Lead	7439-92-1	0.015	0.015	0.000600	U	0.000600	0.001350	J	0.000600	0.001260	J	0.000600	0.000600	U	0.000600
Selenium	7782-49-2	0.05	0.05	0.00233		0.00110	0.00110	U	0.00110	0.00563		0.00110	0.00110	U	0.00110
Silver	7440-22-4	0.12	0.37	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200
Zinc	7440-66-6	7.3	22	0.00200	U	0.00200	0.00200	U	0.00200	0.00348		0.00200	0.00200	U	0.00200
Metals (USEPA Method 6020A) Dissolved															
Date Prepared				3/23/2023				3/23/2023				3/23/2023			
Date Analyzed				3/23/2023		3/23/2023		3/23/2023		3/23/2023		3/23/2023		3/23/2023	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Antimony	7440-36-0	0.006	0.006	0.000400	U	0.000400	0.000400	U	0.000400	0.000400	U	0.000400	0.000400	U	0.000400
Arsenic	7440-38-2	0.01	0.01	0.000400	U	0.000400	0.000510	J	0.000400	0.000648	J	0.000400	0.000445	J	0.000400
Barium	7440-39-3	2	2	0.0537		0.00190	0.0509		0.00190	0.0328		0.00190	0.0711		0.00190
Cadmium	7440-43-9	0.005	0.005	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200
Chromium	7440-47-3	0.1	0.1	0.000400	U	0.000400	0.000400	U	0.000400	0.000400	U	0.000400	0.000400	U	0.000400
Copper	7440-50-8	1.3	1.3	0.00100	U	0.00100	0.00112	J	0.00100	0.00100	U	0.00100	0.00168	J	0.00100
Lead	7439-92-1	0.015	0.015	0.000600	U	0.000600	0.001100	J	0.000600	0.001100	J	0.000600	0.000600	U	0.000600
Selenium	7782-49-2	0.05	0.05	0.00238		0.00110	0.00110	U	0.00110	0.00715		0.00110	0.00137	J	0.00110
Silver	7440-22-4	0.12	0.37	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200
Zinc	7440-66-6	7.3	22	0.00200	U	0.00200	0.00200	U	0.00200	0.00200	J	0.00200	0.00213	J	0.00200
Mercury (USEPA Method 7470A)															
Date Prepared				3/22/2023				3/22/2023				3/22/2023			
Date Analyzed				3/22/2023		3/22/2023		3/22/2023		3/22/2023		3/22/2023		3/22/2023	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Mercury	7439-97-6	0.002	0.002	0.0000300	J	0.0000300	0.0000300	U	0.0000300	0.0000700	J	0.0000300	0.0000300	U	0.0000300
Mercury (USEPA Method 7470A) Dissolved															
Date Prepared				3/20/2023				3/20/2023				3/20/2023			
Date Analyzed				3/20/2023		3/20/2023		3/20/2023		3/20/2023		3/20/2023		3/20/2023	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Mercury	7439-97-6	0.002	0.002	0.0000300	U	0.0000300	0.0000300	U	0.0000300	0.0000300	U	0.0000300	0.0000300	U	0.0000300

Notes
Results in ***bold italics*** denote detections.
USEPA - United States Environmental Protection Agency.
RAL - Residential Assessment Level.
PCL - Protective Concentration Level.
SDL - Sample Detection Limit.
TRRP - Texas Risk Reduction Program.
mg/L - Milligrams per liter.
CAMU - Corrective Action Management Unit.
¹ - The Groundwater Residential Assessment Level (GW RAL) is the TRRP Tier 1 Residential ^{GW}GW_{Ing} PCL applicable for Class 2 groundwater ingestion.
² - The Groundwater Critical PCL is the TRRP Tier 1 Commercial/Industrial ^{GW}GW_{Ing} PCL applicable for Class 2 groundwater ingestion.

Flags and Qualifiers
U - Analyte was not detected at or above the Sample Detection Limit (SDL).
J - Result is an estimated value.

Prepared by: MEM 7/03/2023
Checked by: JDH 7/5/2023
Reviewed by: THR 7/14/2023

TABLE 3
FIRST QUARTER 2023
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
CLASS 2 LANDFILL NORTH CAMU
FRISCO COMMUNITY DEVELOPMENT CORPORATION SITE
FRISCO, TEXAS

Monitoring Well				LMW-9R	SDL	LMW-8	SDL	LMW-17	SDL	LMW-22	SDL	MW-47	SDL	DUP-01	SDL
Lab Sample ID				HS23031023-10		HS23031023-03		HS23031023-04		HS23031023-11		HS23031023-09		HS23031023-12	
Date Sampled				3/15/2023		3/15/2023		3/15/2023		3/16/2023		3/15/2023		3/15/2023	
Time Sampled				15:30		10:35		11:00		8:40		14:35		11:35	
Metals (USEPA Method 6020A) Total Recoverable															
Date Prepared				3/23/2023				3/23/2023				3/23/2023			
Date Analyzed				3/23/2023		3/23/2023		3/23/2023		3/23/2023		3/23/2023		3/23/2023	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Antimony	7440-36-0	0.006	0.006	0.000400	U	0.000400		0.000400	U	0.000400	0.000400	U	0.000400	0.000400	0.000400
Arsenic	7440-38-2	0.01	0.01	0.00152	J	0.000400		0.00295		0.000400	0.000865	J	0.000400	0.00279	0.000484
Barium	7440-39-3	2	2	0.0303		0.00190		0.0686		0.00190	0.0801		0.00190	0.0560	0.0482
Cadmium	7440-43-9	0.005	0.005	0.000200	U	0.000200		0.000200	U	0.000200	0.000200	U	0.000200	0.000200	0.000200
Chromium	7440-47-3	0.1	0.1	0.000400	U	0.000400		0.00855		0.000400	0.000400	U	0.000400	0.000400	0.000400
Copper	7440-50-8	1.3	1.3	0.00476		0.00100		0.00381		0.00100	0.00243	J	0.00100	0.00100	0.00121
Lead	7439-92-1	0.015	0.015	0.000600	U	0.000600		0.00347		0.000600	0.000600	U	0.000600	0.000600	0.000986
Selenium	7782-49-2	0.05	0.05	0.00110	U	0.00110		0.00690		0.00110	0.00113	J	0.00110	0.00110	0.00110
Silver	7440-22-4	0.12	0.37	0.000200	U	0.000200		0.000200	U	0.000200	0.000200	U	0.000200	0.000200	0.000200
Zinc	7440-66-6	7.3	22	0.00213	J	0.00200		0.0188		0.00200	0.00371	J	0.00200	0.00200	0.00200
Metals (USEPA Method 6020A) Dissolved															
Date Prepared				3/23/2023				3/23/2023				3/23/2023			
Date Analyzed				3/23/2023		3/23/2023		3/23/2023		3/23/2023		3/23/2023		3/23/2023	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Antimony	7440-36-0	0.006	0.006	0.000400	U	0.000400		0.000400	U	0.000400	0.000400	J	0.000400	0.000400	0.000400
Arsenic	7440-38-2	0.01	0.01	0.00128	J	0.000400		0.000507	J	0.000400	0.000871	J	0.000400	0.00247	0.0005000
Barium	7440-39-3	2	2	0.0287		0.00190		0.0436		0.00190	0.0789		0.00190	0.0536	0.0496
Cadmium	7440-43-9	0.005	0.005	0.000200	U	0.000200		0.000200	U	0.000200	0.000200	U	0.000200	0.000200	0.000200
Chromium	7440-47-3	0.1	0.1	0.000400	U	0.000400		0.000400	U	0.000400	0.000400	U	0.000400	0.000400	0.000400
Copper	7440-50-8	1.3	1.3	0.00463		0.00100		0.00100	U	0.00100	0.00160	J	0.00100	0.00100	0.00117
Lead	7439-92-1	0.015	0.015	0.000600	U	0.000600		0.000600	U	0.000600	0.000600	U	0.000600	0.000600	0.000600
Selenium	7782-49-2	0.05	0.05	0.00110	U	0.00110		0.00725		0.00110	0.00110	U	0.00110	0.00110	0.00110
Silver	7440-22-4	0.12	0.37	0.000200	U	0.000200		0.000200	U	0.000200	0.000200	U	0.000200	0.000200	0.000200
Zinc	7440-66-6	7.3	22	0.00227	J	0.00200		0.00200	U	0.00200	0.00437		0.00200	0.00200	0.00205
Mercury (USEPA Method 7470A)															
Date Prepared				3/22/2023				3/22/2023				3/22/2023			
Date Analyzed				3/22/2023		3/23/2023		3/22/2023		3/22/2023		3/22/2023		3/22/2023	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Mercury	7439-97-6	0.002	0.002	0.0000300	U	0.0000300		0.0000300	U	0.0000300	0.0000300	U	0.0000300	0.0000300	0.0000300
Mercury (USEPA Method 7470A) Dissolved															
Date Prepared				3/20/2023				3/20/2023				3/20/2023			
Date Analyzed				3/20/2023		3/20/2023		3/20/2023		3/20/2023		3/20/2023		3/20/2023	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Mercury	7439-97-6	0.002	0.002	0.0000300	U	0.0000300		0.0000300	U	0.0000300	0.0000300	U	0.0000300	0.0000300	0.0000990

Notes
Results in ***bold italics*** denote detections.
USEPA - United States Environmental Protection Agency.
RAL - Residential Assessment Level.
PCL - Protective Concentration Level.
SDL - Sample Detection Limit.
TRRP - Texas Risk Reduction Program.
mg/L - Milligrams per liter.
CAMU - Corrective Action Management Unit.
¹ - The Groundwater Residential Assessment Level (GW RAL) is the TRRP Tier 1 Residential ^{GW}GW_{ing} PCL applicable for Class 2 groundwater ingestion.
² - The Groundwater Critical PCL is the TRRP Tier 1 Commercial/Industrial ^{GW}GW_{ing} PCL applicable for Class 2 groundwater ingestion.

Flags and Qualifiers
U - Analyte was not detected at or above the Sample Detection Limit (SDL).
J - Result is an estimated value.

Prepared by: MEM 7/03/2023
Checked by: JDH 7/5/2023
Reviewed by: THR 7/14/2023

TABLE 4
SECOND QUARTER 2023
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
CLASS 2 LANDFILL NORTH CAMU
FRISCO COMMUNITY DEVELOPMENT CORPORATION SITE
FRISCO, TEXAS

Monitoring Well				PMW-20R	SDL	LMW-5	SDL	LMW-21	SDL	MW-45	SDL	MW-41	SDL	PMW-19R	SDL
Lab Sample ID				HS23060166-07		HS23060166-05		HS23060166-06		HS23060166-01		HS23060166-08		HS23060166-02	
Date Sampled				5/30/2023		5/30/2023		5/30/2023		5/30/2022		5/30/2023		5/30/2023	
Time Sampled				13:10		11:45		12:15		9:30		13:45		10:05	
Metals (USEPA Method 6020A) Total Recoverable															
Date Prepared				6/7/2023		6/7/2023		6/7/2023		6/7/2023		6/7/2023		6/7/2023	
Date Analyzed				6/9/2023		6/9/2023		6/9/2023		6/9/2023		6/9/2023		6/9/2023	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Antimony	7440-36-0	0.006	0.006	NS		NS		NS		NS		NS		NS	
Arsenic	7440-38-2	0.01	0.01	0.000456 J	0.000400	0.000486 J	0.000400	0.000756 J	0.000400	0.000432 J	0.000400	0.00218	0.000400	0.000583 J	0.000400
Barium	7440-39-3	2	2	NS		NS		NS		NS		NS		NS	
Cadmium	7440-43-9	0.005	0.005	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200
Chromium	7440-47-3	0.1	0.1	NS		NS		NS		NS		NS		NS	
Copper	7440-50-8	1.3	1.3	NS		NS		NS		NS		NS		NS	
Lead	7439-92-1	0.015	0.015	0.000600 U	0.000600	0.000600 U	0.000600	0.00159 J	0.000600	0.000600 U	0.000600	0.000600 U	0.000600	0.000600 U	0.000600
Selenium	7782-49-2	0.05	0.05	0.00139 J	0.00110	0.00110 U	0.00110	0.00640	0.00110	0.00114 J	0.00110	0.00110 U	0.00110	0.00110 U	0.00110
Silver	7440-22-4	0.12	0.37	NS		NS		NS		NS		NS		NS	
Zinc	7440-66-6	7.3	22	NS		NS		NS		NS		NS		NS	
Metals (USEPA Method 6020A) Dissolved															
Date Prepared				6/7/2023		6/7/2023		6/7/2023		6/7/2023		6/7/2023		6/7/2023	
Date Analyzed				6/9/2023		6/9/2023		6/9/2023		6/9/2023		6/9/2023		6/9/2023	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Antimony	7440-36-0	0.006	0.006	NS		NS		NS		NS		NS		NS	
Arsenic	7440-38-2	0.01	0.01	0.000446 J	0.000400	0.000491 J	0.000400	0.000630 J	0.000400	0.000400 U	0.000400	0.00356	0.000400	0.000586 J	0.000400
Barium	7440-39-3	2	2	NS		NS		NS		NS		NS		NS	
Cadmium	7440-43-9	0.005	0.005	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200
Chromium	7440-47-3	0.1	0.1	NS		NS		NS		NS		NS		NS	
Copper	7440-50-8	1.3	1.3	NS		NS		NS		NS		NS		NS	
Lead	7439-92-1	0.015	0.015	0.000600 U	0.000600	0.000600 U	0.000600	0.000849 J	0.000600	0.000600 U	0.000600	0.000600 U	0.000600	0.000600 U	0.000600
Selenium	7782-49-2	0.05	0.05	0.00140 J	0.00110	0.00110 U	0.00110	0.00606	0.00110	0.00168 J	0.00110	0.00110 U	0.00110	0.00110 U	0.00110
Silver	7440-22-4	0.12	0.37	NS		NS		NS		NS		NS		NS	
Zinc	7440-66-6	7.3	22	NS		NS		NS		NS		NS		NS	
Mercury (USEPA Method 7470A)															
Date Prepared				NS		NS		NS		NS		NS		NS	
Date Analyzed				NS		NS		NS		NS		NS		NS	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Mercury	7439-97-6	0.002	0.002	NS		NS		NS		NS		NS		NS	
Mercury (USEPA Method 7470A) Dissolved															
Date Prepared				NS		NS		NS		NS		NS		NS	
Date Analyzed				NS		NS		NS		NS		NS		NS	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Mercury	7439-97-6	0.002	0.002	NS		NS		NS		NS		NS		NS	

Notes
Results in ***bold italics*** denote detections.
USEPA - United States Environmental Protection Agency.
RAL - Residential Assessment Level.
PCL - Protective Concentration Level.
SDL - Sample Detection Limit.
TRRP - Texas Risk Reduction Program.
mg/L - Milligrams per liter.
CAMU - Corrective Action Management Unit.
¹ - The Groundwater Residential Assessment Level (GW RAL) is the TRRP Tier 1 Residential ^{GW}GW_{ing} PCL applicable for Class 2 groundwater ingestion.
² - The Groundwater Critical PCL is the TRRP Tier 1 Commercial/Industrial ^{GW}GW_{ing} PCL applicable for Class 2 groundwater ingestion.

Flags and Qualifiers
U - Analyte was not detected at or above the Sample Detection Limit (SDL).
J - Result is an estimated value.

Prepared by: MEM 7/03/2023
Checked by: JDH 7/5/2023
Reviewed by: THR 7/14/23

TABLE 4
SECOND QUARTER 2023
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
CLASS 2 LANDFILL NORTH CAMU
FRISCO COMMUNITY DEVELOPMENT CORPORATION SITE
FRISCO, TEXAS

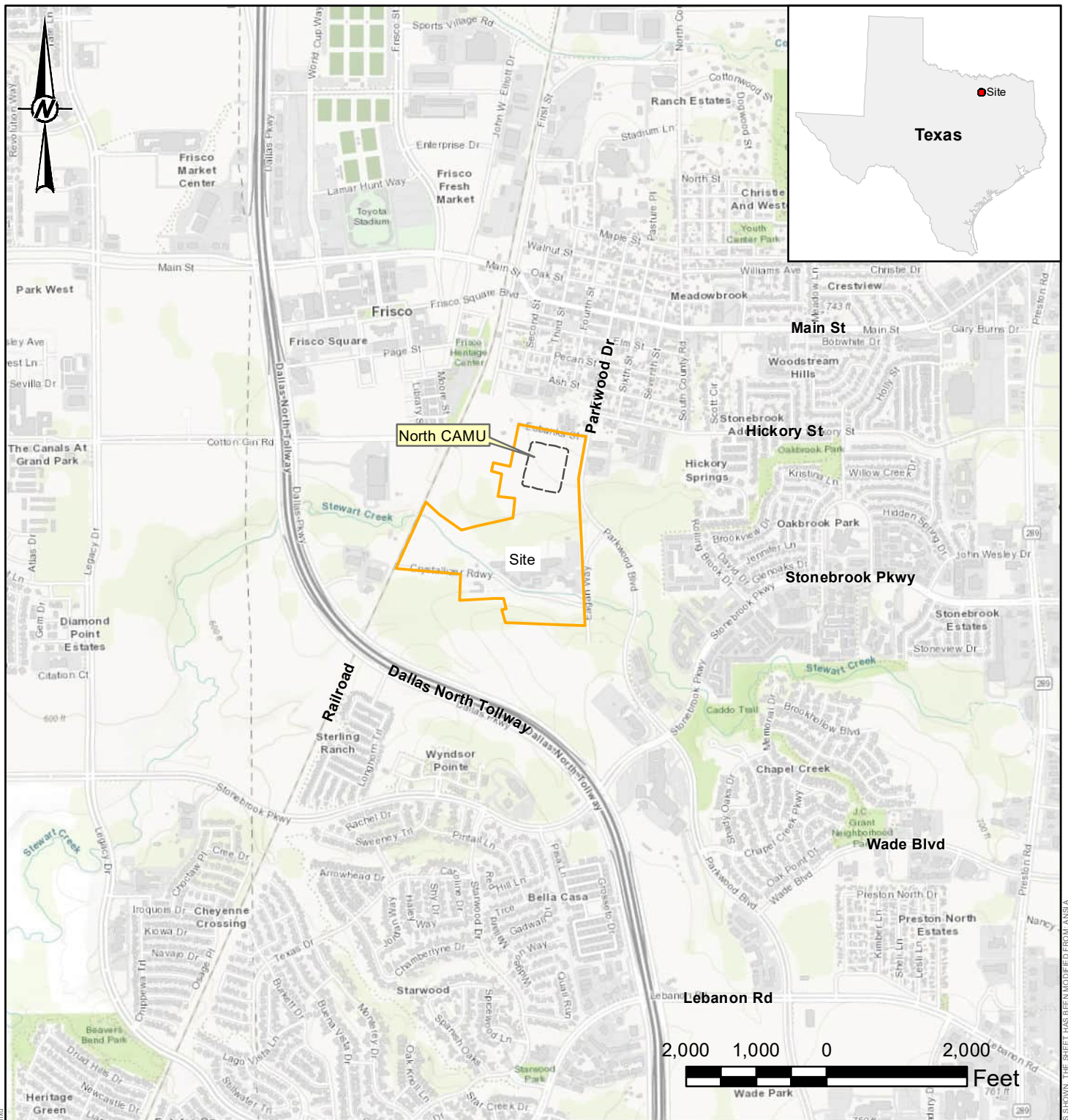
Monitoring Well				LMW-9R	SDL	LMW-8	SDL	LMW-17	SDL	LMW-22	SDL	MW-47	SDL	DUP-01	SDL				
Lab Sample ID				HS23060166-10		HS23060166-03		HS23060166-04		HS23060166-11		HS23060166-09		HS23060166-12					
Date Sampled				5/31/2023		5/30/2023		5/30/2023		5/31/2023		5/30/2023		5/30/2023					
Time Sampled				8:00		10:40		11:10		9:00		14:30		11:45					
Metals (USEPA Method 6020A) Total Recoverable																			
Date Prepared				6/7/2023				6/7/2023				6/7/2022				6/7/2023			
Date Analyzed				6/9/2023		6/9/2023		6/9/2023		6/9/2022		6/9/2023		6/9/2023		6/9/2023			
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)			
Antimony	7440-36-0	0.006	0.006	NS		NS		NS		NS		NS		NS		NS			
Arsenic	7440-38-2	0.01	0.01	0.00342		0.000400		0.000859 J		0.000400		0.00219		0.000400		0.00165 J		0.000433 J	
Barium	7440-39-3	2	2	NS		NS		NS		NS		NS		NS		NS			
Cadmium	7440-43-9	0.005	0.005	0.000200 U		0.000200		0.000200 U		0.000200		0.000200 U		0.000200		0.000200 U		0.000200	
Chromium	7440-47-3	0.1	0.1	NS		NS		NS		NS		NS		NS		NS			
Copper	7440-50-8	1.3	1.3	NS		NS		NS		NS		NS		NS		NS			
Lead	7439-92-1	0.015	0.015	0.000600 U		0.000600		0.000720 J		0.000600		0.000600 U		0.000600		0.000600 U		0.000600	
Selenium	7782-49-2	0.05	0.05	0.00199 J		0.00110		0.00305		0.00110		0.00114 J		0.00110		0.00110 U		0.00110	
Silver	7440-22-4	0.12	0.37	NS		NS		NS		NS		NS		NS		NS			
Zinc	7440-66-6	7.3	22	NS		NS		NS		NS		NS		NS		NS			
Metals (USEPA Method 6020A) Dissolved																			
Date Prepared				6/7/2023				6/7/2023				6/7/2023				6/7/2023			
Date Analyzed				6/9/2023		6/9/2023		6/9/2023		6/9/2023		6/9/2023		6/9/2023		6/9/2023			
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)			
Antimony	7440-36-0	0.006	0.006	NS		NS		NS		NS		NS		NS		NS			
Arsenic	7440-38-2	0.01	0.01	0.00331		0.000400		0.000472 J		0.000400		0.00264		0.000400		0.00106 J		0.000455 J	
Barium	7440-39-3	2	2	NS		NS		NS		NS		NS		NS		NS			
Cadmium	7440-43-9	0.005	0.005	0.000200 U		0.000200		0.000200 U		0.000200		0.000200 U		0.000200		0.000200 U		0.000200	
Chromium	7440-47-3	0.1	0.1	NS		NS		NS		NS		NS		NS		NS			
Copper	7440-50-8	1.3	1.3	NS		NS		NS		NS		NS		NS		NS			
Lead	7439-92-1	0.015	0.015	0.000600 U		0.000600		0.000600 U		0.000600		0.000600 U		0.000600		0.000600 U		0.000600	
Selenium	7782-49-2	0.05	0.05	0.00202		0.00110		0.00292		0.00110		0.00110 U		0.00110		0.00110 U		0.00110	
Silver	7440-22-4	0.12	0.37	NS		NS		NS		NS		NS		NS		NS			
Zinc	7440-66-6	7.3	22	NS		NS		NS		NS		NS		NS		NS			
Mercury (USEPA Method 7470A)																			
Date Prepared				NS		NS		NS		NS		NS		NS		NS			
Date Analyzed				NS		NS		NS		NS		NS		NS		NS			
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)			
Mercury	7439-97-6	0.002	0.002	NS		NS		NS		NS		NS		NS		NS			
Mercury (USEPA Method 7470A) Dissolved																			
Date Prepared				NS		NS		NS		NS		NS		NS		NS			
Date Analyzed				NS		NS		NS		NS		NS		NS		NS			
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)			
Mercury	7439-97-6	0.002	0.002	NS		NS		NS		NS		NS		NS		NS			

Notes
Results in ***bold italics*** denote detections.
USEPA - United States Environmental Protection Agency.
RAL - Residential Assessment Level.
PCL - Protective Concentration Level.
SDL - Sample Detection Limit.
TRRP - Texas Risk Reduction Program.
mg/L - Milligrams per liter.
CAMU - Corrective Action Management Unit.
¹ - The Groundwater Residential Assessment Level (GW RAL) is the TRRP Tier 1 Residential ^{GW}GW_{ing} PCL applicable for Class 2 groundwater ingestion.
² - The Groundwater Critical PCL is the TRRP Tier 1 Commercial/Industrial ^{GW}GW_{ing} PCL applicable for Class 2 groundwater ingestion.

Flags and Qualifiers
U - Analyte was not detected at or above the Sample Detection Limit (SDL).
J - Result is an estimated value.

Prepared by: MEM 7/03/2023
Checked by: JDH 7/5/2023
Reviewed by: THR 7/14/23

Figures



LEGEND

Former Operating Plant Property Boundary

NOTES:

1. CAMU – CORRECTIVE ACTION MANAGEMENT UNIT

REFERENCE

1. BASE MAP - SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

FRISCO COMMUNITY DEVELOPMENT CORPORATION
FRISCO, TX

PROJECT

NORTH CAMU GROUNDWATER MONITORING

TITLE

SITE LOCATION MAP

CONSULTANT



YYYY-MM-DD 04/19/2021

PREPARED SJRS

DESIGN SJRS

REVIEW EPF

APPROVED AMF

PROJECT No.
20409062

CONTROL
20409062A003.mxd

Rev.
0

FIGURE
1



LEGEND

- Monitoring Well Location
- Approximate Extent of Disposal Area
- Former Operating Plant Property Boundary

- NOTES**
- 1. LMW-9 COLLAPSED AND WAS REPLACED WITH LMW-9R IN MARCH 2016 AND LMW-9 WAS SUBSEQUENTLY ABANDONED IN MAY 2017.
 - 2. MW-47 WAS INSTALLED ON MAY 2, 2017.
 - 3. CAMU – CORRECTIVE ACTION MANAGEMENT UNIT

REFERENCE

1. AERIAL IMAGERY - SOURCE: ESRI, MAXAR, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRIID, IGN, AND THE GIS USER COMMUNITY SITE AERIAL IMAGERY - PROVIDED BY DALLAS AERIAL SURVEY, DATED APRIL, 2017.



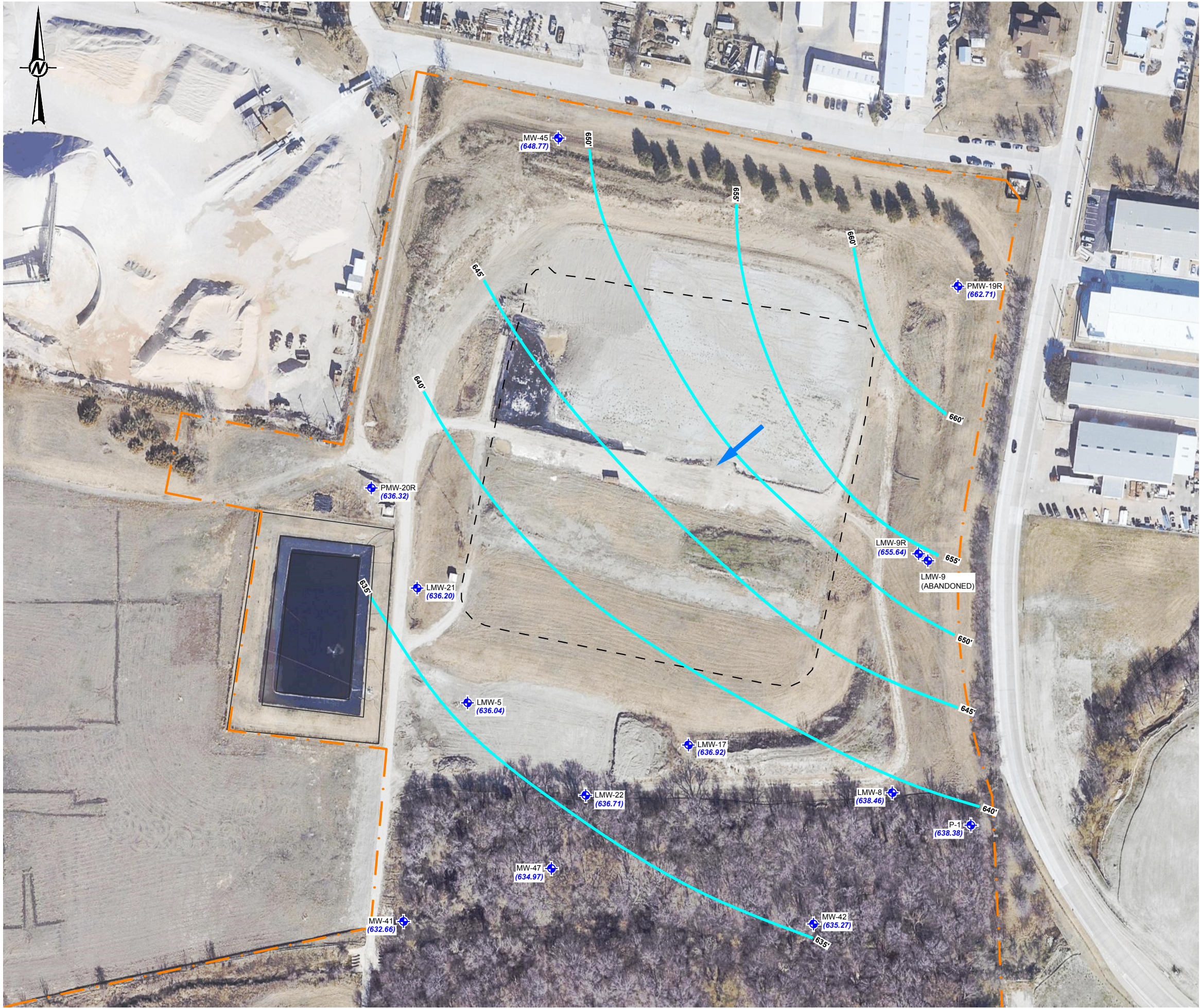
CLIENT
FRISCO COMMUNITY DEVELOPMENT CORPORATION
FRISCO, TX

PROJECT
NORTH CAMU GROUNDWATER MONITORING

TITLE
MONITORING WELL LOCATION MAP

	CONSULTANT	YYYY-MM-DD	04/19/2021
	PREPARED	SJRS	
	DESIGN	SJRS	
	REVIEW	EPF	
	APPROVED	AMF	

Path: \\gdr-gis-complex\data\office\frisco\projects - houston_2023\gl2040906205 - frisco community development corporation\PRODUCTS - NORTH CAMU GWM REPORT | File Name: 002 - Groundwater Gradient Map - Second Quarter 2023.dwg | Last Edited By: rsalazar Date: 2023-07-10 Time: 1:12:14 PM | Printed By: rsalazar Date: 2023-07-10 Time: 1:14:20 PM



LEGEND

- SITE PROPERTY BOUNDARY
- APPROXIMATE EXTENT OF DISPOSAL AREA
- MONITORING WELL LOCATION
- (636.20) GROUNDWATER ELEVATION (IN FEET ABOVE MSL)
- GROUNDWATER POTENTIOMETRIC SURFACE CONTOUR
- SURFACE WATER FLOW DIRECTION

NOTE(S)

- GROUNDWATER ELEVATIONS MEASURED MARCH 15, 2023.
- MSL = MEAN SEA LEVEL
- CONTOUR INTERVAL = 5 FEET
- LMW-9 COLLAPSED AND WAS REPLACED WITH LMW-9R IN MARCH 2016 AND LMW-9 WAS SUBSEQUENTLY ABANDONED IN MAY 2017.
- CAMU - CORRECTIVE ACTION MANAGEMENT UNIT.

7/19/2023

REFERENCE(S)

BASE MAP TAKEN FROM GOOGLE EARTH, DATED 12/10/2017.

CLIENT

FRISCO COMMUNITY DEVELOPMENT CORPORATION
FRISCO, TX

PROJECT

NORTH CAMU GROUNDWATER MONITORING

TITLE

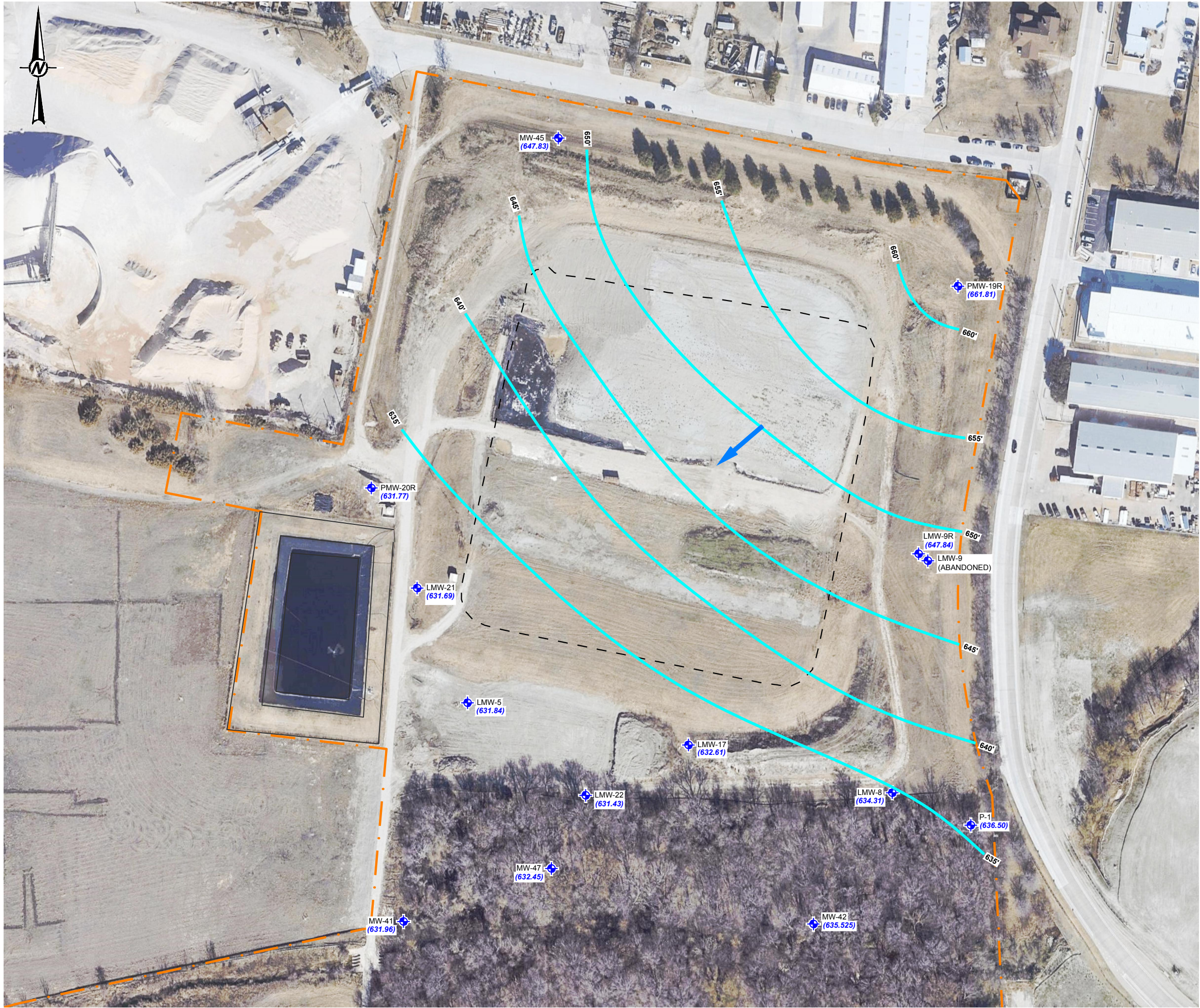
GROUNDWATER GRADIENT MAP
FIRST QUARTER 2023

	CONSULTANT	YYYY-MM-DD	2023-07-10
	DESIGNED	RS	
	PREPARED	RS	
	REVIEWED	JH	
	APPROVED	XXX	

PROJECT NO.	REV.	FIGURE
GL2040906205	A	3

1 in IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI B

Path: \\golder-gis-complex\data\office\frisco\camu\reports\GL2040906205 - frisco community development corporation\PRODUCTS\NORTH CAMU GWM REPORT\1. File Name 002 - Groundwater Gradient Map - Second Quarter 2023.dwg | Last Edited By: rsalazar Date: 2023-07-10 Time: 12:14 PM | Printed By: rsalazar Date: 2023-07-10 Time: 1:17:55 PM



LEGEND

- SITE PROPERTY BOUNDARY
- APPROXIMATE EXTENT OF DISPOSAL AREA
- MONITORING WELL LOCATION
- (636.20) GROUNDWATER ELEVATION (IN FEET ABOVE MSL)
- GROUNDWATER POTENTIOMETRIC SURFACE CONTOUR
- SURFACE WATER FLOW DIRECTION

NOTE(S)

- GROUNDWATER ELEVATIONS MEASURED MAY 30, 2023.
- MSL = MEAN SEA LEVEL
- CONTOUR INTERVAL = 5 FEET
- LMW-9 COLLAPSED AND WAS REPLACED WITH LMW-9R IN MARCH 2016 AND LMW-9 WAS SUBSEQUENTLY ABANDONED IN MAY 2017.
- CAMU - CORRECTIVE ACTION MANAGEMENT UNIT.

REFERENCE(S)

BASE MAP TAKEN FROM GOOGLE EARTH, DATED 12/10/2017.

7/19/2023

1" = 150'

CLIENT

FRISCO COMMUNITY DEVELOPMENT CORPORATION
FRISCO, TX

PROJECT

NORTH CAMU GROUNDWATER MONITORING

TITLE

GROUNDWATER GRADIENT MAP
SECOND QUARTER 2023

	CONSULTANT	YYYY-MM-DD	2023-07-10
	DESIGNED	RS	
	PREPARED	RS	
	REVIEWED	JH	
	APPROVED	XXX	

PROJECT NO.	REV.	FIGURE
GL2040906205	A	4

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI B

APPENDIX A

Monitoring Well Inspection Forms



Monitoring Well Inspection Form

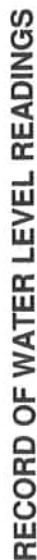
Project No.: 130-2086-05

Sheet 1 of 1

Project No.: 2040906201[illegible]

APPENDIX B

Groundwater Sampling Forms



RECORD OF WATER LEVEL READINGS

Project Name: North CAMU GW Monitoring **Location:** Frisco, TX **Project No.:** 2040906201

[illegible]



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature

70°

Weather

SUNNY

SAMPLE INFORMATION

Sample Location LMW-22

Sample No. LMW-22

Sample Date 3-16-23

Time 0840

Sample By JTB

Sample Method Peristaltic Pump

Sample Type Grab

Begin Purge @

Water Level Before Purging:

10.28

FT BTOC

TD:

2295

FT BTOC

0820

Well Volume: 12.67

FT

x 0.163 gal/FT = 2.0

gallons

@

mL/min

Volume Water Removed Before Sampling:

0.8

gallons

200

Water Level Before Sampling:

10.49

FT BTOC

Water Level After Sampling:

10.51

FT BTOC

Appearance of Sample:

clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>0825</u>	<u>0830</u>	<u>0835</u>		<u>0840</u>
Volume Discharge	gals	<u>200</u>	<u>200</u>	<u>200</u>		<u>200</u>
pH	Standard	<u>6.86</u>	<u>6.82</u>	<u>6.81</u>		<u>6.83</u>
Spec. Cond.	mS/CM	<u>1,212</u>	<u>1,239</u>	<u>1,231</u>		<u>1,234</u>
Turbidity	NTU	<u>4.71</u>	<u>4.52</u>	<u>4.56</u>		<u>4.62</u>
Temperature	°C	<u>21.57</u>	<u>21.67</u>	<u>21.71</u>		<u>21.73</u>
Pump Rate	mL/min	<u>200</u>	<u>200</u>	<u>200</u>		<u>200</u>
Water Level	FT BTOC	<u>10.42</u>	<u>10.46</u>	<u>10.49</u>		<u>10.51</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

Peristaltic Pump

Submersible Pump

Hand Pump

Air-Lift Pump

Other



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature

65°

Weather

SUNNY

SAMPLE INFORMATION

Sample Location LMW-9R

Sample No. LMW-9R

Sample Date 3-15-23

Time 1530

Sample By JTB

Sample Method Peristaltic Pump

Sample Type Grab

Begin Purge @

Water Level Before Purging:

8.67

FT BTOC

TD: 32.60

FT BTOC

@ 1510

mL/min

Well Volume: 23.93 FT x 0.163 gal/FT = 3.9 gallons

Volume Water Removed Before Sampling: 0.8 gallons

Water Level Before Sampling: 8.99 FT BTOC

Water Level After Sampling: 8.99 FT BTOC

Appearance of Sample: clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1515</u>	<u>1520</u>	<u>1525</u>		<u>1530</u>
Volume Discharge	gals	<u>0.2</u>	<u>0.4</u>	<u>0.6</u>		<u>0.8</u>
pH	Standard	<u>6.47</u>	<u>6.53</u>	<u>6.54</u>		<u>6.55</u>
Spec. Cond.	mS/CM	<u>2.964</u>	<u>2.944</u>	<u>2.946</u>		<u>2.947</u>
Turbidity	NTU	<u>5.29</u>	<u>5.36</u>	<u>5.39</u>		<u>5.39</u>
Temperature	°C	<u>21.41</u>	<u>21.31</u>	<u>21.34</u>		<u>21.34</u>
Pump Rate	mL/min	<u>200</u>	<u>200</u>	<u>200</u>		<u>200</u>
Water Level	FT BTOC	<u>8.91</u>	<u>8.96</u>	<u>8.99</u>		<u>8.99</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

☒ Peristaltic Pump

☐ Submersible Pump

☐ Hand Pump

☐ Air-Lift Pump

☐ Other



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater MonitoringProject No. : 2040906201

WEATHER CONDITIONS

Temperature 65°Weather SUNNY

SAMPLE INFORMATION

Sample Location MW-47Sample No. MW-47Sample Date 3-15-23Time 1435Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

Water Level Before Purging: 3.31

FT BTOC

TD: 17.10

FT BTOC

1415Well Volume: 13.79 FT x 0.163 gal/FT = 2.3 gallons

@

mL/min

Volume Water Removed Before Sampling: 0.8 gallons200Water Level Before Sampling: 3.57 FT BTOCWater Level After Sampling: 3.59 FT BTOCAppearance of Sample: clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1420</u>	<u>1425</u>	<u>1430</u>		<u>1435</u>
Volume Discharge	gals	<u>0.2</u>	<u>0.4</u>	<u>0.6</u>		<u>0.8</u>
pH	Standard	<u>6.89</u>	<u>6.84</u>	<u>6.86</u>		<u>6.87</u>
Spec. Cond.	mS/CM	<u>1.341</u>	<u>1.356</u>	<u>1.362</u>		<u>1.371</u>
Turbidity	NTU	<u>5.16</u>	<u>5.26</u>	<u>5.29</u>		<u>5.29</u>
Temperature	°C	<u>20.96</u>	<u>20.84</u>	<u>20.87</u>		<u>20.86</u>
Pump Rate	mL/min	<u>200</u>	<u>200</u>	<u>200</u>		<u>200</u>
Water Level	FT BTOC	<u>3.51</u>	<u>3.54</u>	<u>3.57</u>		<u>3.59</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>ND</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand PumpAir-Lift Pump
Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature 65° Weather SUNNY

SAMPLE INFORMATION

Sample Location MW-41 Sample No. MW-41
Sample Date 3-15-23 Time 1340 Sample By JTB
Sample Method Peristaltic Pump Sample Type Grab

Begin Purge @ 1320 Water Level Before Purging: 9.51 FT BTOC TD: 18.90 FT BTOC
@ 200 mL/min Well Volume: 9.39 FT x 0.163 gal/FT = 1.5 gallons
Volume Water Removed Before Sampling: 0.8 gallons
Water Level Before Sampling: 9.77 FT BTOC
Water Level After Sampling: 9.79 FT BTOC
Appearance of Sample: Clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1325</u>	<u>1330</u>	<u>1335</u>		<u>1340</u>
Volume Discharge	gals	<u>0.2</u>	<u>0.4</u>	<u>0.6</u>		<u>0.8</u>
pH	Standard	<u>6.71</u>	<u>6.77</u>	<u>6.79</u>		<u>6.81</u>
Spec. Cond.	mS/CM	<u>1.216</u>	<u>1.234</u>	<u>1.241</u>		<u>1.246</u>
Turbidity	NTU	<u>4.21</u>	<u>3.96</u>	<u>3.91</u>		<u>3.94</u>
Temperature	°C	<u>21.46</u>	<u>21.61</u>	<u>21.64</u>		<u>21.66</u>
Pump Rate	mL/min	<u>200</u>	<u>200</u>	<u>200</u>		<u>200</u>
Water Level	FT BTOC	<u>9.71</u>	<u>9.74</u>	<u>9.77</u>		<u>9.79</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: _____

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon

Peristaltic Pump
Submersible Pump
Hand Pump

Air-Lift Pump
Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature

62°

Weather

SONNY

SAMPLE INFORMATION

Sample Location PMW-20R

Sample No. PMW-20R

Sample Date 3-15-23

Time 1300

Sample By JTB

Sample Method Peristaltic Pump

Sample Type Grab

Begin Purge @

Water Level Before Purging: 11.77

FT BTOC

TD: 28.05

FT BTOC

1240

Well Volume: 16.25 FT x 0.163 gal/FT = 0.5 gallons

@ 200

mL/min

Volume Water Removed Before Sampling: 0.8 gallons

Water Level Before Sampling: 12.05

FT BTOC

Water Level After Sampling: 12.07

FT BTOC

Appearance of Sample: clean

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1245</u>	<u>1250</u>	<u>1255</u>		<u>1300</u>
Volume Discharge	gals	<u>0.2</u>	<u>0.4</u>	<u>0.6</u>		<u>0.8</u>
pH	Standard	<u>6.96</u>	<u>6.99</u>	<u>6.99</u>		<u>6.96</u>
Spec. Cond.	mS/CM	<u>1.096</u>	<u>1.045</u>	<u>1.049</u>		<u>1.046</u>
Turbidity	NTU	<u>3.24</u>	<u>3.41</u>	<u>3.46</u>		<u>3.46</u>
Temperature	°C	<u>21.41</u>	<u>21.31</u>	<u>21.34</u>		<u>21.35</u>
Pump Rate	mL/min	<u>200</u>	<u>200</u>	<u>200</u>		<u>200</u>
Water Level	FT BTOC	<u>11.96</u>	<u>12.02</u>	<u>12.05</u>		<u>12.07</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

☒ Peristaltic Pump

☐ Submersible Pump

☐ Hand Pump

☐ Air-Lift Pump

Other



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature 60°

Weather SUNNY

SAMPLE INFORMATION

Sample Location LMW-21

Sample No. LMW-21

Sample Date 3-15-23

Time 1225

Sample By JTB

Sample Method Peristaltic Pump

Sample Type Grab

Begin Purge @

Water Level Before Purging: 12.08

FT BTOC

TD: 27.90

FT BTOC

@ 1205

Well Volume: 15.82 FT x 0.163 gal/FT = 2.6 gallons

@ 200 mL/min

Volume Water Removed Before Sampling: 0.8 gallons

Water Level Before Sampling: 12.31 FT BTOC

Water Level After Sampling: 12.31 FT BTOC

Appearance of Sample: clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1210</u>	<u>1215</u>	<u>1220</u>		<u>1225</u>
Volume Discharge	gals	<u>0.2</u>	<u>0.4</u>	<u>0.6</u>		<u>0.8</u>
pH	Standard	<u>6.56</u>	<u>6.59</u>	<u>6.62</u>		<u>6.61</u>
Spec. Cond.	mS/CM	<u>1.134</u>	<u>1.149</u>	<u>1.146</u>		<u>1.147</u>
Turbidity	NTU	<u>5.26</u>	<u>5.39</u>	<u>5.36</u>		<u>5.31</u>
Temperature	°C	<u>21.36</u>	<u>21.41</u>	<u>21.42</u>		<u>21.42</u>
Pump Rate	mL/min	<u>200</u>	<u>200</u>	<u>200</u>		<u>200</u>
Water Level	FT BTOC	<u>12.21</u>	<u>12.29</u>	<u>12.31</u>		<u>12.31</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon

☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand Pump

☐ Air-Lift Pump
Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater MonitoringProject No. : 2040906201

WEATHER CONDITIONS

Temperature 50° Weather SUNNY

SAMPLE INFORMATION

Sample Location LMW-5Sample No. LMW-5/DUP-01Sample Date 3-15-23Time 1135Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

Water Level Before Purging: 10.03 FT BTOC TD: 25.10 FT BTOC1115Well Volume: 15.07 FT x 0.163 gal/FT = 2.5 gallons

@

mL/min

Volume Water Removed Before Sampling: 0.8 gallons200Water Level Before Sampling: 10.32 FT BTOCWater Level After Sampling: 10.34 FT BTOCAppearance of Sample: Clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1120</u>	<u>1125</u>	<u>1130</u>		<u>1135</u>
Volume Discharge	gals	<u>0.2</u>	<u>0.4</u>	<u>0.6</u>		<u>0.8</u>
pH	Standard	<u>7.24</u>	<u>7.29</u>	<u>7.31</u>		<u>7.30</u>
Spec. Cond.	mS/CM	<u>0.849</u>	<u>0.861</u>	<u>0.857</u>		<u>0.856</u>
Turbidity	NTU	<u>3.26</u>	<u>3.47</u>	<u>3.41</u>		<u>3.46</u>
Temperature	°C	<u>21.31</u>	<u>21.39</u>	<u>21.36</u>		<u>21.39</u>
Pump Rate	mL/min	<u>200</u>	<u>200</u>	<u>200</u>		<u>200</u>
Water Level	FT BTOC	<u>10.24</u>	<u>10.29</u>	<u>10.32</u>		<u>10.34</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	2 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	2 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: DUP-01 collected

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

☒ Peristaltic Pump☐ Submersible Pump☐ Hand Pump☐ Air-Lift Pump

Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature 50°

Weather SUNNY

SAMPLE INFORMATION

Sample Location LMW-17

Sample No. LMW-17

Sample Date 3-15-23

Time 1100

Sample By JTB

Sample Method Peristaltic Pump

Sample Type Grab

Begin Purge @

Water Level Before Purging: 11.78

FT BTOC

TD: 25.20

FT BTOC

@ 1040

Well Volume: 13.42 FT x 0.653 gal/FT = 2.2 gallons

@ 200 mL/min

Volume Water Removed Before Sampling: 0.8 gallons

Water Level Before Sampling: 12.03 FT BTOC

Water Level After Sampling: 12.03 FT BTOC

Appearance of Sample: clean

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1045</u>	<u>1050</u>	<u>1055</u>		<u>1100</u>
Volume Discharge	gals	<u>0.2</u>	<u>0.4</u>	<u>0.6</u>		<u>0.8</u>
pH	Standard	<u>6.71</u>	<u>6.75</u>	<u>6.76</u>		<u>6.77</u>
Spec. Cond.	mS/CM	<u>0.917</u>	<u>0.929</u>	<u>0.936</u>		<u>0.931</u>
Turbidity	NTU	<u>8.16</u>	<u>8.21</u>	<u>8.20</u>		<u>8.23</u>
Temperature	°C	<u>21.26</u>	<u>21.34</u>	<u>21.35</u>		<u>21.37</u>
Pump Rate	mL/min	<u>200</u>	<u>200</u>	<u>200</u>		<u>200</u>
Water Level	FT BTOC	<u>11.97</u>	<u>12.01</u>	<u>12.02</u>		<u>12.03</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon

☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand Pump

☐ Air-Lift Pump
Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater MonitoringProject No. : 2040906201**WEATHER CONDITIONS**

Temperature

48°

Weather

SUNNY**SAMPLE INFORMATION**Sample Location LMW-8Sample No. LMW-8Sample Date 3-15-23Time 1035Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

Water Level Before Purging:

10.26

FT BTOC

TD:

23.85

FT BTOC

@ 1015Well Volume: 13.59

FT

x

0.163

gal/FT

=

2.2

gallons

@

mL/min

Volume Water Removed Before Sampling:

—

gallons

Water Level Before Sampling:

10.49

FT BTOC

Water Level After Sampling:

10.51

FT BTOC

Appearance of Sample:

clean**FIELD MEASUREMENTS**

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1020</u>	<u>1025</u>	<u>1030</u>		<u>1035</u>
Volume Discharge	gals	<u>—</u>	<u>—</u>	<u>—</u>		<u>—</u>
pH	Standard	<u>6.71</u>	<u>6.77</u>	<u>6.78</u>		<u>6.79</u>
Spec. Cond.	mS/CM	<u>0.817</u>	<u>0.829</u>	<u>0.836</u>		<u>0.841</u>
Turbidity	NTU	<u>8.16</u>	<u>8.19</u>	<u>8.24</u>		<u>8.21</u>
Temperature	°C	<u>21.06</u>	<u>21.12</u>	<u>21.13</u>		<u>21.16</u>
Pump Rate	mL/min	<u>200</u>	<u>200</u>	<u>200</u>		<u>200</u>
Water Level	FT BTOC	<u>10.42</u>	<u>10.46</u>	<u>10.49</u>		<u>10.51</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

☒ Peristaltic Pump☐ Submersible Pump☐ Hand Pump☐ Air-Lift PumpOther



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature 46° Weather SUNNY

SAMPLE INFORMATION

Sample Location PMW-19R

Sample No. PMW-19R

Sample Date 3-15-23

Time 1000

Sample By JTB

Sample Method Peristaltic Pump

Sample Type Grab

Begin Purge @

Water Level Before Purging: 19.08

FT BTOC

TD: 22.50

FT BTOC

0940

Well Volume: 342

FT x 0.163 gal/FT = 0.6 gallons

@

mL/min

Volume Water Removed Before Sampling: —

gallons

250

Water Level Before Sampling: 19.41

FT BTOC

Water Level After Sampling: 19.42

FT BTOC

Appearance of Sample: clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>0945</u>	<u>0950</u>	<u>0955</u>		<u>1000</u>
Volume Discharge	gals	<u>—</u>	<u>—</u>	<u>—</u>		<u>—</u>
pH	Standard	<u>6.96</u>	<u>6.89</u>	<u>6.91</u>		<u>6.92</u>
Spec. Cond.	S/CM	<u>1.260</u>	<u>1.290</u>	<u>1.290</u>		<u>1.280</u>
Turbidity	NTU	<u>7.66</u>	<u>7.41</u>	<u>7.46</u>		<u>7.51</u>
Temperature	°C	<u>21.46</u>	<u>21.66</u>	<u>21.64</u>		<u>21.61</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>19.34</u>	<u>19.39</u>	<u>19.41</u>		<u>19.42</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: _____

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

Peristaltic Pump

Submersible Pump

Hand Pump

Air-Lift Pump

Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature 45° Weather SUNNY

SAMPLE INFORMATION

Sample Location MW-45 Sample No. MW-45/MS-01/MSD-01

Sample Date 3-15-23 Time 0925 Sample By JTB

Sample Method Peristaltic Pump Sample Type Grab

Begin Purge @ 0900 Water Level Before Purging: 12.09 FT BTOC TD: 22.50 FT BTOC

@ 250 mL/min Well Volume: 10.41 FT x 0.163 gal/FT = 1.7 gallons

Volume Water Removed Before Sampling: — gallons

Water Level Before Sampling: 12.37 FT BTOC

Water Level After Sampling: 12.38 FT BTOC

Appearance of Sample: clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>0905</u>	<u>0910</u>	<u>0915</u>	<u>0920</u>	<u>0925</u>
Volume Discharge	gals	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
pH	Standard	<u>6.59</u>	<u>6.52</u>	<u>6.51</u>	<u>6.56</u>	<u>6.58</u>
Spec. Cond.	mS/CM	<u>1320</u>	<u>1260</u>	<u>1250</u>	<u>1240</u>	<u>1240</u>
Turbidity	NTU	<u>5.26</u>	<u>5.74</u>	<u>5.79</u>	<u>5.76</u>	<u>5.77</u>
Temperature	°C	<u>21.06</u>	<u>21.21</u>	<u>21.26</u>	<u>21.29</u>	<u>21.29</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>12.26</u>	<u>12.31</u>	<u>12.34</u>	<u>12.37</u>	<u>12.38</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: MS-01/MSD-01 collected.

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

☒ Peristaltic Pump

☐ Submersible Pump

☐ Hand Pump

☐ Air-Lift Pump

☐ Other _____



RECORD OF WATER LEVEL READINGS

Project Name: Exide North CAMU GW Monitoring

Location: Frisco, TX

Project No.: 130-2086-05

[illegible]



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature

79°

Weather

SUNNY

SAMPLE INFORMATION

Sample Location LMW-22Sample No. LMW-22Sample Date 5-31-23Time 0900Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

Water Level Before Purging: 15.56

FT BTOC

TD: 23.15

FT BTOC

0835
@ 250

mL/min

Well Volume: 7.59

FT

x 0.163 gal/FT = 1.24

gallons

Volume Water Removed Before Sampling: 1.25

gallons

Water Level Before Sampling: 15.92

FT BTOC

Water Level After Sampling: 15.93

FT BTOC

Appearance of Sample: clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>0840</u>	<u>0845</u>	<u>0850</u>	<u>0855</u>	<u>0900</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>	<u>1.0</u>	<u>1.25</u>
pH	Standard	<u>6.59</u>	<u>6.67</u>	<u>6.69</u>	<u>6.71</u>	<u>6.74</u>
Spec. Cond.	mS/CM	<u>1.461</u>	<u>1.569</u>	<u>1.696</u>	<u>1.691</u>	<u>1.694</u>
Turbidity	NTU	<u>2.34</u>	<u>2.67</u>	<u>2.74</u>	<u>2.74</u>	<u>2.73</u>
Temperature	°C	<u>19.46</u>	<u>19.52</u>	<u>19.57</u>	<u>19.56</u>	<u>19.56</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>15.79</u>	<u>15.84</u>	<u>15.89</u>	<u>15.92</u>	<u>15.93</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

☒ Peristaltic Pump☐ Submersible Pump☐ Hand Pump☐ Air-Lift Pump

Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature 74° Weather SUNNY

SAMPLE INFORMATION

Sample Location LMW-9RSample No. LMW-9RSample Date 5-31-23Time 0800Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

Water Level Before Purging: 16.47

FT BTOC

TD: 32.92

FT BTOC

0735Well Volume: 16.45 FT x 0.163 gal/FT = 2.7 gallons@ 250

mL/min

Volume Water Removed Before Sampling: 1.25 gallonsWater Level Before Sampling: 16.79

FT BTOC

Water Level After Sampling: 16.79

FT BTOC

Appearance of Sample: clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>0740</u>	<u>0745</u>	<u>0750</u>	<u>0755</u>	<u>0800</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>	<u>1.00</u>	<u>1.25</u>
pH	Standard	<u>6.71</u>	<u>6.73</u>	<u>6.89</u>	<u>6.91</u>	<u>6.92</u>
Spec. Cond.	mS/CM	<u>2.512</u>	<u>2.574</u>	<u>2.586</u>	<u>2.591</u>	<u>2.597</u>
Turbidity	NTU	<u>4.21</u>	<u>4.26</u>	<u>4.29</u>	<u>4.21</u>	<u>4.83</u>
Temperature	°C	<u>20.06</u>	<u>20.21</u>	<u>20.26</u>	<u>20.27</u>	<u>20.24</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>16.71</u>	<u>16.73</u>	<u>16.75</u>	<u>16.79</u>	<u>16.79</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>ND</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand PumpAir-Lift Pump
Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature

95°

Weather

SUNNY

SAMPLE INFORMATION

Sample Location MW-47Sample No. MW-47Sample Date 5-30-23Time 1430Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

Water Level Before Purging: 5.83

FT BTOC

TD: 17.94

FT BTOC

1405Well Volume: 12.11 FT x 0.163 gal/FT = 1.97 gallons@ 250 mL/minVolume Water Removed Before Sampling: 1.25 gallonsWater Level Before Sampling: 6.21 FT BTOCWater Level After Sampling: 6.24 FT BTOCAppearance of Sample: clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1410</u>	<u>1415</u>	<u>1420</u>	<u>1425</u>	<u>1430</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>	<u>1.00</u>	<u>1.25</u>
pH	Standard	<u>6.71</u>	<u>6.77</u>	<u>6.81</u>	<u>6.84</u>	<u>6.86</u>
Spec. Cond.	mS/CM	<u>1.316</u>	<u>1.329</u>	<u>1.321</u>	<u>1.323</u>	<u>1.326</u>
Turbidity	NTU	<u>2.64</u>	<u>2.91</u>	<u>2.96</u>	<u>2.93</u>	<u>3.04</u>
Temperature	°C	<u>20.46</u>	<u>20.49</u>	<u>20.41</u>	<u>20.43</u>	<u>20.46</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>6.07</u>	<u>6.13</u>	<u>6.16</u>	<u>6.21</u>	<u>6.24</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand PumpAir-Lift Pump
Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature

94°

Weather

SUNNY

SAMPLE INFORMATION

Sample Location MW-41Sample No. MW-41Sample Date 5-30-23Time 1345Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

1325

Water Level Before Purging:

10.21

FT BTOC

TD: 19.15

FT BTOC

Well Volume: 8.94 FT x 0.163 gal/FT = 1.45 gallons@ 250

mL/min

Volume Water Removed Before Sampling: 1.00 gallons

Water Level Before Sampling:

10.56

FT BTOC

Water Level After Sampling:

10.59

FT BTOC

Appearance of Sample:

clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1330</u>	<u>1335</u>	<u>1340</u>		<u>1345</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.00</u>
pH	Standard	<u>6.83</u>	<u>6.86</u>	<u>6.87</u>		<u>6.86</u>
Spec. Cond.	mS/CM	<u>0.961</u>	<u>0.996</u>	<u>0.991</u>		<u>0.993</u>
Turbidity	NTU	<u>5.63</u>	<u>5.96</u>	<u>5.91</u>		<u>5.93</u>
Temperature	°C	<u>19.31</u>	<u>19.67</u>	<u>19.77</u>		<u>19.73</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>10.46</u>	<u>10.51</u>	<u>10.56</u>		<u>10.59</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3	RSP			
4				
5				
6				
7				
8				

REMARKS:

NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand PumpAir-Lift Pump
Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature

95°

Weather

SUNNY

SAMPLE INFORMATION

Sample Location PMW-20RSample No. PMW-20RSample Date 5-30-23Time 1310Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

Water Level Before Purging: 16.32

FT BTOC

TD: 28.26

FT BTOC

1245Well Volume: 11.94 FT x 0.163 gal/FT = 1.95 gallons@ 250 mL/minVolume Water Removed Before Sampling: 1.25 gallonsWater Level Before Sampling: 16.61 FT BTOCWater Level After Sampling: 16.62 FT BTOCAppearance of Sample: clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1250</u>	<u>1255</u>	<u>1300</u>	<u>1305</u>	<u>1310</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>	<u>1.00</u>	<u>1.25</u>
pH	Standard	<u>6.92</u>	<u>6.97</u>	<u>6.99</u>	<u>6.94</u>	<u>6.95</u>
Spec. Cond.	mS/CM	<u>1.146</u>	<u>1.177</u>	<u>1.176</u>	<u>1.162</u>	<u>1.169</u>
Turbidity	NTU	<u>3.67</u>	<u>4.09</u>	<u>4.13</u>	<u>4.06</u>	<u>4.07</u>
Temperature	°C	<u>20.34</u>	<u>20.46</u>	<u>20.41</u>	<u>20.36</u>	<u>20.38</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>16.51</u>	<u>16.56</u>	<u>16.59</u>	<u>16.61</u>	<u>16.62</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3	RSP			
4				
5				
6				
7				
8				

REMARKS:

NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand Pump☐ Air-Lift Pump
☐ Other



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature

90°

Weather

SUNNY

SAMPLE INFORMATION

Sample Location LMW-21Sample No. LMW-21Sample Date 5-30-23Time 1215Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

1155

Water Level Before Purging:

16.59

FT BTOC

TD: 29.07

FT BTOC

Well Volume: 11.48

FT

x 0.163 gal/FT = 1.9 gallons@ 250 mL/min

Volume Water Removed Before Sampling:

1.00 gallons

Water Level Before Sampling:

16.84

FT BTOC

Water Level After Sampling:

16.85

FT BTOC

Appearance of Sample:

clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1200</u>	<u>1205</u>	<u>1210</u>		<u>1215</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.00</u>
pH	Standard	<u>6.71</u>	<u>6.67</u>	<u>6.68</u>		<u>6.64</u>
Spec. Cond.	mS/CM	<u>1.556</u>	<u>1.547</u>	<u>1.544</u>		<u>1.549</u>
Turbidity	NTU	<u>8.67</u>	<u>8.77</u>	<u>8.71</u>		<u>8.72</u>
Temperature	°C	<u>20.34</u>	<u>20.41</u>	<u>20.43</u>		<u>20.44</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>16.79</u>	<u>16.81</u>	<u>16.84</u>		<u>16.85</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3	RSP			
4				
5				
6				
7				
8				

REMARKS:

NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

☒ Peristaltic Pump☐ Submersible Pump☐ Hand Pump☐ Air-Lift Pump

Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature

90°

Weather

SUNNY

SAMPLE INFORMATION

Sample Location LMW-5Sample No. LMW-5/DUP-01Sample Date 5-30-23Time 1145Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

Water Level Before Purging:

14.23

FT BTOC

TD: 25.26 FT BTOC@ 1125 mL/minWell Volume: 11.03 FT x 0.163 gal/FT = 1.8 gallonsVolume Water Removed Before Sampling: 1.00 gallonsWater Level Before Sampling: 14.65 FT BTOCWater Level After Sampling: 14.67 FT BTOCAppearance of Sample: clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1130</u>	<u>1135</u>	<u>1140</u>		<u>1145</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.00</u>
pH	Standard	<u>6.57</u>	<u>6.63</u>	<u>6.61</u>		<u>6.62</u>
Spec. Cond.	mS/CM	<u>0.791</u>	<u>0.774</u>	<u>0.777</u>		<u>0.781</u>
Turbidity	NTU	<u>5.63</u>	<u>5.77</u>	<u>5.76</u>		<u>5.77</u>
Temperature	°C	<u>19.74</u>	<u>19.79</u>	<u>19.77</u>		<u>19.76</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>14.61</u>	<u>14.64</u>	<u>14.65</u>		<u>14.67</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	2 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	2 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: DUP-01 collected

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
TeflonPeristaltic Pump
Submersible Pump
Hand PumpAir-Lift Pump
Other



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature 91° Weather SUNNY

SAMPLE INFORMATION

Sample Location LMW-17Sample No. LMW-17Sample Date 5-30-23Time 1110Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

Water Level Before Purging: 16.09 FT BTOC TD: 25.44 FT BTOC1050Well Volume: 9.35 FT x 0.653 gal/FT = 1.50 gallons@ 250 mL/minVolume Water Removed Before Sampling: 1.00 gallonsWater Level Before Sampling: 16.31 FT BTOCWater Level After Sampling: 16.32 FT BTOCAppearance of Sample: clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1055</u>	<u>1100</u>	<u>1105</u>		<u>1110</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.00</u>
pH	Standard	<u>6.74</u>	<u>6.77</u>	<u>6.74</u>		<u>6.75</u>
Spec. Cond.	mS/CM	<u>0.912</u>	<u>0.934</u>	<u>0.937</u>		<u>0.941</u>
Turbidity	NTU	<u>6.72</u>	<u>6.86</u>	<u>6.89</u>		<u>6.89</u>
Temperature	°C	<u>20.34</u>	<u>20.31</u>	<u>20.32</u>		<u>20.34</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>16.26</u>	<u>16.30</u>	<u>16.31</u>		<u>16.32</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand Pump☐ Air-Lift Pump
Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature 90°Weather SUNNY

SAMPLE INFORMATION

Sample Location LMW-8Sample No. LMW-8Sample Date 5-30-23Time 1040Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

Water Level Before Purging: 14.41 FT BTOC TD: 24.05 FT BTOC1020Well Volume: 9.64 FT x 0.163 gal/FT = 1.6 gallons@ 250

mL/min

Volume Water Removed Before Sampling: 1.00 gallonsWater Level Before Sampling: 14.77 FT BTOCWater Level After Sampling: 14.77 FT BTOCAppearance of Sample: clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1025</u>	<u>1030</u>	<u>1035</u>		<u>1040</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.00</u>
pH	Standard	<u>6.74</u>	<u>6.77</u>	<u>6.78</u>		<u>6.79</u>
Spec. Cond.	mS/CM	<u>1.139</u>	<u>1.167</u>	<u>1.174</u>		<u>1.177</u>
Turbidity	NTU	<u>5.61</u>	<u>5.13</u>	<u>5.16</u>		<u>5.21</u>
Temperature	°C	<u>20.06</u>	<u>20.07</u>	<u>20.07</u>		<u>20.05</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>14.71</u>	<u>14.76</u>	<u>14.77</u>		<u>14.77</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand Pump☐ Air-Lift Pump
Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature

90°

Weather

SUNNY

SAMPLE INFORMATION

Sample Location PMW-19RSample No. PMW-19RSample Date 5-30-23Time 1005Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

Water Level Before Purging: 19.98

FT BTOC

TD: 22.69

FT BTOC

0945Well Volume: 2.71 FT x 0.163 gal/FT = 0.45 gallons@ 250 mL/minVolume Water Removed Before Sampling: 1.00 gallonsWater Level Before Sampling: 20.48 FT BTOCWater Level After Sampling: 20.47 FT BTOCAppearance of Sample: clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>0950</u>	<u>0955</u>	<u>1000</u>		<u>1005</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.00</u>
pH	Standard	<u>6.81</u>	<u>6.77</u>	<u>6.78</u>		<u>6.79</u>
Spec. Cond.	S/CM	<u>1.346</u>	<u>1.351</u>	<u>1.353</u>		<u>1.357</u>
Turbidity	NTU	<u>5.63</u>	<u>5.71</u>	<u>5.73</u>		<u>5.71</u>
Temperature	°C	<u>19.67</u>	<u>19.72</u>	<u>19.73</u>		<u>19.74</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>20.39</u>	<u>20.46</u>	<u>20.48</u>		<u>20.47</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>N/D</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

☒ Peristaltic Pump☐ Submersible Pump☐ Hand Pump☐ Air-Lift Pump

Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature 89° Weather cloudy

SAMPLE INFORMATION

Sample Location MW-45 Sample No. MW-45/MS-01/MSD-01
Sample Date 5-30-23 Time 0930 Sample By JTB
Sample Method Peristaltic Pump Sample Type Grab

Begin Purge @ 0905 Water Level Before Purging: 13.03 FT BTOC TD: 22.57 FT BTOC
Well Volume: 9.54 FT x 0.163 gal/FT = 1.60 gallons
@ 0905 mL/min Volume Water Removed Before Sampling: 1.25 gallons
250 Water Level Before Sampling: 13.40 FT BTOC
Water Level After Sampling: 13.41 FT BTOC
Appearance of Sample: clear

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>0910</u>	<u>0915</u>	<u>0920</u>	<u>0925</u>	<u>0930</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>	<u>1.0</u>	<u>1.25</u>
pH	Standard	<u>6.74</u>	<u>7.03</u>	<u>7.06</u>	<u>7.09</u>	<u>7.07</u>
Spec. Cond.	mS/CM	<u>0.867</u>	<u>0.874</u>	<u>0.879</u>	<u>0.886</u>	<u>0.891</u>
Turbidity	NTU	<u>5.26</u>	<u>3.41</u>	<u>3.47</u>	<u>3.33</u>	<u>3.36</u>
Temperature	°C	<u>19.74</u>	<u>19.84</u>	<u>19.86</u>	<u>19.87</u>	<u>19.88</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>13.27</u>	<u>13.34</u>	<u>13.37</u>	<u>13.40</u>	<u>13.41</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: MS-01/MSD-01 collected.

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon

☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand Pump

☐ Air-Lift Pump
Other _____

APPENDIX C

**Groundwater Laboratory Analytical
Results**



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

March 26, 2023

Rahel Pommerenke
WSP Golder
701 Emerson Road Suite 250
Creve Coeur, MO 63141

Work Order: **HS23031023**

Laboratory Results for: **Frisco CDC GW North CAMU**

Dear Rahel Pommerenke,

ALS Environmental received 12 sample(s) on Mar 17, 2023 for the analysis presented in the following report.

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

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

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

Sincerely,

Generated By: JUMOKE.LAWAL

Dane J. Wacasey

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

**TRRP Laboratory Data
Package Cover Page**

This data package consists of all or some of the following as applicable:

This signature page, the laboratory review checklist, and the following reportable data:

- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC Chapter 5,
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits.
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 Other problems or anomalies.
The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

**TRRP Laboratory Data
Package Cover Page**

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory have been identified by the laboratory in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☒ [NA] This laboratory meets an exception under 30 TAC §25.6 and was last inspected by ☐ TCEQ or ☐ _____ on (enter date of last inspection). Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.



Dane J. Wacasey

Laboratory Review Checklist: Reportable Data							
Laboratory Name: ALS Laboratory Group				LRC Date:03/26/2023			
Project Name: Frisco CDC GW North CAMU				Laboratory Job Number: HS23031023			
Reviewer Name: Dane Wacasey				Prep Batch Number(s): 191050,191186,191187,191223,191242			
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW-846 Method 5035?			X		
		If required for the project, TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				
		Was applicable and available technology used to lower the SDL and minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Laboratory Review Checklist: Supporting Data							
Laboratory Name: ALS Laboratory Group				LRC Date: 03/26/2023			
Project Name: Frisco CDC GW North CAMU				Laboratory Job Number: HS23031023			
Reviewer Name: Dane Wacasey				Prep Batch Number(s): 191050,191186,191187,191223,191242			
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB)					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		1
S3	O	Mass spectral tuning:					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS):					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs):					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results:					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports:					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs):					
		Are laboratory SOPs current and on file for each method performed?	X				

Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable); NA = Not Applicable; NR = Not Reviewed; R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports	
Laboratory Name: ALS Laboratory Group	LRC Date: 03/26/2023
Project Name: Frisco CDC GW North CAMU	Laboratory Job Number: HS23031023
Reviewer Name: Dane Wacasey	Prep Batch Number(s): 191050,191186,191187,191223,191242
ER#⁵	Description
1	See Run Log and CCB Exceptions
Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable); NA = Not Applicable; NR = Not Reviewed; R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).	

FORM 13 - ANALYSIS RUN LOG

Client: WSP Golder

Run ID:ICPMS06_430778

Project: Frisco CDC GW North CAMU

Instrument:ICPMS06

WorkOrder: HS23031023

Method:SW6020A

Start Date: 23-Mar-2023

End Date: 24-Mar-2023

Sample No.	D/F	Time	FileID	Analytes
ICV	1	23-Mar-2023 11:16	032_ICV.d	AG AS BA CD CR CU PB SB SE ZN
LLICV2	1	23-Mar-2023 11:18	033LCV2.d	AG AS BA CD CR CU PB SB SE ZN
LLICV5	1	23-Mar-2023 11:20	034LCV5.d	AG AS BA CD CR CU PB SB SE ZN
ICB	1	23-Mar-2023 11:22	035_ICB.d	AG AS BA CD CR CU PB SB SE ZN
ICSA	1	23-Mar-2023 11:28	037ICSA.d	AG AS BA CD CR CU PB SB SE ZN
ICSAB	1	23-Mar-2023 11:30	038ICSB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 1	1	23-Mar-2023 11:38	041_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 1	1	23-Mar-2023 11:40	042_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 2	1	23-Mar-2023 12:03	053_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 2	1	23-Mar-2023 12:05	054_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 3	1	23-Mar-2023 12:25	063_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 3	1	23-Mar-2023 12:27	064_CCB.d	AG AS BA CD CR CU PB SB SE ZN
ICCV 4	1	23-Mar-2023 13:19	086_ICV.d	AG AS BA CD CR CU PB SB SE ZN
LLCCV2	1	23-Mar-2023 13:21	087LCV2.d	AG AS BA CD CR CU PB SB SE ZN
LLCCV5	1	23-Mar-2023 13:23	088LCV5.d	AG AS BA CD CR CU PB SB SE ZN
ICCB 4	1	23-Mar-2023 13:25	089_ICB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 5	1	23-Mar-2023 13:30	091_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 5	1	23-Mar-2023 13:32	092_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 6	1	23-Mar-2023 13:56	103_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 6	1	23-Mar-2023 13:58	104_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 7	1	23-Mar-2023 14:21	115_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 7	1	23-Mar-2023 14:23	116_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 8	1	23-Mar-2023 14:43	125_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 8	1	23-Mar-2023 14:45	126_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 9	1	23-Mar-2023 15:09	137_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 9	1	23-Mar-2023 15:11	138_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 10	1	23-Mar-2023 15:32	148_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 10	1	23-Mar-2023 15:34	149_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 11	1	23-Mar-2023 16:07	160_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 11	1	23-Mar-2023 16:09	161_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 12	1	23-Mar-2023 16:37	172_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 12	1	23-Mar-2023 16:39	173_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 13	1	23-Mar-2023 17:03	184_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 13	1	23-Mar-2023 17:05	185_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 14	1	23-Mar-2023 17:31	196_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 14	1	23-Mar-2023 17:33	197_CCB.d	AG AS BA CD CR CU PB SB SE ZN
MBLK-191223	1	23-Mar-2023 17:35	198SMPL.d	AG AS BA CD CR CU PB SB SE ZN
LCS-191223	1	23-Mar-2023 17:37	199SMPL.d	AG AS BA CD CR CU PB SB SE ZN
MW-45	1	23-Mar-2023 17:39	200SMPL.d	AG AS BA CD CR CU PB SB SE ZN
MW-45SD	5	23-Mar-2023 17:41	201SMPL.d	AG AS BA CD CR CU PB SB SE ZN
MW-45MS	1	23-Mar-2023 17:43	202SMPL.d	AG AS BA CD CR CU PB SB SE ZN
MW-45MSD	1	23-Mar-2023 17:45	203SMPL.d	AG AS BA CD CR CU PB SB SE ZN
MW-45PDS	1	23-Mar-2023 17:47	204SMPL.d	AG AS BA CD CR CU PB SB SE ZN
PMW-19R	1	23-Mar-2023 17:49	205SMPL.d	AG AS BA CD CR CU PB SB SE ZN
LMW-8	1	23-Mar-2023 17:51	206SMPL.d	AG AS BA CD CR CU PB SB SE ZN
CCV 15	1	23-Mar-2023 17:56	208_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 15	1	23-Mar-2023 17:58	209_CCB.d	AG AS BA CD CR CU PB SB SE ZN
LMW-17	1	23-Mar-2023 18:01	210SMPL.d	AG AS BA CD CR CU PB SB SE ZN
LMW-5	1	23-Mar-2023 18:03	211SMPL.d	AG AS BA CD CR CU PB SB SE ZN
LMW-21	1	23-Mar-2023 18:05	212SMPL.d	AG AS BA CD CR CU PB SB SE ZN

FORM 13 - ANALYSIS RUN LOG

Client: WSP Golder

Run ID: ICPMS06_430778

Project: Frisco CDC GW North CAMU

Instrument: ICPMS06

WorkOrder: HS23031023

Method: SW6020A

Start Date: 23-Mar-2023

End Date: 24-Mar-2023

Sample No.	D/F	Time	FileID	Analytes
PMW-20R	1	23-Mar-2023 18:07	213SMPL.d	AG AS BA CD CR CU PB SB SE ZN
MW-41	1	23-Mar-2023 18:09	214SMPL.d	AG AS BA CD CR CU PB SB SE ZN
MW-47	1	23-Mar-2023 18:11	215SMPL.d	AG AS BA CD CR CU PB SB SE ZN
LMW-9R	1	23-Mar-2023 18:13	216SMPL.d	AG AS BA CD CR CU PB SB SE ZN
LMW-22	1	23-Mar-2023 18:15	217SMPL.d	AG AS BA CD CR CU PB SB SE ZN
DUP-01	1	23-Mar-2023 18:17	218SMPL.d	AG AS BA CD CR CU PB SB SE ZN
CCV 16	1	23-Mar-2023 18:21	220_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 16	1	23-Mar-2023 18:23	221_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 17	1	23-Mar-2023 18:50	232_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 17	1	23-Mar-2023 18:52	233_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 18	1	23-Mar-2023 19:13	238_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 18	1	23-Mar-2023 19:15	239_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 19	1	23-Mar-2023 19:31	247_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 19	1	23-Mar-2023 19:33	248_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 20	1	23-Mar-2023 19:51	257_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 20	1	23-Mar-2023 19:53	258_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 21	1	23-Mar-2023 20:11	267_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 21	1	23-Mar-2023 20:13	268_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 22	1	23-Mar-2023 20:29	276_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 22	1	23-Mar-2023 20:31	277_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 23	1	23-Mar-2023 20:50	286_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 23	1	23-Mar-2023 20:52	287_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 24	1	23-Mar-2023 21:14	298_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 24	1	23-Mar-2023 21:16	299_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 25	1	23-Mar-2023 21:36	308_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 25	1	23-Mar-2023 21:38	309_CCB.d	AG AS BA CD CR CU PB SB SE ZN
MBLK-191242	1	23-Mar-2023 21:40	310SMPL.d	AG AS BA CD CR CU PB SB SE ZN
MBLKF1-191242	1	23-Mar-2023 21:42	311SMPL.d	AG AS BA CD CR CU PB SB SE ZN
LCS-191242	1	23-Mar-2023 21:44	312SMPL.d	AG AS BA CD CR CU PB SB SE ZN
MW-45	1	23-Mar-2023 21:46	313SMPL.d	AG AS BA CD CR CU PB SB SE ZN
MW-45SD	5	23-Mar-2023 21:48	314SMPL.d	AG AS BA CD CR CU PB SB SE ZN
MW-45MS	1	23-Mar-2023 21:50	315SMPL.d	AG AS BA CD CR CU PB SB SE ZN
MW-45MSD	1	23-Mar-2023 21:52	316SMPL.d	AG AS BA CD CR CU PB SB SE ZN
MW-45PDS	1	23-Mar-2023 21:54	317SMPL.d	AG AS BA CD CR CU PB SB SE ZN
CCV 26	1	23-Mar-2023 21:56	318_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 26	1	23-Mar-2023 21:58	319_CCB.d	AG AS BA CD CR CU PB SB SE ZN
PMW-19R	1	23-Mar-2023 22:00	320SMPL.d	AG AS BA CD CR CU PB SB SE ZN
LMW-8	1	23-Mar-2023 22:02	321SMPL.d	AG AS BA CD CR CU PB SB SE ZN
LMW-17	1	23-Mar-2023 22:04	322SMPL.d	AG AS BA CD CR CU PB SB SE ZN
LMW-5	1	23-Mar-2023 22:06	323SMPL.d	AG AS BA CD CR CU PB SB SE ZN
LMW-21	1	23-Mar-2023 22:08	324SMPL.d	AG AS BA CD CR CU PB SB SE ZN
PMW-20R	1	23-Mar-2023 22:10	325SMPL.d	AG AS BA CD CR CU PB SB SE ZN
MW-41	1	23-Mar-2023 22:12	326SMPL.d	AG AS BA CD CR CU PB SB SE ZN
MW-47	1	23-Mar-2023 22:14	327SMPL.d	AG AS BA CD CR CU PB SB SE ZN
LMW-9R	1	23-Mar-2023 22:16	328SMPL.d	AG AS BA CD CR CU PB SB SE ZN
LMW-22	1	23-Mar-2023 22:18	329SMPL.d	AG AS BA CD CR CU PB SB SE ZN
CCV 27	1	23-Mar-2023 22:20	330_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 27	1	23-Mar-2023 22:22	331_CCB.d	AG AS BA CD CR CU PB SB SE ZN
DUP-01	1	23-Mar-2023 22:24	332SMPL.d	AG AS BA CD CR CU PB SB SE ZN
CCV 28	1	23-Mar-2023 22:35	338_CCV.d	AG AS BA CD CR CU PB SB SE ZN

FORM 13 - ANALYSIS RUN LOG

Client: WSP Golder

Run ID:ICPMS06_430778

Project: Frisco CDC GW North CAMU

Instrument:ICPMS06

WorkOrder: HS23031023

Method:SW6020A

Start Date: 23-Mar-2023

End Date: 24-Mar-2023

Sample No.	D/F	Time	FileID	Analytes
CCB 28	1	23-Mar-2023 22:37	339_CCB.d	AG AS BA CD CR CU PB SB SE ZN
ICCV 29	1	23-Mar-2023 23:13	353_ICV.d	AG AS BA CD CR CU PB SB SE ZN
LLCCV2	1	23-Mar-2023 23:15	354LCV2.d	AG AS BA CD CR CU PB SB SE ZN
LLCCV5	1	23-Mar-2023 23:17	355LCV5.d	AG AS BA CD CR CU PB SB SE ZN
ICCB 29	1	23-Mar-2023 23:19	356_ICB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 30	1	23-Mar-2023 23:23	358_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 30	1	23-Mar-2023 23:25	359_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 31	1	23-Mar-2023 23:43	368_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 31	1	23-Mar-2023 23:45	369_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 32	1	23-Mar-2023 23:55	374_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 32	1	23-Mar-2023 23:57	375_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 33	1	24-Mar-2023 00:14	384_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 33	1	24-Mar-2023 00:16	385_CCB.d	AG AS BA CD CR CU PB SB SE ZN
CCV 34	1	24-Mar-2023 00:34	394_CCV.d	AG AS BA CD CR CU PB SB SE ZN
CCB 34	1	24-Mar-2023 00:36	395_CCB.d	AG AS BA CD CR CU PB SB SE ZN
LLCCV2	1	24-Mar-2023 00:38	396LCV2.d	AG AS BA CD CR CU PB SB SE ZN
LLCCV5	1	24-Mar-2023 00:40	397LCV5.d	AG AS BA CD CR CU PB SB SE ZN
ICSA	1	24-Mar-2023 00:42	398ICSA.d	AG AS BA CD CR CU PB SB SE ZN
ICSAB	1	24-Mar-2023 00:44	399ICSB.d	AG AS BA CD CR CU PB SB SE ZN

CCB EXCEPTIONS REPORT

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

Run ID:ICPMS06_430778
Instrument:ICPMS06
Method:SW6020A

ICCB 4	Date: 23-Mar-2023 13:25	Seq: 7190937	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Chromium	0.421	0.4	4	
CCB 6	Date: 23-Mar-2023 13:58	Seq: 7190952	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Chromium	0.426	0.4	4	
CCB 7	Date: 23-Mar-2023 14:23	Seq: 7191118	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Chromium	0.457	0.4	4	
CCB 8	Date: 23-Mar-2023 14:45	Seq: 7191250	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Chromium	0.426	0.4	4	
CCB 9	Date: 23-Mar-2023 15:11	Seq: 7191297	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Chromium	0.608	0.4	4	
CCB 10	Date: 23-Mar-2023 15:34	Seq: 7191498	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Chromium	0.497	0.4	4	
CCB 11	Date: 23-Mar-2023 16:09	Seq: 7191605	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Chromium	0.59	0.4	4	
CCB 12	Date: 23-Mar-2023 16:39	Seq: 7191711	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Chromium	0.406	0.4	4	
CCB 13	Date: 23-Mar-2023 17:05	Seq: 7191810	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Chromium	0.416	0.4	4	
CCB 15	Date: 23-Mar-2023 17:58	Seq: 7191851	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Chromium	0.464	0.4	4	
CCB 18	Date: 23-Mar-2023 19:15	Seq: 7192479	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Chromium	0.468	0.4	4	
CCB 34	Date: 24-Mar-2023 00:36	Seq: 7192634	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Chromium	-1.175	0.4	4	

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Work Order: HS23031023

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23031023-01	MW-45	Groundwater		15-Mar-2023 09:25	17-Mar-2023 10:00	☐
HS23031023-02	PMW-19R	Groundwater		15-Mar-2023 10:00	17-Mar-2023 10:00	☐
HS23031023-03	LMW-8	Groundwater		15-Mar-2023 10:35	17-Mar-2023 10:00	☐
HS23031023-04	LMW-17	Groundwater		15-Mar-2023 11:00	17-Mar-2023 10:00	☐
HS23031023-05	LMW-5	Groundwater		15-Mar-2023 11:35	17-Mar-2023 10:00	☐
HS23031023-06	LMW-21	Groundwater		15-Mar-2023 12:25	17-Mar-2023 10:00	☐
HS23031023-07	PMW-20R	Groundwater		15-Mar-2023 13:00	17-Mar-2023 10:00	☐
HS23031023-08	MW-41	Groundwater		15-Mar-2023 13:40	17-Mar-2023 10:00	☐
HS23031023-09	MW-47	Groundwater		15-Mar-2023 14:35	17-Mar-2023 10:00	☐
HS23031023-10	LMW-9R	Groundwater		15-Mar-2023 15:30	17-Mar-2023 10:00	☐
HS23031023-11	LMW-22	Groundwater		16-Mar-2023 08:40	17-Mar-2023 10:00	☐
HS23031023-12	DUP-01	Groundwater		15-Mar-2023 11:35	17-Mar-2023 10:00	☐

Client: WSP Golder
 Project: Frisco CDC GW North CAMU
 Sample ID: MW-45
 Collection Date: 15-Mar-2023 09:25

ANALYTICAL REPORT

WorkOrder:HS23031023
 Lab ID:HS23031023-01
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 17:39
Arsenic	0.000533	J	0.000400	0.00200	mg/L	1	23-Mar-2023 17:39
Barium	0.0727		0.00190	0.00400	mg/L	1	23-Mar-2023 17:39
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 17:39
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 17:39
Copper	0.00136	J	0.00100	0.00200	mg/L	1	23-Mar-2023 17:39
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 17:39
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 17:39
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 17:39
Zinc	U		0.00200	0.00400	mg/L	1	23-Mar-2023 17:39
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 21:46
Arsenic	0.000445	J	0.000400	0.00200	mg/L	1	23-Mar-2023 21:46
Barium	0.0687		0.00190	0.00400	mg/L	1	23-Mar-2023 21:46
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 21:46
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 21:46
Copper	0.00168	J	0.00100	0.00200	mg/L	1	23-Mar-2023 21:46
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 21:46
Selenium	0.00137	J	0.00110	0.00200	mg/L	1	23-Mar-2023 21:46
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 21:46
Zinc	0.00213	J	0.00200	0.00400	mg/L	1	23-Mar-2023 21:46
MERCURY BY SW7470A		Method:SW7470A		Prep:SW7470A / 22-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	22-Mar-2023 16:50
DISSOLVED MERCURY BY SW7470A		Method:SW7470A (dissolved)		Prep:SW7470A / 20-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	20-Mar-2023 16:11

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

Client: WSP Golder
 Project: Frisco CDC GW North CAMU
 Sample ID: PMW-19R
 Collection Date: 15-Mar-2023 10:00

ANALYTICAL REPORT

WorkOrder:HS23031023
 Lab ID:HS23031023-02
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	0.000413	J	0.000400	0.00200	mg/L	1	23-Mar-2023 17:49
Arsenic	0.000626	J	0.000400	0.00200	mg/L	1	23-Mar-2023 17:49
Barium	0.0529		0.00190	0.00400	mg/L	1	23-Mar-2023 17:49
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 17:49
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 17:49
Copper	0.00153	J	0.00100	0.00200	mg/L	1	23-Mar-2023 17:49
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 17:49
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 17:49
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 17:49
Zinc	0.00413		0.00200	0.00400	mg/L	1	23-Mar-2023 17:49
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 22:00
Arsenic	U		0.000400	0.00200	mg/L	1	23-Mar-2023 22:00
Barium	0.0572		0.00190	0.00400	mg/L	1	23-Mar-2023 22:00
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:00
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 22:00
Copper	0.00117	J	0.00100	0.00200	mg/L	1	23-Mar-2023 22:00
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 22:00
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 22:00
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:00
Zinc	U		0.00200	0.00400	mg/L	1	23-Mar-2023 22:00
MERCURY BY SW7470A		Method:SW7470A		Prep:SW7470A / 22-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	22-Mar-2023 17:02
DISSOLVED MERCURY BY SW7470A		Method:SW7470A (dissolved)		Prep:SW7470A / 20-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	20-Mar-2023 16:16

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

Client: WSP Golder
 Project: Frisco CDC GW North CAMU
 Sample ID: LMW-8
 Collection Date: 15-Mar-2023 10:35

ANALYTICAL REPORT

WorkOrder:HS23031023
 Lab ID:HS23031023-03
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 17:51
Arsenic	0.00295		0.000400	0.00200	mg/L	1	23-Mar-2023 17:51
Barium	0.0686		0.00190	0.00400	mg/L	1	23-Mar-2023 17:51
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 17:51
Chromium	0.00855		0.000400	0.00400	mg/L	1	23-Mar-2023 17:51
Copper	0.00381		0.00100	0.00200	mg/L	1	23-Mar-2023 17:51
Lead	0.00347		0.000600	0.00200	mg/L	1	23-Mar-2023 17:51
Selenium	0.00690		0.00110	0.00200	mg/L	1	23-Mar-2023 17:51
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 17:51
Zinc	0.0188		0.00200	0.00400	mg/L	1	23-Mar-2023 17:51
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 22:02
Arsenic	0.000507	J	0.000400	0.00200	mg/L	1	23-Mar-2023 22:02
Barium	0.0436		0.00190	0.00400	mg/L	1	23-Mar-2023 22:02
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:02
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 22:02
Copper	U		0.00100	0.00200	mg/L	1	23-Mar-2023 22:02
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 22:02
Selenium	0.00725		0.00110	0.00200	mg/L	1	23-Mar-2023 22:02
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:02
Zinc	U		0.00200	0.00400	mg/L	1	23-Mar-2023 22:02
MERCURY BY SW7470A		Method:SW7470A		Prep:SW7470A / 22-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	22-Mar-2023 17:04
DISSOLVED MERCURY BY SW7470A		Method:SW7470A (dissolved)		Prep:SW7470A / 20-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	20-Mar-2023 16:18

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

Client: WSP Golder
 Project: Frisco CDC GW North CAMU
 Sample ID: LMW-17
 Collection Date: 15-Mar-2023 11:00

ANALYTICAL REPORT

WorkOrder:HS23031023
 Lab ID:HS23031023-04
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 18:01
Arsenic	0.000865	J	0.000400	0.00200	mg/L	1	23-Mar-2023 18:01
Barium	0.0801		0.00190	0.00400	mg/L	1	23-Mar-2023 18:01
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:01
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 18:01
Copper	0.00243		0.00100	0.00200	mg/L	1	23-Mar-2023 18:01
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 18:01
Selenium	0.00113	J	0.00110	0.00200	mg/L	1	23-Mar-2023 18:01
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:01
Zinc	0.00371	J	0.00200	0.00400	mg/L	1	23-Mar-2023 18:01
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 22:04
Arsenic	0.000871	J	0.000400	0.00200	mg/L	1	23-Mar-2023 22:04
Barium	0.0789		0.00190	0.00400	mg/L	1	23-Mar-2023 22:04
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:04
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 22:04
Copper	U		0.00100	0.00200	mg/L	1	23-Mar-2023 22:04
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 22:04
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 22:04
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:04
Zinc	U		0.00200	0.00400	mg/L	1	23-Mar-2023 22:04
MERCURY BY SW7470A		Method:SW7470A		Prep:SW7470A / 22-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	22-Mar-2023 17:06
DISSOLVED MERCURY BY SW7470A		Method:SW7470A (dissolved)		Prep:SW7470A / 20-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	20-Mar-2023 16:19

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

Client: WSP Golder
 Project: Frisco CDC GW North CAMU
 Sample ID: LMW-5
 Collection Date: 15-Mar-2023 11:35

ANALYTICAL REPORT

WorkOrder:HS23031023
 Lab ID:HS23031023-05
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 18:03
Arsenic	0.000670	J	0.000400	0.00200	mg/L	1	23-Mar-2023 18:03
Barium	0.0571		0.00190	0.00400	mg/L	1	23-Mar-2023 18:03
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:03
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 18:03
Copper	0.00155	J	0.00100	0.00200	mg/L	1	23-Mar-2023 18:03
Lead	0.00135	J	0.000600	0.00200	mg/L	1	23-Mar-2023 18:03
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 18:03
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:03
Zinc	U		0.00200	0.00400	mg/L	1	23-Mar-2023 18:03
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 22:06
Arsenic	0.000510	J	0.000400	0.00200	mg/L	1	23-Mar-2023 22:06
Barium	0.0509		0.00190	0.00400	mg/L	1	23-Mar-2023 22:06
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:06
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 22:06
Copper	0.00112	J	0.00100	0.00200	mg/L	1	23-Mar-2023 22:06
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 22:06
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 22:06
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:06
Zinc	U		0.00200	0.00400	mg/L	1	23-Mar-2023 22:06
MERCURY BY SW7470A		Method:SW7470A		Prep:SW7470A / 22-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	22-Mar-2023 17:08
DISSOLVED MERCURY BY SW7470A		Method:SW7470A (dissolved)		Prep:SW7470A / 20-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	20-Mar-2023 16:21

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

Client: WSP Golder
 Project: Frisco CDC GW North CAMU
 Sample ID: LMW-21
 Collection Date: 15-Mar-2023 12:25

ANALYTICAL REPORT

WorkOrder:HS23031023
 Lab ID:HS23031023-06
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 18:05
Arsenic	0.000621	J	0.000400	0.00200	mg/L	1	23-Mar-2023 18:05
Barium	0.0295		0.00190	0.00400	mg/L	1	23-Mar-2023 18:05
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:05
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 18:05
Copper	0.00299		0.00100	0.00200	mg/L	1	23-Mar-2023 18:05
Lead	0.00126	J	0.000600	0.00200	mg/L	1	23-Mar-2023 18:05
Selenium	0.00563		0.00110	0.00200	mg/L	1	23-Mar-2023 18:05
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:05
Zinc	0.00348	J	0.00200	0.00400	mg/L	1	23-Mar-2023 18:05
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 22:08
Arsenic	0.000648	J	0.000400	0.00200	mg/L	1	23-Mar-2023 22:08
Barium	0.0328		0.00190	0.00400	mg/L	1	23-Mar-2023 22:08
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:08
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 22:08
Copper	U		0.00100	0.00200	mg/L	1	23-Mar-2023 22:08
Lead	0.00110	J	0.000600	0.00200	mg/L	1	23-Mar-2023 22:08
Selenium	0.00715		0.00110	0.00200	mg/L	1	23-Mar-2023 22:08
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:08
Zinc	U		0.00200	0.00400	mg/L	1	23-Mar-2023 22:08
MERCURY BY SW7470A		Method:SW7470A		Prep:SW7470A / 22-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	22-Mar-2023 17:09
DISSOLVED MERCURY BY SW7470A		Method:SW7470A (dissolved)		Prep:SW7470A / 20-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	20-Mar-2023 16:23

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

Client: WSP Golder
 Project: Frisco CDC GW North CAMU
 Sample ID: PMW-20R
 Collection Date: 15-Mar-2023 13:00

ANALYTICAL REPORT

WorkOrder:HS23031023
 Lab ID:HS23031023-07
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 18:07
Arsenic	U		0.000400	0.00200	mg/L	1	23-Mar-2023 18:07
Barium	0.0562		0.00190	0.00400	mg/L	1	23-Mar-2023 18:07
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:07
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 18:07
Copper	0.00145	J	0.00100	0.00200	mg/L	1	23-Mar-2023 18:07
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 18:07
Selenium	0.00233		0.00110	0.00200	mg/L	1	23-Mar-2023 18:07
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:07
Zinc	U		0.00200	0.00400	mg/L	1	23-Mar-2023 18:07
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 22:10
Arsenic	U		0.000400	0.00200	mg/L	1	23-Mar-2023 22:10
Barium	0.0537		0.00190	0.00400	mg/L	1	23-Mar-2023 22:10
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:10
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 22:10
Copper	U		0.00100	0.00200	mg/L	1	23-Mar-2023 22:10
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 22:10
Selenium	0.00238		0.00110	0.00200	mg/L	1	23-Mar-2023 22:10
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:10
Zinc	U		0.00200	0.00400	mg/L	1	23-Mar-2023 22:10
MERCURY BY SW7470A		Method:SW7470A		Prep:SW7470A / 22-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	22-Mar-2023 17:14
DISSOLVED MERCURY BY SW7470A		Method:SW7470A (dissolved)		Prep:SW7470A / 20-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	20-Mar-2023 16:25

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

Client: WSP Golder
 Project: Frisco CDC GW North CAMU
 Sample ID: MW-41
 Collection Date: 15-Mar-2023 13:40

ANALYTICAL REPORT

WorkOrder:HS23031023
 Lab ID:HS23031023-08
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 18:09
Arsenic	0.000539	J	0.000400	0.00200	mg/L	1	23-Mar-2023 18:09
Barium	0.0686		0.00190	0.00400	mg/L	1	23-Mar-2023 18:09
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:09
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 18:09
Copper	0.00124	J	0.00100	0.00200	mg/L	1	23-Mar-2023 18:09
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 18:09
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 18:09
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:09
Zinc	0.00222	J	0.00200	0.00400	mg/L	1	23-Mar-2023 18:09
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 22:12
Arsenic	0.000517	J	0.000400	0.00200	mg/L	1	23-Mar-2023 22:12
Barium	0.0711		0.00190	0.00400	mg/L	1	23-Mar-2023 22:12
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:12
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 22:12
Copper	U		0.00100	0.00200	mg/L	1	23-Mar-2023 22:12
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 22:12
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 22:12
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:12
Zinc	U		0.00200	0.00400	mg/L	1	23-Mar-2023 22:12
MERCURY BY SW7470A		Method:SW7470A		Prep:SW7470A / 22-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	22-Mar-2023 17:40
DISSOLVED MERCURY BY SW7470A		Method:SW7470A (dissolved)		Prep:SW7470A / 20-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	20-Mar-2023 16:26

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

Client: WSP Golder
 Project: Frisco CDC GW North CAMU
 Sample ID: MW-47
 Collection Date: 15-Mar-2023 14:35

ANALYTICAL REPORT

WorkOrder:HS23031023
 Lab ID:HS23031023-09
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 18:11
Arsenic	0.00279		0.000400	0.00200	mg/L	1	23-Mar-2023 18:11
Barium	0.0560		0.00190	0.00400	mg/L	1	23-Mar-2023 18:11
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:11
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 18:11
Copper	U		0.00100	0.00200	mg/L	1	23-Mar-2023 18:11
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 18:11
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 18:11
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:11
Zinc	U		0.00200	0.00400	mg/L	1	23-Mar-2023 18:11
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 22:14
Arsenic	0.00247		0.000400	0.00200	mg/L	1	23-Mar-2023 22:14
Barium	0.0536		0.00190	0.00400	mg/L	1	23-Mar-2023 22:14
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:14
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 22:14
Copper	U		0.00100	0.00200	mg/L	1	23-Mar-2023 22:14
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 22:14
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 22:14
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:14
Zinc	U		0.00200	0.00400	mg/L	1	23-Mar-2023 22:14
MERCURY BY SW7470A		Method:SW7470A		Prep:SW7470A / 22-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	22-Mar-2023 17:42
DISSOLVED MERCURY BY SW7470A		Method:SW7470A (dissolved)		Prep:SW7470A / 20-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	20-Mar-2023 16:40

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

Client: WSP Golder
 Project: Frisco CDC GW North CAMU
 Sample ID: LMW-9R
 Collection Date: 15-Mar-2023 15:30

ANALYTICAL REPORT

WorkOrder:HS23031023
 Lab ID:HS23031023-10
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 18:13
Arsenic	0.00152	J	0.000400	0.00200	mg/L	1	23-Mar-2023 18:13
Barium	0.0303		0.00190	0.00400	mg/L	1	23-Mar-2023 18:13
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:13
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 18:13
Copper	0.00476		0.00100	0.00200	mg/L	1	23-Mar-2023 18:13
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 18:13
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 18:13
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:13
Zinc	0.00213	J	0.00200	0.00400	mg/L	1	23-Mar-2023 18:13
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 22:16
Arsenic	0.00128	J	0.000400	0.00200	mg/L	1	23-Mar-2023 22:16
Barium	0.0287		0.00190	0.00400	mg/L	1	23-Mar-2023 22:16
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:16
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 22:16
Copper	0.00463		0.00100	0.00200	mg/L	1	23-Mar-2023 22:16
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 22:16
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 22:16
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:16
Zinc	0.00227	J	0.00200	0.00400	mg/L	1	23-Mar-2023 22:16
MERCURY BY SW7470A		Method:SW7470A		Prep:SW7470A / 22-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	22-Mar-2023 17:44
DISSOLVED MERCURY BY SW7470A		Method:SW7470A (dissolved)		Prep:SW7470A / 20-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	20-Mar-2023 16:41

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

Client: WSP Golder
 Project: Frisco CDC GW North CAMU
 Sample ID: LMW-22
 Collection Date: 16-Mar-2023 08:40

ANALYTICAL REPORT

WorkOrder:HS23031023
 Lab ID:HS23031023-11
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	0.000603	J	0.000400	0.00200	mg/L	1	23-Mar-2023 18:15
Arsenic	0.00180	J	0.000400	0.00200	mg/L	1	23-Mar-2023 18:15
Barium	0.0721		0.00190	0.00400	mg/L	1	23-Mar-2023 18:15
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:15
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 18:15
Copper	0.00110	J	0.00100	0.00200	mg/L	1	23-Mar-2023 18:15
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 18:15
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 18:15
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:15
Zinc	U		0.00200	0.00400	mg/L	1	23-Mar-2023 18:15
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	0.000601	J	0.000400	0.00200	mg/L	1	23-Mar-2023 22:18
Arsenic	0.00175	J	0.000400	0.00200	mg/L	1	23-Mar-2023 22:18
Barium	0.0718		0.00190	0.00400	mg/L	1	23-Mar-2023 22:18
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:18
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 22:18
Copper	0.00160	J	0.00100	0.00200	mg/L	1	23-Mar-2023 22:18
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 22:18
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 22:18
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:18
Zinc	0.00437		0.00200	0.00400	mg/L	1	23-Mar-2023 22:18
MERCURY BY SW7470A		Method:SW7470A		Prep:SW7470A / 22-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	22-Mar-2023 17:46
DISSOLVED MERCURY BY SW7470A		Method:SW7470A (dissolved)		Prep:SW7470A / 20-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	20-Mar-2023 16:43

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

Client: WSP Golder
 Project: Frisco CDC GW North CAMU
 Sample ID: DUP-01
 Collection Date: 15-Mar-2023 11:35

ANALYTICAL REPORT

WorkOrder:HS23031023
 Lab ID:HS23031023-12
 Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 18:17
Arsenic	0.000484	J	0.000400	0.00200	mg/L	1	23-Mar-2023 18:17
Barium	0.0482		0.00190	0.00400	mg/L	1	23-Mar-2023 18:17
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:17
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 18:17
Copper	0.00121	J	0.00100	0.00200	mg/L	1	23-Mar-2023 18:17
Lead	0.000986	J	0.000600	0.00200	mg/L	1	23-Mar-2023 18:17
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 18:17
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 18:17
Zinc	U		0.00200	0.00400	mg/L	1	23-Mar-2023 18:17
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 23-Mar-2023		Analyst: JC	
Antimony	U		0.000400	0.00200	mg/L	1	23-Mar-2023 22:24
Arsenic	0.000500	J	0.000400	0.00200	mg/L	1	23-Mar-2023 22:24
Barium	0.0496		0.00190	0.00400	mg/L	1	23-Mar-2023 22:24
Cadmium	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:24
Chromium	U		0.000400	0.00400	mg/L	1	23-Mar-2023 22:24
Copper	0.00117	J	0.00100	0.00200	mg/L	1	23-Mar-2023 22:24
Lead	U		0.000600	0.00200	mg/L	1	23-Mar-2023 22:24
Selenium	U		0.00110	0.00200	mg/L	1	23-Mar-2023 22:24
Silver	U		0.000200	0.00200	mg/L	1	23-Mar-2023 22:24
Zinc	0.00205	J	0.00200	0.00400	mg/L	1	23-Mar-2023 22:24
MERCURY BY SW7470A		Method:SW7470A		Prep:SW7470A / 22-Mar-2023		Analyst: JS	
Mercury	U		0.0000300	0.000200	mg/L	1	22-Mar-2023 17:47
DISSOLVED MERCURY BY SW7470A		Method:SW7470A (dissolved)		Prep:SW7470A / 20-Mar-2023		Analyst: JS	
Mercury	0.0000990	J	0.0000300	0.000200	mg/L	1	20-Mar-2023 16:45

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

Weight / Prep Log

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

Batch ID: 191050 **Start Date:** 20 Mar 2023 09:00 **End Date:** 20 Mar 2023 12:00
Method: MERCURY PREP BY 7470A - DISSOLVED **Prep Code:** HG_W_DISSPR

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23031023-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-12		10 (mL)	10 (mL)	1	120 plastic HNO3

Batch ID: 191186 **Start Date:** 22 Mar 2023 10:00 **End Date:** 22 Mar 2023 13:00
Method: MERCURY PREP BY 7470A- WATER **Prep Code:** HG_WPR

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23031023-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-06		10 (mL)	10 (mL)	1	120 plastic HNO3

Batch ID: 191187 **Start Date:** 22 Mar 2023 10:00 **End Date:** 22 Mar 2023 13:00
Method: MERCURY PREP BY 7470A- WATER **Prep Code:** HG_WPR

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23031023-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-12		10 (mL)	10 (mL)	1	120 plastic HNO3

Weight / Prep Log

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

Batch ID: 191223	Start Date: 23 Mar 2023 11:30	End Date: 23 Mar 2023 15:30
Method: WATER - SW3010A	Prep Code: 3010A	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23031023-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-12		10 (mL)	10 (mL)	1	120 plastic HNO3

Batch ID: 191242	Start Date: 23 Mar 2023 14:00	End Date: 23 Mar 2023 18:00
Method: DISS METALS PREP - WATER - SW3010A	Prep Code: 3010A DISS	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23031023-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23031023-12		10 (mL)	10 (mL)	1	120 plastic HNO3

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 191050 (0)		Test Name : DISSOLVED MERCURY BY SW7470A			Matrix: Groundwater	
HS23031023-01	MW-45	15 Mar 2023 09:25		20 Mar 2023 09:00	20 Mar 2023 16:11	1
HS23031023-02	PMW-19R	15 Mar 2023 10:00		20 Mar 2023 09:00	20 Mar 2023 16:16	1
HS23031023-03	LMW-8	15 Mar 2023 10:35		20 Mar 2023 09:00	20 Mar 2023 16:18	1
HS23031023-04	LMW-17	15 Mar 2023 11:00		20 Mar 2023 09:00	20 Mar 2023 16:19	1
HS23031023-05	LMW-5	15 Mar 2023 11:35		20 Mar 2023 09:00	20 Mar 2023 16:21	1
HS23031023-06	LMW-21	15 Mar 2023 12:25		20 Mar 2023 09:00	20 Mar 2023 16:23	1
HS23031023-07	PMW-20R	15 Mar 2023 13:00		20 Mar 2023 09:00	20 Mar 2023 16:25	1
HS23031023-08	MW-41	15 Mar 2023 13:40		20 Mar 2023 09:00	20 Mar 2023 16:26	1
HS23031023-09	MW-47	15 Mar 2023 14:35		20 Mar 2023 09:00	20 Mar 2023 16:40	1
HS23031023-10	LMW-9R	15 Mar 2023 15:30		20 Mar 2023 09:00	20 Mar 2023 16:41	1
HS23031023-11	LMW-22	16 Mar 2023 08:40		20 Mar 2023 09:00	20 Mar 2023 16:43	1
HS23031023-12	DUP-01	15 Mar 2023 11:35		20 Mar 2023 09:00	20 Mar 2023 16:45	1
Batch ID: 191186 (0)		Test Name : MERCURY BY SW7470A			Matrix: Groundwater	
HS23031023-01	MW-45	15 Mar 2023 09:25		22 Mar 2023 10:00	22 Mar 2023 16:50	1
HS23031023-02	PMW-19R	15 Mar 2023 10:00		22 Mar 2023 10:00	22 Mar 2023 17:02	1
HS23031023-03	LMW-8	15 Mar 2023 10:35		22 Mar 2023 10:00	22 Mar 2023 17:04	1
HS23031023-04	LMW-17	15 Mar 2023 11:00		22 Mar 2023 10:00	22 Mar 2023 17:06	1
HS23031023-05	LMW-5	15 Mar 2023 11:35		22 Mar 2023 10:00	22 Mar 2023 17:08	1
HS23031023-06	LMW-21	15 Mar 2023 12:25		22 Mar 2023 10:00	22 Mar 2023 17:09	1
Batch ID: 191187 (0)		Test Name : MERCURY BY SW7470A			Matrix: Groundwater	
HS23031023-07	PMW-20R	15 Mar 2023 13:00		22 Mar 2023 10:00	22 Mar 2023 17:14	1
HS23031023-08	MW-41	15 Mar 2023 13:40		22 Mar 2023 10:00	22 Mar 2023 17:40	1
HS23031023-09	MW-47	15 Mar 2023 14:35		22 Mar 2023 10:00	22 Mar 2023 17:42	1
HS23031023-10	LMW-9R	15 Mar 2023 15:30		22 Mar 2023 10:00	22 Mar 2023 17:44	1
HS23031023-11	LMW-22	16 Mar 2023 08:40		22 Mar 2023 10:00	22 Mar 2023 17:46	1
HS23031023-12	DUP-01	15 Mar 2023 11:35		22 Mar 2023 10:00	22 Mar 2023 17:47	1

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 191223 (0)		Test Name : ICP-MS METALS BY SW6020A			Matrix: Groundwater	
HS23031023-01	MW-45	15 Mar 2023 09:25		23 Mar 2023 11:30	23 Mar 2023 17:39	1
HS23031023-02	PMW-19R	15 Mar 2023 10:00		23 Mar 2023 11:30	23 Mar 2023 17:49	1
HS23031023-03	LMW-8	15 Mar 2023 10:35		23 Mar 2023 11:30	23 Mar 2023 17:51	1
HS23031023-04	LMW-17	15 Mar 2023 11:00		23 Mar 2023 11:30	23 Mar 2023 18:01	1
HS23031023-05	LMW-5	15 Mar 2023 11:35		23 Mar 2023 11:30	23 Mar 2023 18:03	1
HS23031023-06	LMW-21	15 Mar 2023 12:25		23 Mar 2023 11:30	23 Mar 2023 18:05	1
HS23031023-07	PMW-20R	15 Mar 2023 13:00		23 Mar 2023 11:30	23 Mar 2023 18:07	1
HS23031023-08	MW-41	15 Mar 2023 13:40		23 Mar 2023 11:30	23 Mar 2023 18:09	1
HS23031023-09	MW-47	15 Mar 2023 14:35		23 Mar 2023 11:30	23 Mar 2023 18:11	1
HS23031023-10	LMW-9R	15 Mar 2023 15:30		23 Mar 2023 11:30	23 Mar 2023 18:13	1
HS23031023-11	LMW-22	16 Mar 2023 08:40		23 Mar 2023 11:30	23 Mar 2023 18:15	1
HS23031023-12	DUP-01	15 Mar 2023 11:35		23 Mar 2023 11:30	23 Mar 2023 18:17	1
Batch ID: 191242 (0)		Test Name : DISSOLVED METALS BY SW6020A			Matrix: Groundwater	
HS23031023-01	MW-45	15 Mar 2023 09:25		23 Mar 2023 14:00	23 Mar 2023 21:46	1
HS23031023-02	PMW-19R	15 Mar 2023 10:00		23 Mar 2023 14:00	23 Mar 2023 22:00	1
HS23031023-03	LMW-8	15 Mar 2023 10:35		23 Mar 2023 14:00	23 Mar 2023 22:02	1
HS23031023-04	LMW-17	15 Mar 2023 11:00		23 Mar 2023 14:00	23 Mar 2023 22:04	1
HS23031023-05	LMW-5	15 Mar 2023 11:35		23 Mar 2023 14:00	23 Mar 2023 22:06	1
HS23031023-06	LMW-21	15 Mar 2023 12:25		23 Mar 2023 14:00	23 Mar 2023 22:08	1
HS23031023-07	PMW-20R	15 Mar 2023 13:00		23 Mar 2023 14:00	23 Mar 2023 22:10	1
HS23031023-08	MW-41	15 Mar 2023 13:40		23 Mar 2023 14:00	23 Mar 2023 22:12	1
HS23031023-09	MW-47	15 Mar 2023 14:35		23 Mar 2023 14:00	23 Mar 2023 22:14	1
HS23031023-10	LMW-9R	15 Mar 2023 15:30		23 Mar 2023 14:00	23 Mar 2023 22:16	1
HS23031023-11	LMW-22	16 Mar 2023 08:40		23 Mar 2023 14:00	23 Mar 2023 22:18	1
HS23031023-12	DUP-01	15 Mar 2023 11:35		23 Mar 2023 14:00	23 Mar 2023 22:24	1

WorkOrder: HS23031023

InstrumentID: HG04

Test Code: HG_Diss

Test Number: SW7470A (dissolved)

Test Name: Dissolved Mercury by SW7470A

Matrix: Aqueous**METHOD DETECTION /
REPORTING LIMITS****Units:** mg/L

Type	Analyte	CAS	DCS Spike	DCS	MDL	PQL
A	Mercury	7439-97-6	0.000100	0.000104	0.0000300	0.000200

WorkOrder: HS23031023

InstrumentID: HG04

Test Code: HG_W

Test Number: SW7470A

Test Name: Mercury by SW7470A

**METHOD DETECTION /
REPORTING LIMITS****Matrix:** Aqueous**Units:** mg/L

Type	Analyte	CAS	DCS Spike	DCS	MDL	PQL
A	Mercury	7439-97-6	0.000100	0.000104	0.0000300	0.000200

WorkOrder: HS23031023

InstrumentID: ICPMS06

Test Code: ICP_DISS

Test Number: SW6020A (dissolved)

Test Name: Dissolved Metals by SW6020A

**METHOD DETECTION /
REPORTING LIMITS****Matrix:** Aqueous**Units:** mg/L

Type	Analyte	CAS	DCS Spike	DCS	MDL	PQL
A	Antimony	7440-36-0	0.00125	0.00147	0.000400	0.00200
A	Arsenic	7440-38-2	0.00125	0.00132	0.000400	0.00200
A	Barium	7440-39-3	0.00250	0.00278	0.00190	0.00400
A	Cadmium	7440-43-9	0.000500	0.000576	0.000200	0.00200
A	Chromium	7440-47-3	0.00125	0.00124	0.000400	0.00400
A	Copper	7440-50-8	0.00250	0.00301	0.00100	0.00200
A	Lead	7439-92-1	0.00125	0.00131	0.000600	0.00200
A	Selenium	7782-49-2	0.00250	0.00282	0.00110	0.00200
A	Silver	7440-22-4	0.000500	0.000581	0.000200	0.00200
A	Zinc	7440-66-6	0.00250	0.00306	0.00200	0.00400

WorkOrder: HS23031023

InstrumentID: ICPMS06

Test Code: ICP_TW

Test Number: SW6020A

Test Name: ICP-MS Metals by SW6020A

**METHOD DETECTION /
REPORTING LIMITS****Matrix:** Aqueous**Units:** mg/L

Type	Analyte	CAS	DCS Spike	DCS	MDL	PQL
A	Antimony	7440-36-0	0.00125	0.00147	0.000400	0.00200
A	Arsenic	7440-38-2	0.00125	0.00132	0.000400	0.00200
A	Barium	7440-39-3	0.00250	0.00278	0.00190	0.00400
A	Cadmium	7440-43-9	0.000500	0.000576	0.000200	0.00200
A	Chromium	7440-47-3	0.00125	0.00124	0.000400	0.00400
A	Copper	7440-50-8	0.00250	0.00301	0.00100	0.00200
A	Lead	7439-92-1	0.00125	0.00131	0.000600	0.00200
A	Selenium	7782-49-2	0.00250	0.00282	0.00110	0.00200
A	Silver	7440-22-4	0.000500	0.000581	0.000200	0.00200
A	Zinc	7440-66-6	0.00250	0.00306	0.00200	0.00400

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

QC BATCH REPORT

Batch ID: 191050 (0)		Instrument: HG04		Method: DISSOLVED MERCURY BY SW7470A (DISSOLVED)						
MBLK	Sample ID: MBLK-191050	Units: mg/L		Analysis Date: 20-Mar-2023 15:48						
Client ID:	Run ID: HG04_430453		SeqNo: 7184175		PrepDate: 20-Mar-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Mercury	U	0.000200								
LCS	Sample ID: LCS-191050	Units: mg/L		Analysis Date: 20-Mar-2023 15:49						
Client ID:	Run ID: HG04_430453		SeqNo: 7184176		PrepDate: 20-Mar-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Mercury	0.00516	0.000200	0.005	0	103	80 - 120				
MS	Sample ID: HS23031023-01MS	Units: mg/L		Analysis Date: 20-Mar-2023 16:13						
Client ID: MW-45	Run ID: HG04_430453		SeqNo: 7184186		PrepDate: 20-Mar-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Mercury	0.0056	0.000200	0.005	-0.000006	112	80 - 120				
MSD	Sample ID: HS23031023-01MSD	Units: mg/L		Analysis Date: 20-Mar-2023 16:38						
Client ID: MW-45	Run ID: HG04_430453		SeqNo: 7184197		PrepDate: 20-Mar-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Mercury	0.00492	0.000200	0.005	-0.000006	98.5	80 - 120	0.0056	12.9	20	
The following samples were analyzed in this batch:										
HS23031023-01		HS23031023-02		HS23031023-03		HS23031023-04				
HS23031023-05		HS23031023-06		HS23031023-07		HS23031023-08				
HS23031023-09		HS23031023-10		HS23031023-11		HS23031023-12				

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

QC BATCH REPORT

Batch ID: 191186 (0)		Instrument: HG04		Method: MERCURY BY SW7470A						
MBLK	Sample ID: MBLK-191186	Units: mg/L			Analysis Date: 22-Mar-2023 16:15					
Client ID:	Run ID: HG04_430699		SeqNo: 7190103		PrepDate: 22-Mar-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Mercury	U	0.000200								
LCS	Sample ID: LCS-191186	Units: mg/L			Analysis Date: 22-Mar-2023 16:17					
Client ID:	Run ID: HG04_430699		SeqNo: 7190104		PrepDate: 22-Mar-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Mercury	0.00493	0.000200	0.005	0	98.6	80 - 120				
MS	Sample ID: HS23031023-01MS	Units: mg/L			Analysis Date: 22-Mar-2023 16:59					
Client ID: MW-45	Run ID: HG04_430699		SeqNo: 7190123		PrepDate: 22-Mar-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Mercury	0.00518	0.000200	0.005	-0.000006	104	75 - 125				
MSD	Sample ID: HS23031023-01MSD	Units: mg/L			Analysis Date: 22-Mar-2023 17:01					
Client ID: MW-45	Run ID: HG04_430699		SeqNo: 7190124		PrepDate: 22-Mar-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual
Mercury	0.00518	0.000200	0.005	-0.000006	104	75 - 125	0.00518	0	20	
The following samples were analyzed in this batch:										
HS23031023-01			HS23031023-02		HS23031023-03			HS23031023-04		
HS23031023-05			HS23031023-06							

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

QC BATCH REPORT

Batch ID: 191187 (0)		Instrument: HG04		Method: MERCURY BY SW7470A							
MBLK	Sample ID: MBLK-191187	Units: mg/L			Analysis Date: 22-Mar-2023 17:11						
Client ID:	Run ID: HG04_430699		SeqNo: 7190130		PrepDate: 22-Mar-2023		DF: 1				
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual	
Mercury	U	0.000200									
LCS	Sample ID: LCS-191187	Units: mg/L			Analysis Date: 22-Mar-2023 17:13						
Client ID:	Run ID: HG04_430699		SeqNo: 7190131		PrepDate: 22-Mar-2023		DF: 1				
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual	
Mercury	0.0052	0.000200	0.005	0	104	80 - 120					
MS	Sample ID: HS23031023-07MS	Units: mg/L			Analysis Date: 22-Mar-2023 17:35						
Client ID: PMW-20R	Run ID: HG04_430699		SeqNo: 7190135		PrepDate: 22-Mar-2023		DF: 1				
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual	
Mercury	0.00592	0.000200	0.005	-0.00001	119	75 - 125					
MSD	Sample ID: HS23031023-07MSD	Units: mg/L			Analysis Date: 22-Mar-2023 17:39						
Client ID: PMW-20R	Run ID: HG04_430699		SeqNo: 7190136		PrepDate: 22-Mar-2023		DF: 1				
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual	
Mercury	0.00518	0.000200	0.005	-0.00001	104	75 - 125	0.00592	13.3	20		
The following samples were analyzed in this batch:				HS23031023-07 HS23031023-11		HS23031023-08 HS23031023-12		HS23031023-09		HS23031023-10	

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

QC BATCH REPORT

Batch ID: 191223 (0)		Instrument: ICPMS06		Method: ICP-MS METALS BY SW6020A					
MBLK	Sample ID: MBLK-191223	Units: mg/L		Analysis Date: 23-Mar-2023 17:35					
Client ID:	Run ID: ICPMS06_430778	SeqNo: 7191840		PrepDate: 23-Mar-2023		DF: 1			
Analyte	Result	MQL	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							
Cadmium	U	0.00200							
Chromium	0.000454	0.00400							J
Copper	U	0.00200							
Lead	U	0.00200							
Selenium	U	0.00200							
Silver	U	0.00200							
Zinc	U	0.00400							

LCS	Sample ID: LCS-191223	Units: mg/L		Analysis Date: 23-Mar-2023 17:37					
Client ID:	Run ID: ICPMS06_430778	SeqNo: 7191841		PrepDate: 23-Mar-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Antimony	0.05122	0.00200	0.05	0	102	80 - 120			
Arsenic	0.05047	0.00200	0.05	0	101	80 - 120			
Barium	0.04953	0.00400	0.05	0	99.1	80 - 120			
Cadmium	0.05007	0.00200	0.05	0	100	80 - 120			
Chromium	0.04756	0.00400	0.05	0	95.1	80 - 120			
Copper	0.05146	0.00200	0.05	0	103	80 - 120			
Lead	0.04941	0.00200	0.05	0	98.8	80 - 120			
Selenium	0.05116	0.00200	0.05	0	102	80 - 120			
Silver	0.0486	0.00200	0.05	0	97.2	80 - 120			
Zinc	0.05238	0.00400	0.05	0	105	80 - 120			

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

QC BATCH REPORT

Batch ID: 191223 (0)		Instrument: ICPMS06		Method: ICP-MS METALS BY SW6020A					
MS		Sample ID: HS23031023-01MS		Units: mg/L		Analysis Date: 23-Mar-2023 17:43			
Client ID: MW-45		Run ID: ICPMS06_430778		SeqNo: 7191844		PrepDate: 23-Mar-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Antimony	0.05112	0.00200	0.05	0.000339	102	80 - 120			
Arsenic	0.05004	0.00200	0.05	0.000533	99.0	80 - 120			
Barium	0.1271	0.00400	0.05	0.07274	109	80 - 120			
Cadmium	0.04962	0.00200	0.05	0.00004	99.2	80 - 120			
Chromium	0.0468	0.00400	0.05	-0.000739	95.1	80 - 120			
Copper	0.05101	0.00200	0.05	0.001365	99.3	80 - 120			
Lead	0.04932	0.00200	0.05	0.000346	98.0	80 - 120			
Selenium	0.05164	0.00200	0.05	0.000721	102	80 - 120			
Silver	0.04754	0.00200	0.05	0.000046	95.0	80 - 120			
Zinc	0.05218	0.00400	0.05	0.001112	102	80 - 120			

MSD		Sample ID: HS23031023-01MSD		Units: mg/L		Analysis Date: 23-Mar-2023 17:45			
Client ID: MW-45		Run ID: ICPMS06_430778		SeqNo: 7191845		PrepDate: 23-Mar-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Antimony	0.05187	0.00200	0.05	0.000339	103	80 - 120	0.05112	1.45	20
Arsenic	0.05116	0.00200	0.05	0.000533	101	80 - 120	0.05004	2.22	20
Barium	0.1281	0.00400	0.05	0.07274	111	80 - 120	0.1271	0.773	20
Cadmium	0.05036	0.00200	0.05	0.00004	101	80 - 120	0.04962	1.49	20
Chromium	0.04707	0.00400	0.05	-0.000739	95.6	80 - 120	0.0468	0.594	20
Copper	0.05075	0.00200	0.05	0.001365	98.8	80 - 120	0.05101	0.521	20
Lead	0.05002	0.00200	0.05	0.000346	99.3	80 - 120	0.04932	1.4	20
Selenium	0.05168	0.00200	0.05	0.000721	102	80 - 120	0.05164	0.0697	20
Silver	0.04807	0.00200	0.05	0.000046	96.0	80 - 120	0.04754	1.1	20
Zinc	0.05194	0.00400	0.05	0.001112	102	80 - 120	0.05218	0.471	20

Client: WSP Golder
 Project: Frisco CDC GW North CAMU
 WorkOrder: HS23031023

QC BATCH REPORT

Batch ID: 191223 (0)		Instrument: ICPMS06		Method: ICP-MS METALS BY SW6020A					
PDS		Sample ID: HS23031023-01PDS		Units: mg/L		Analysis Date: 23-Mar-2023 17:47			
Client ID: MW-45		Run ID: ICPMS06_430778		SeqNo: 7191846		PrepDate: 23-Mar-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Antimony	0.0985	0.00200	0.1	0.000339	98.2	75 - 125			
Arsenic	0.09943	0.00200	0.1	0.000533	98.9	75 - 125			
Barium	0.1699	0.00400	0.1	0.07274	97.1	75 - 125			
Cadmium	0.09793	0.00200	0.1	0.00004	97.9	75 - 125			
Chromium	0.09392	0.00400	0.1	-0.000739	94.7	75 - 125			
Copper	0.09782	0.00200	0.1	0.001365	96.5	75 - 125			
Lead	0.09899	0.00200	0.1	0.000346	98.6	75 - 125			
Selenium	0.1003	0.00200	0.1	0.000721	99.6	75 - 125			
Silver	0.09664	0.00200	0.1	0.000046	96.6	75 - 125			
Zinc	0.09968	0.00400	0.1	0.001112	98.6	75 - 125			

SD		Sample ID: HS23031023-01SD		Units: mg/L		Analysis Date: 23-Mar-2023 17:41			
Client ID: MW-45		Run ID: ICPMS06_430778		SeqNo: 7191843		PrepDate: 23-Mar-2023		DF: 5	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit Qual
Antimony	U	0.0100					0.000339	0	10
Arsenic	U	0.0100					0.000533	0	10
Barium	0.07301	0.0200					0.07274	0.37	10
Cadmium	U	0.0100					0.00004	0	10
Chromium	0.007571	0.0200					-0.000739	0	10 J
Copper	U	0.0100					0.001365	0	10
Lead	U	0.0100					0.000346	0	10
Selenium	U	0.0100					0.000721	0	10
Silver	U	0.0100					0.000046	0	10
Zinc	U	0.0200					0.001112	0	10

The following samples were analyzed in this batch:				HS23031023-01	HS23031023-02	HS23031023-03	HS23031023-04
				HS23031023-05	HS23031023-06	HS23031023-07	HS23031023-08
				HS23031023-09	HS23031023-10	HS23031023-11	HS23031023-12

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

QC BATCH REPORT

Batch ID: 191242 (0)		Instrument: ICPMS06		Method: DISSOLVED METALS BY SW6020A (DISSOLVED)					
MBLK	Sample ID: MBLK-F1-191242	Units: mg/L		Analysis Date: 23-Mar-2023 21:42					
Client ID:	Run ID: ICPMS06_430778		SeqNo: 7192574		PrepDate: 23-Mar-2023		DF: 1		
Analyte	Result	MQL	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							
Cadmium	U	0.00200							
Chromium	U	0.00400							
Copper	U	0.00200							
Lead	U	0.00200							
Selenium	U	0.00200							
Silver	U	0.00200							
Zinc	U	0.00400							

MBLK	Sample ID: MBLK-191242	Units: mg/L		Analysis Date: 23-Mar-2023 21:40					
Client ID:	Run ID: ICPMS06_430778		SeqNo: 7192573		PrepDate: 23-Mar-2023		DF: 1		
Analyte	Result	MQL	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							
Cadmium	U	0.00200							
Chromium	U	0.00400							
Copper	U	0.00200							
Lead	U	0.00200							
Selenium	U	0.00200							
Silver	U	0.00200							
Zinc	U	0.00400							

Client: WSP Golder
 Project: Frisco CDC GW North CAMU
 WorkOrder: HS23031023

QC BATCH REPORT

Batch ID: 191242 (0)		Instrument: ICPMS06		Method: DISSOLVED METALS BY SW6020A (DISSOLVED)					
LCS		Sample ID: LCS-191242		Units: mg/L		Analysis Date: 23-Mar-2023 21:44			
Client ID:		Run ID: ICPMS06_430778		SeqNo: 7192575		PrepDate: 23-Mar-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Antimony	0.05009	0.00200	0.05	0	100	80 - 120			
Arsenic	0.0481	0.00200	0.05	0	96.2	80 - 120			
Barium	0.04653	0.00400	0.05	0	93.1	80 - 120			
Cadmium	0.04716	0.00200	0.05	0	94.3	80 - 120			
Chromium	0.04471	0.00400	0.05	0	89.4	80 - 120			
Copper	0.04792	0.00200	0.05	0	95.8	80 - 120			
Lead	0.04808	0.00200	0.05	0	96.2	80 - 120			
Selenium	0.04856	0.00200	0.05	0	97.1	80 - 120			
Silver	0.04692	0.00200	0.05	0	93.8	80 - 120			
Zinc	0.04838	0.00400	0.05	0	96.8	80 - 120			

MS		Sample ID: HS23031023-01MS		Units: mg/L		Analysis Date: 23-Mar-2023 21:50			
Client ID: MW-45		Run ID: ICPMS06_430778		SeqNo: 7192578		PrepDate: 23-Mar-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Antimony	0.05063	0.00200	0.05	0.000295	101	75 - 125			
Arsenic	0.04854	0.00200	0.05	0.000445	96.2	75 - 125			
Barium	0.1177	0.00400	0.05	0.0687	97.9	75 - 125			
Cadmium	0.04687	0.00200	0.05	0.000035	93.7	75 - 125			
Chromium	0.04466	0.00400	0.05	-0.000709	90.7	75 - 125			
Copper	0.04811	0.00200	0.05	0.001685	92.9	75 - 125			
Lead	0.04783	0.00200	0.05	0.000108	95.4	75 - 125			
Selenium	0.0494	0.00200	0.05	0.001369	96.1	75 - 125			
Silver	0.04586	0.00200	0.05	0.000018	91.7	75 - 125			
Zinc	0.04778	0.00400	0.05	0.002129	91.3	75 - 125			

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

QC BATCH REPORT

Batch ID: 191242 (0)		Instrument: ICPMS06		Method: DISSOLVED METALS BY SW6020A (DISSOLVED)					
MSD		Sample ID: HS23031023-01MSD		Units: mg/L		Analysis Date: 23-Mar-2023 21:52			
Client ID: MW-45		Run ID: ICPMS06_430778		SeqNo: 7192579		PrepDate: 23-Mar-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Antimony	0.04973	0.00200	0.05	0.000295	98.9	75 - 125	0.05063	1.78	20
Arsenic	0.04859	0.00200	0.05	0.000445	96.3	75 - 125	0.04854	0.0885	20
Barium	0.1171	0.00400	0.05	0.0687	96.7	75 - 125	0.1177	0.504	20
Cadmium	0.04674	0.00200	0.05	0.000035	93.4	75 - 125	0.04687	0.282	20
Chromium	0.04408	0.00400	0.05	-0.000709	89.6	75 - 125	0.04466	1.31	20
Copper	0.04639	0.00200	0.05	0.001685	89.4	75 - 125	0.04811	3.64	20
Lead	0.04706	0.00200	0.05	0.000108	93.9	75 - 125	0.04783	1.63	20
Selenium	0.04943	0.00200	0.05	0.001369	96.1	75 - 125	0.0494	0.0607	20
Silver	0.04638	0.00200	0.05	0.000018	92.7	75 - 125	0.04586	1.13	20
Zinc	0.04776	0.00400	0.05	0.002129	91.3	75 - 125	0.04778	0.044	20

PDS		Sample ID: HS23031023-01PDS		Units: mg/L		Analysis Date: 23-Mar-2023 21:54			
Client ID: MW-45		Run ID: ICPMS06_430778		SeqNo: 7192580		PrepDate: 23-Mar-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Antimony	0.09562	0.00200	0.1	0.000295	95.3	75 - 125			
Arsenic	0.09591	0.00200	0.1	0.000445	95.5	75 - 125			
Barium	0.1633	0.00400	0.1	0.0687	94.6	75 - 125			
Cadmium	0.09357	0.00200	0.1	0.000035	93.5	75 - 125			
Chromium	0.08686	0.00400	0.1	-0.000709	87.6	75 - 125			
Copper	0.09132	0.00200	0.1	0.001685	89.6	75 - 125			
Lead	0.09487	0.00200	0.1	0.000108	94.8	75 - 125			
Selenium	0.09471	0.00200	0.1	0.001369	93.3	75 - 125			
Silver	0.09153	0.00200	0.1	0.000018	91.5	75 - 125			
Zinc	0.09408	0.00400	0.1	0.002129	92.0	75 - 125			

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

QC BATCH REPORT

Batch ID: 191242 (0)		Instrument: ICPMS06		Method: DISSOLVED METALS BY SW6020A (DISSOLVED)					
SD		Sample ID: HS23031023-01SD		Units: mg/L		Analysis Date: 23-Mar-2023 21:48			
Client ID: MW-45		Run ID: ICPMS06_430778		SeqNo: 7192577		PrepDate: 23-Mar-2023		DF: 5	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit Qual
Antimony	U	0.0100					0.000295	0	10
Arsenic	U	0.0100					0.000445	0	10
Barium	0.06847	0.0200					0.0687	0.339	10
Cadmium	U	0.0100					0.000035	0	10
Chromium	0.01302	0.0200					-0.000709	0	10 J
Copper	U	0.0100					0.001685	0	10
Lead	U	0.0100					0.000108	0	10
Selenium	U	0.0100					0.001369	0	10
Silver	U	0.0100					0.000018	0	10
Zinc	U	0.0200					0.002129	0	10
The following samples were analyzed in this batch:									
HS23031023-01		HS23031023-02		HS23031023-03		HS23031023-04			
HS23031023-05		HS23031023-06		HS23031023-07		HS23031023-08			
HS23031023-09		HS23031023-10		HS23031023-11		HS23031023-12			

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23031023

**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 Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

CERTIFICATIONS,ACCREDITATIONS & LICENSES

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

Sample Receipt Checklist

Work Order ID: HS23031023

Date/Time Received: 17-Mar-2023 10:00

Client Name: Golder St Louis

Received by: Corey Grandits

Completed By: /S/ Paresh M. Giga	17-Mar-2023 11:25	Reviewed by:	
eSignature	Date/Time	eSignature	Date/Time

Matrices: **GW**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 ☐	2 Page(s)
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	COC IDs:293917/293916
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):	2.2C/1.7C U/C IR31		
Cooler(s)/Kit(s):	50601		
Date/Time sample(s) sent to storage:	3/17/23 11:40		
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:



Cincinnati, OH
+1 513 733 5336

Everett, WA
+1 425 356 2600

Fort Collins, CO
+1 970 490 1511

Holland, MI
+1 616 399 6070

Chain of Custody Form

Page 1 of 2

COC ID: **293917**

HS23031023

WSP Golder
Frisco CDC GW North CAMU

IV

ALS Project Manager:



Customer Information		Project Information	
Purchase Order	GL2040906201	Project Name	Frisco CDC North CAMU GW Annual
Work Order		Project Number	GL2040906201
Company Name	Golder Associates	Bill To Company	WSP Golder
Send Report To	Gerardo Ruiz	Invoice Attn	Accounts Payable
Address	701 Emerson Road, Suite 250	Address	701 Emerson Road Suite 250
City/State/Zip	Creve Coeur, MO 63141	City/State/Zip	Creve Coeur MO 63141
Phone	(314) 394-6125	Phone	(314) 984-8800
Fax		Fax	
e-Mail Address	gerardo_ruiz@golder.com	e-Mail Address	USAccountsPayableInvoices@golder.com

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-45	3-15-23	0925	Groundwa	2.8	6	X	X	X								
2	PMW-19R	3-15-23	1000	Groundwa	2.8	2	X	X									
3	LMW-8	3-15-23	1035	Groundwa	2.8	2	X	X									
4	LMW-17	3-15-23	1100	Groundwa	2.8	2	X	X									
5	LMW-5	3-15-23	1135	Groundwa	2.8	2	X	X									
6	LMW-21	3-15-23	1225	Groundwa	2.8	2	X	X									
7	PMW-20R	3-15-23	1300	Groundwa	2.8	2	X	X									
8	MW-41	3-15-23	1340	Groundwa	2.8	2	X	X									
9	MW-47	3-15-23	1435	Groundwa	2.8	2	X	X									
10	LMW-9R	3-15-23	1530	Groundwa	2.8	2	X	X									

Sampler(s) Please Print & Sign JOHN BRAYTON		Shipment Method FEDEX		Required Turnaround Time: (Check Box) ☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour				Results Due Date:	
Relinquished by:	Date: 3-16-23	Time: 1600	Received by:	Notes: Frisco CDC North CAMU GW					
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)			
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	50601	2.2°	☐ Level II Std QC	☒ TRRP Checklist		
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035				1231		☐ Level III Std QC/Raw Data	☐ TRRP Level IV		
						☐ Level IV SW648/CLP			

- Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

Copyright 2011 by ALS Environmental.



Cincinnati, OH
+1 513 733 5336

Everett, WA
+1 425 356 2600

Fort Collins, CO
+1 970 490 1511

Holland, MI
+1 616 399 6070

Chain of Custody Form

Page 2 of 2

COC ID: 293916

HS23031023

WSP Golder
Frisco CDC GW North CAMU

ALS Project Manager:



Customer Information		Project Information	
Purchase Order	GL2040906201	Project Name	Frisco CDC North CAMU GW Annual
Work Order		Project Number	GL2040906201
Company Name	Golder Associates	Bill To Company	WSP Golder
Send Report To	Gerardo Ruiz	Invoice Attn	Accounts Payable
Address	701 Emerson Road, Suite 250	Address	701 Emerson Road Suite 250
City/State/Zip	Creve Coeur, MO 63141	City/State/Zip	Creve Coeur MO 63141
Phone	(314) 394-6125	Phone	(314) 984-8800
Fax		Fax	
e-Mail Address	gerardo_ruiz@golder.com	e-Mail Address	USAccountsPayableInvoices@golder.com

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	LMW-22	3-16-23	0840	Groundwa	2.8	2	X	X									
2	DUP-01	3-15-23	1135	Groundwa	2.8	2	X	X									
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign. JOHN BRAYTON		Shipment Method FEDEX		Required Turnaround Time: (Check Box) ☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour				Results Due Date:	
Relinquished by:	Date: 3-16-23	Time: 1600	Received by:	Notes: Frisco CDC North CAMU GW					
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)			
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			☐ Level II Std QC	☒ TRRP Checklist		
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035						☐ Level III Std QC/Row Date	☐ TRRP Level IV		
						☐ Level IV SW846/CLP			

- Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

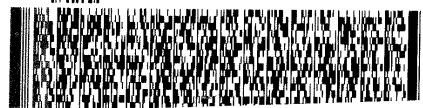
Copyright 2011 by ALS Environmental.

ALS
 10450 Stancliff Rd., Suite 110
 Houston, Texas 77099
 Tel. +1 281 530 5656
 Fax. +1 281 530 5887

CUSTODY SEAL		Seal Broken By:
Date: 3-17-23	Time:	
Name:		Date:
Company:		

HOUSTON TX 77099
 (281) 530-5656
REF: FRISCO CDC NORTH = BO 91537 - DW

RMA: 111111



FedEx
 Express
 AN 10201

FedEx
 TRK# 6230 2996 3521
 0221

FRI - 17 MAR 10:30A
PRIORITY OVERNIGHT

AB SGRA

77099
 TX-US IAH
 EXP 0



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

June 12, 2023

Rahel Pommerenke
WSP Golder
701 Emerson Road Suite 250
Creve Coeur, MO 63141

Work Order: **HS23060166**

Laboratory Results for: **Frisco CDC GW North CAMU**

Dear Rahel Pommerenke,

ALS Environmental received 12 sample(s) on Jun 02, 2023 for the analysis presented in the following report.

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

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

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

Sincerely,

Generated By: JUMOKE.LAWAL

Tyler Monroe

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23060166

**TRRP Laboratory Data
Package Cover Page**

This data package consists of all or some of the following as applicable:

This signature page, the laboratory review checklist, and the following reportable data:

- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC Chapter 5,
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits.
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 Other problems or anomalies.
The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Client: WSP Golder**Project:** Frisco CDC GW North CAMU**WorkOrder:** HS23060166**TRRP Laboratory Data
Package Cover Page**

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory have been identified by the laboratory in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☒ [NA] This laboratory meets an exception under 30 TAC §25.6 and was last inspected by ☐ TCEQ or ☐ _____ on (enter date of last inspection). Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.



Tyler Monroe

Laboratory Review Checklist: Reportable Data

Laboratory Name: ALS Laboratory Group			LRC Date:06/12/2023				
Project Name: Frisco CDC GW North CAMU			Laboratory Job Number: HS23060166				
Reviewer Name: Tyler Monroe			Prep Batch Number(s): 194872,194877				
#1	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW-846 Method 5035?			X		
		If required for the project, TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				
		Was applicable and available technology used to lower the SDL and minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Laboratory Review Checklist: Supporting Data

Laboratory Name: ALS Laboratory Group			LRC Date: 06/12/2023				
Project Name: Frisco CDC GW North CAMU			Laboratory Job Number: HS23060166				
Reviewer Name: Tyler Monroe			Prep Batch Number(s): 194872,194877				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB)					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning:					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS):					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs):					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results:					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports:					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs):					
		Are laboratory SOPs current and on file for each method performed?	X				
Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable); NA = Not Applicable; NR = Not Reviewed; R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).							

Laboratory Review Checklist: Exception Reports	
Laboratory Name: ALS Laboratory Group	LRC Date: 06/12/2023
Project Name: Frisco CDC GW North CAMU	Laboratory Job Number: HS23060166
Reviewer Name: Tyler Monroe	Prep Batch Number(s): 194872,194877
ER#⁵	Description
	No Exceptions
Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable); NA = Not Applicable; NR = Not Reviewed; R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).	

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Work Order: HS23060166

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23060166-01	MW-45	Groundwater		30-May-2023 09:30	02-Jun-2023 09:15	☐
HS23060166-02	PMW-19R	Groundwater		30-May-2023 10:05	02-Jun-2023 09:15	☐
HS23060166-03	LMW-8	Groundwater		30-May-2023 10:40	02-Jun-2023 09:15	☐
HS23060166-04	LMW-17	Groundwater		30-May-2023 11:10	02-Jun-2023 09:15	☐
HS23060166-05	LMW-5	Groundwater		30-May-2023 11:45	02-Jun-2023 09:15	☐
HS23060166-06	LMW-21	Groundwater		30-May-2023 12:15	02-Jun-2023 09:15	☐
HS23060166-07	PMW-20R	Groundwater		30-May-2023 13:10	02-Jun-2023 09:15	☐
HS23060166-08	MW-41	Groundwater		30-May-2023 13:45	02-Jun-2023 09:15	☐
HS23060166-09	MW-47	Groundwater		30-May-2023 14:30	02-Jun-2023 09:15	☐
HS23060166-10	LMW-9R	Groundwater		31-May-2023 08:00	02-Jun-2023 09:15	☐
HS23060166-11	LMW-22	Groundwater		31-May-2023 09:00	02-Jun-2023 09:15	☐
HS23060166-12	DUP-01	Groundwater		30-May-2023 11:45	02-Jun-2023 09:15	☐

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: MW-45
Collection Date: 30-May-2023 09:30

ANALYTICAL REPORT

WorkOrder:HS23060166
Lab ID:HS23060166-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.000432	J	0.000400	0.00200	mg/L	1	09-Jun-2023 16:21
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 16:21
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 16:21
Selenium	0.00114	J	0.00110	0.00200	mg/L	1	09-Jun-2023 16:21
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	U		0.000400	0.00200	mg/L	1	09-Jun-2023 15:09
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 15:09
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 15:09
Selenium	0.00168	J	0.00110	0.00200	mg/L	1	09-Jun-2023 15:09

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

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: PMW-19R
Collection Date: 30-May-2023 10:05

ANALYTICAL REPORT

WorkOrder:HS23060166
Lab ID:HS23060166-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.000583	J	0.000400	0.00200	mg/L	1	09-Jun-2023 16:37
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 16:37
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 16:37
Selenium	U		0.00110	0.00200	mg/L	1	09-Jun-2023 16:37
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.000586	J	0.000400	0.00200	mg/L	1	09-Jun-2023 15:20
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 15:20
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 15:20
Selenium	U		0.00110	0.00200	mg/L	1	09-Jun-2023 15:20

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

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: LMW-8
Collection Date: 30-May-2023 10:40

ANALYTICAL REPORT

WorkOrder:HS23060166
Lab ID:HS23060166-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.000859	J	0.000400	0.00200	mg/L	1	09-Jun-2023 16:39
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 16:39
Lead	0.000720	J	0.000600	0.00200	mg/L	1	09-Jun-2023 16:39
Selenium	0.00305		0.00110	0.00200	mg/L	1	09-Jun-2023 16:39
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.000472	J	0.000400	0.00200	mg/L	1	09-Jun-2023 15:21
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 15:21
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 15:21
Selenium	0.00292		0.00110	0.00200	mg/L	1	09-Jun-2023 15:21

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

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: LMW-17
Collection Date: 30-May-2023 11:10

ANALYTICAL REPORT

WorkOrder:HS23060166
Lab ID:HS23060166-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.000537	J	0.000400	0.00200	mg/L	1	09-Jun-2023 16:57
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 16:57
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 16:57
Selenium	0.00114	J	0.00110	0.00200	mg/L	1	09-Jun-2023 16:57
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.000566	J	0.000400	0.00200	mg/L	1	09-Jun-2023 15:23
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 15:23
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 15:23
Selenium	U		0.00110	0.00200	mg/L	1	09-Jun-2023 15:23

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

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: LMW-5
Collection Date: 30-May-2023 11:45

ANALYTICAL REPORT

WorkOrder:HS23060166
Lab ID:HS23060166-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.000486	J	0.000400	0.00200	mg/L	1	09-Jun-2023 16:59
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 16:59
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 16:59
Selenium	U		0.00110	0.00200	mg/L	1	09-Jun-2023 16:59
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.000491	J	0.000400	0.00200	mg/L	1	09-Jun-2023 15:29
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 15:29
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 15:29
Selenium	U		0.00110	0.00200	mg/L	1	09-Jun-2023 15:29

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

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: LMW-21
Collection Date: 30-May-2023 12:15

ANALYTICAL REPORT

WorkOrder:HS23060166
Lab ID:HS23060166-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.000756	J	0.000400	0.00200	mg/L	1	09-Jun-2023 17:01
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 17:01
Lead	0.00159	J	0.000600	0.00200	mg/L	1	09-Jun-2023 17:01
Selenium	0.00640		0.00110	0.00200	mg/L	1	09-Jun-2023 17:01
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.000630	J	0.000400	0.00200	mg/L	1	09-Jun-2023 15:31
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 15:31
Lead	0.000849	J	0.000600	0.00200	mg/L	1	09-Jun-2023 15:31
Selenium	0.00606		0.00110	0.00200	mg/L	1	09-Jun-2023 15:31

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

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: PMW-20R
Collection Date: 30-May-2023 13:10

ANALYTICAL REPORT

WorkOrder:HS23060166
Lab ID:HS23060166-07
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.000456	J	0.000400	0.00200	mg/L	1	09-Jun-2023 17:03
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 17:03
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 17:03
Selenium	0.00139	J	0.00110	0.00200	mg/L	1	09-Jun-2023 17:03
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.000446	J	0.000400	0.00200	mg/L	1	09-Jun-2023 15:33
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 15:33
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 15:33
Selenium	0.00140	J	0.00110	0.00200	mg/L	1	09-Jun-2023 15:33

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

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: MW-41
Collection Date: 30-May-2023 13:45

ANALYTICAL REPORT

WorkOrder:HS23060166
Lab ID:HS23060166-08
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.00218		0.000400	0.00200	mg/L	1	09-Jun-2023 17:05
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 17:05
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 17:05
Selenium	U		0.00110	0.00200	mg/L	1	09-Jun-2023 17:05
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.00356		0.000400	0.00200	mg/L	1	09-Jun-2023 15:35
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 15:35
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 15:35
Selenium	U		0.00110	0.00200	mg/L	1	09-Jun-2023 15:35

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

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: MW-47
Collection Date: 30-May-2023 14:30

ANALYTICAL REPORT

WorkOrder:HS23060166
Lab ID:HS23060166-09
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.00165	J	0.000400	0.00200	mg/L	1	09-Jun-2023 17:07
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 17:07
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 17:07
Selenium	U		0.00110	0.00200	mg/L	1	09-Jun-2023 17:07
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.00106	J	0.000400	0.00200	mg/L	1	09-Jun-2023 15:37
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 15:37
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 15:37
Selenium	U		0.00110	0.00200	mg/L	1	09-Jun-2023 15:37

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

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: LMW-9R
Collection Date: 31-May-2023 08:00

ANALYTICAL REPORT

WorkOrder:HS23060166
Lab ID:HS23060166-10
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.00342		0.000400	0.00200	mg/L	1	09-Jun-2023 17:09
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 17:09
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 17:09
Selenium	0.00199	J	0.00110	0.00200	mg/L	1	09-Jun-2023 17:09
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.00331		0.000400	0.00200	mg/L	1	09-Jun-2023 15:39
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 15:39
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 15:39
Selenium	0.00202		0.00110	0.00200	mg/L	1	09-Jun-2023 15:39

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

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: LMW-22
Collection Date: 31-May-2023 09:00

ANALYTICAL REPORT

WorkOrder:HS23060166
Lab ID:HS23060166-11
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.00219		0.000400	0.00200	mg/L	1	09-Jun-2023 17:11
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 17:11
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 17:11
Selenium	0.00179	J	0.00110	0.00200	mg/L	1	09-Jun-2023 17:11
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.00264		0.000400	0.00200	mg/L	1	09-Jun-2023 15:41
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 15:41
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 15:41
Selenium	0.00171	J	0.00110	0.00200	mg/L	1	09-Jun-2023 15:41

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

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: DUP-01
Collection Date: 30-May-2023 11:45

ANALYTICAL REPORT

WorkOrder:HS23060166
Lab ID:HS23060166-12
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.000433	J	0.000400	0.00200	mg/L	1	09-Jun-2023 17:13
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 17:13
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 17:13
Selenium	U		0.00110	0.00200	mg/L	1	09-Jun-2023 17:13
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 07-Jun-2023		Analyst: JC	
Arsenic	0.000455	J	0.000400	0.00200	mg/L	1	09-Jun-2023 15:43
Cadmium	U		0.000200	0.00200	mg/L	1	09-Jun-2023 15:43
Lead	U		0.000600	0.00200	mg/L	1	09-Jun-2023 15:43
Selenium	U		0.00110	0.00200	mg/L	1	09-Jun-2023 15:43

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

Weight / Prep Log

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23060166

Batch ID: 194872	Start Date: 07 Jun 2023 13:30	End Date: 07 Jun 2023 13:30
Method: WATER - SW3010A	Prep Code: 3010A	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23060166-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-12		10 (mL)	10 (mL)	1	120 plastic HNO3

Batch ID: 194877	Start Date: 07 Jun 2023 13:00	End Date: 07 Jun 2023 13:00
Method: DISS METALS PREP - WATER - SW3010A	Prep Code: 3010A DISS	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23060166-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23060166-12		10 (mL)	10 (mL)	1	120 plastic HNO3

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23060166

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 194872 (0)		Test Name : ICP-MS METALS BY SW6020A			Matrix: Groundwater	
HS23060166-01	MW-45	30 May 2023 09:30		07 Jun 2023 13:30	09 Jun 2023 16:21	1
HS23060166-02	PMW-19R	30 May 2023 10:05		07 Jun 2023 13:30	09 Jun 2023 16:37	1
HS23060166-03	LMW-8	30 May 2023 10:40		07 Jun 2023 13:30	09 Jun 2023 16:39	1
HS23060166-04	LMW-17	30 May 2023 11:10		07 Jun 2023 13:30	09 Jun 2023 16:57	1
HS23060166-05	LMW-5	30 May 2023 11:45		07 Jun 2023 13:30	09 Jun 2023 16:59	1
HS23060166-06	LMW-21	30 May 2023 12:15		07 Jun 2023 13:30	09 Jun 2023 17:01	1
HS23060166-07	PMW-20R	30 May 2023 13:10		07 Jun 2023 13:30	09 Jun 2023 17:03	1
HS23060166-08	MW-41	30 May 2023 13:45		07 Jun 2023 13:30	09 Jun 2023 17:05	1
HS23060166-09	MW-47	30 May 2023 14:30		07 Jun 2023 13:30	09 Jun 2023 17:07	1
HS23060166-10	LMW-9R	31 May 2023 08:00		07 Jun 2023 13:30	09 Jun 2023 17:09	1
HS23060166-11	LMW-22	31 May 2023 09:00		07 Jun 2023 13:30	09 Jun 2023 17:11	1
HS23060166-12	DUP-01	30 May 2023 11:45		07 Jun 2023 13:30	09 Jun 2023 17:13	1
Batch ID: 194877 (0)		Test Name : DISSOLVED METALS BY SW6020A			Matrix: Groundwater	
HS23060166-01	MW-45	30 May 2023 09:30		07 Jun 2023 13:00	09 Jun 2023 15:09	1
HS23060166-02	PMW-19R	30 May 2023 10:05		07 Jun 2023 13:00	09 Jun 2023 15:20	1
HS23060166-03	LMW-8	30 May 2023 10:40		07 Jun 2023 13:00	09 Jun 2023 15:21	1
HS23060166-04	LMW-17	30 May 2023 11:10		07 Jun 2023 13:00	09 Jun 2023 15:23	1
HS23060166-05	LMW-5	30 May 2023 11:45		07 Jun 2023 13:00	09 Jun 2023 15:29	1
HS23060166-06	LMW-21	30 May 2023 12:15		07 Jun 2023 13:00	09 Jun 2023 15:31	1
HS23060166-07	PMW-20R	30 May 2023 13:10		07 Jun 2023 13:00	09 Jun 2023 15:33	1
HS23060166-08	MW-41	30 May 2023 13:45		07 Jun 2023 13:00	09 Jun 2023 15:35	1
HS23060166-09	MW-47	30 May 2023 14:30		07 Jun 2023 13:00	09 Jun 2023 15:37	1
HS23060166-10	LMW-9R	31 May 2023 08:00		07 Jun 2023 13:00	09 Jun 2023 15:39	1
HS23060166-11	LMW-22	31 May 2023 09:00		07 Jun 2023 13:00	09 Jun 2023 15:41	1
HS23060166-12	DUP-01	30 May 2023 11:45		07 Jun 2023 13:00	09 Jun 2023 15:43	1

WorkOrder: HS23060166

InstrumentID: ICPMS06

Test Code: ICP_DISS

Test Number: SW6020A (dissolved)

Test Name: Dissolved Metals by SW6020A

**METHOD DETECTION /
REPORTING LIMITS****Matrix:** Aqueous**Units:** mg/L

Type	Analyte	CAS	DCS Spike	DCS	MDL	PQL
A	Arsenic	7440-38-2	0.00125	0.00132	0.000400	0.00200
A	Cadmium	7440-43-9	0.000500	0.000466	0.000200	0.00200
A	Lead	7439-92-1	0.00125	0.00131	0.000600	0.00200
A	Selenium	7782-49-2	0.00250	0.00282	0.00110	0.00200

WorkOrder: HS23060166

InstrumentID: ICPMS06

Test Code: ICP_TW

Test Number: SW6020A

Test Name: ICP-MS Metals by SW6020A

**METHOD DETECTION /
REPORTING LIMITS****Matrix:** Aqueous**Units:** mg/L

Type	Analyte	CAS	DCS Spike	DCS	MDL	PQL
A	Arsenic	7440-38-2	0.00125	0.00132	0.000400	0.00200
A	Cadmium	7440-43-9	0.000500	0.000466	0.000200	0.00200
A	Lead	7439-92-1	0.00125	0.00131	0.000600	0.00200
A	Selenium	7782-49-2	0.00250	0.00282	0.00110	0.00200

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23060166

QC BATCH REPORT

Batch ID: 194872 (0)		Instrument: ICPMS06		Method: ICP-MS METALS BY SW6020A					
MBLK	Sample ID: MBLK-194872	Units: mg/L		Analysis Date: 09-Jun-2023 15:57					
Client ID:	Run ID: ICPMS06_437531	SeqNo: 7356073		PrepDate: 07-Jun-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Arsenic	U	0.00200							
Cadmium	U	0.00200							
Lead	U	0.00200							
Selenium	U	0.00200							

LCS	Sample ID: LCS-194872	Units: mg/L		Analysis Date: 09-Jun-2023 15:59					
Client ID:	Run ID: ICPMS06_437531	SeqNo: 7356074		PrepDate: 07-Jun-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Arsenic	0.04714	0.00200	0.05	0	94.3	80 - 120			
Cadmium	0.0483	0.00200	0.05	0	96.6	80 - 120			
Lead	0.04607	0.00200	0.05	0	92.1	80 - 120			
Selenium	0.04858	0.00200	0.05	0	97.2	80 - 120			

MS	Sample ID: HS23060166-01MS	Units: mg/L		Analysis Date: 09-Jun-2023 16:25					
Client ID: MW-45	Run ID: ICPMS06_437531	SeqNo: 7356087		PrepDate: 07-Jun-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Arsenic	0.05098	0.00200	0.05	0.000432	101	80 - 120			
Cadmium	0.05095	0.00200	0.05	0.000003	102	80 - 120			
Lead	0.04969	0.00200	0.05	0.000253	98.9	80 - 120			
Selenium	0.05282	0.00200	0.05	0.00114	103	80 - 120			

MS	Sample ID: HS23060122-02MS	Units: mg/L		Analysis Date: 09-Jun-2023 16:05					
Client ID:	Run ID: ICPMS06_437531	SeqNo: 7356077		PrepDate: 07-Jun-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Arsenic	0.05084	0.00200	0.05	0.000803	100	80 - 120			
Cadmium	0.04974	0.00200	0.05	0.000008	99.5	80 - 120			
Lead	0.04852	0.00200	0.05	0.000162	96.7	80 - 120			
Selenium	0.04868	0.00200	0.05	-0.000255	97.9	80 - 120			

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23060166

QC BATCH REPORT

Batch ID: 194872 (0)		Instrument: ICPMS06		Method: ICP-MS METALS BY SW6020A					
MSD		Sample ID: HS23060166-01MSD		Units: mg/L		Analysis Date: 09-Jun-2023 16:27			
Client ID: MW-45		Run ID: ICPMS06_437531		SeqNo: 7356088		PrepDate: 07-Jun-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Arsenic	0.05222	0.00200	0.05	0.000432	104	80 - 120	0.05098	2.42	20
Cadmium	0.05155	0.00200	0.05	0.000003	103	80 - 120	0.05095	1.16	20
Lead	0.04964	0.00200	0.05	0.000253	98.8	80 - 120	0.04969	0.0886	20
Selenium	0.05409	0.00200	0.05	0.00114	106	80 - 120	0.05282	2.37	20
MSD		Sample ID: HS23060122-02MSD		Units: mg/L		Analysis Date: 09-Jun-2023 16:07			
Client ID:		Run ID: ICPMS06_437531		SeqNo: 7356078		PrepDate: 07-Jun-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Arsenic	0.05091	0.00200	0.05	0.000803	100	80 - 120	0.05084	0.132	20
Cadmium	0.04855	0.00200	0.05	0.000008	97.1	80 - 120	0.04974	2.42	20
Lead	0.04858	0.00200	0.05	0.000162	96.8	80 - 120	0.04852	0.117	20
Selenium	0.04912	0.00200	0.05	-0.000255	98.8	80 - 120	0.04868	0.908	20
PDS		Sample ID: HS23060166-01PDS		Units: mg/L		Analysis Date: 09-Jun-2023 16:29			
Client ID: MW-45		Run ID: ICPMS06_437531		SeqNo: 7356089		PrepDate: 07-Jun-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Arsenic	0.101	0.00200	0.1	0.000432	101	75 - 125			
Cadmium	0.1004	0.00200	0.1	0.000003	100	75 - 125			
Lead	0.09738	0.00200	0.1	0.000253	97.1	75 - 125			
Selenium	0.1023	0.00200	0.1	0.00114	101	75 - 125			
PDS		Sample ID: HS23060122-02PDS		Units: mg/L		Analysis Date: 09-Jun-2023 16:09			
Client ID:		Run ID: ICPMS06_437531		SeqNo: 7356079		PrepDate: 07-Jun-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Arsenic	0.1069	0.00200	0.1	0.000803	106	75 - 125			
Cadmium	0.1033	0.00200	0.1	0.000008	103	75 - 125			
Lead	0.1016	0.00200	0.1	0.000162	101	75 - 125			
Selenium	0.1033	0.00200	0.1	-0.000255	104	75 - 125			

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23060166

QC BATCH REPORT

Batch ID: 194872 (0)		Instrument: ICPMS06		Method: ICP-MS METALS BY SW6020A					
SD		Sample ID: HS23060166-01SD		Units: mg/L		Analysis Date: 09-Jun-2023 16:23			
Client ID: MW-45		Run ID: ICPMS06_437531		SeqNo: 7356086		PrepDate: 07-Jun-2023		DF: 5	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit Qual
Arsenic	U	0.0100					0.000432	0	10
Cadmium	U	0.0100					0.000003	0	10
Lead	U	0.0100					0.000253	0	10
Selenium	U	0.0100					0.00114	0	10

SD		Sample ID: HS23060122-02SD		Units: mg/L		Analysis Date: 09-Jun-2023 16:03			
Client ID:		Run ID: ICPMS06_437531		SeqNo: 7356076		PrepDate: 07-Jun-2023		DF: 5	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit Qual
Arsenic	U	0.0100					0.000803	0	10
Cadmium	U	0.0100					0.000008	0	10
Lead	U	0.0100					0.000162	0	10
Selenium	U	0.0100					-0.000255	0	10

The following samples were analyzed in this batch:

HS23060166-01	HS23060166-02	HS23060166-03	HS23060166-04
HS23060166-05	HS23060166-06	HS23060166-07	HS23060166-08
HS23060166-09	HS23060166-10	HS23060166-11	HS23060166-12

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23060166

QC BATCH REPORT

Batch ID: 194877 (0)		Instrument: ICPMS06		Method: DISSOLVED METALS BY SW6020A (DISSOLVED)					
MBLK	Sample ID: MBLK-194877	Units: mg/L		Analysis Date: 09-Jun-2023 15:05					
Client ID:	Run ID: ICPMS06_437531	SeqNo: 7355949		PrepDate: 07-Jun-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	U	0.00200							
Cadmium	U	0.00200							
Lead	U	0.00200							
Selenium	U	0.00200							

LCS	Sample ID: LCS-194877	Units: mg/L		Analysis Date: 09-Jun-2023 15:07					
Client ID:	Run ID: ICPMS06_437531	SeqNo: 7355950		PrepDate: 07-Jun-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	0.04992	0.00200	0.05	0	99.8	80 - 120			
Cadmium	0.0523	0.00200	0.05	0	105	80 - 120			
Lead	0.04947	0.00200	0.05	0	98.9	80 - 120			
Selenium	0.05109	0.00200	0.05	0	102	80 - 120			

MS	Sample ID: HS23060166-01MS	Units: mg/L		Analysis Date: 09-Jun-2023 15:14					
Client ID: MW-45	Run ID: ICPMS06_437531	SeqNo: 7355953		PrepDate: 07-Jun-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	0.05086	0.00200	0.05	0.000318	101	75 - 125			
Cadmium	0.05018	0.00200	0.05	0.000017	100	75 - 125			
Lead	0.04983	0.00200	0.05	0.000156	99.4	75 - 125			
Selenium	0.05149	0.00200	0.05	0.00168	99.6	75 - 125			

MSD	Sample ID: HS23060166-01MSD	Units: mg/L		Analysis Date: 09-Jun-2023 15:16					
Client ID: MW-45	Run ID: ICPMS06_437531	SeqNo: 7355954		PrepDate: 07-Jun-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	0.05144	0.00200	0.05	0.000318	102	75 - 125	0.05086	1.13	20
Cadmium	0.05123	0.00200	0.05	0.000017	102	75 - 125	0.05018	2.08	20
Lead	0.05002	0.00200	0.05	0.000156	99.7	75 - 125	0.04983	0.369	20
Selenium	0.05152	0.00200	0.05	0.00168	99.7	75 - 125	0.05149	0.0544	20

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23060166

QC BATCH REPORT

Batch ID: 194877 (0)		Instrument: ICPMS06		Method: DISSOLVED METALS BY SW6020A (DISSOLVED)					
PDS		Sample ID: HS23060166-01PDS		Units: mg/L		Analysis Date: 09-Jun-2023 15:18			
Client ID: MW-45		Run ID: ICPMS06_437531		SeqNo: 7355955		PrepDate: 07-Jun-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	0.1018	0.00200	0.1	0.000318	101	75 - 125			
Cadmium	0.1023	0.00200	0.1	0.000017	102	75 - 125			
Lead	0.09893	0.00200	0.1	0.000156	98.8	75 - 125			
Selenium	0.1013	0.00200	0.1	0.00168	99.7	75 - 125			

SD		Sample ID: HS23060166-01SD		Units: mg/L		Analysis Date: 09-Jun-2023 15:12			
Client ID: MW-45		Run ID: ICPMS06_437531		SeqNo: 7355952		PrepDate: 07-Jun-2023		DF: 5	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit Qual
Arsenic	U	0.0100					0.000318	0	10
Cadmium	U	0.0100					0.000017	0	10
Lead	U	0.0100					0.000156	0	10
Selenium	U	0.0100					0.00168	0	10

The following samples were analyzed in this batch:

HS23060166-01	HS23060166-02	HS23060166-03	HS23060166-04
HS23060166-05	HS23060166-06	HS23060166-07	HS23060166-08
HS23060166-09	HS23060166-10	HS23060166-11	HS23060166-12

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23060166

**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 Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	88-00356	27-Mar-2024
Dept of Defense	L23-358	31-May-2025
Florida	E87611-37	30-Jun-2023
Kansas	E-10352; 2022-2023	31-Jul-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2023	31-Dec-2023
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-23-31	30-Apr-2024
Utah	TX026932022-13	31-Jul-2023

Sample Receipt Checklist

Work Order ID: HS23060166

Date/Time Received: 02-Jun-2023 09:15

Client Name: Golder St Louis

Received by: Corey Grandits

Completed By: /S/ Corey Grandits	02-Jun-2023 18:15	Reviewed by: /S/ James Guin	05-Jun-2023 18:09
eSignature	Date/Time	eSignature	Date/Time

Matrices: WCarrier name: FedEx

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 ☐	2 Page(s)
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	COC IDs:241332 , 241331
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):	3.2UC/3.1C IR31		
Cooler(s)/Kit(s):	51075		
Date/Time sample(s) sent to storage:	6/2/23		
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:



Cincinnati, OH
+1 513 733 5336

Fort Collins, CO
+1 970 490 1511

Everett, WA
+1 425 356 2600

Holland, MI
+1 616 399 6070

Chain of Custody Form

Page 1 of 2

COC ID: 241332

Houston, TX
+1 281 530 5656

Spring City, PA
+1 610 948 4903

South Charleston, WV
+1 304 356 3168

Middletown, PA
+1 717 944 5541

Salt Lake City, UT
+1 801 266 7700

York, PA
+1 717 505 5280

Customer Information			Project Information				Parameter/Method Request for Analysis												
Purchase Order	GL2040906205	Project Name	Frisco CDC North CAMU GW Qty	A	ICP_TW (6020A - Total As. Cd. Pb. Se (QTY)) [120mlPHNO3]														
Work Order		Project Number	GL2040906205	B	(6020A - DISSolved As. Cd. Pb. Se (QTY))-FidFitr [120mlPHNO3]														
Company Name	WSP Golder	Bill To Company	WSP Golder	C	MS/MSD [1x120ml P HNO3 (T), 1x120ml P HNO3 (D)]														
Send Report To	Rahel Pommerenke	Invoice Attn	Accounts Payable WSP	D	HS23060166 WSP Golder Frisco CDC GW North CAMU 														
Address	701 Emerson Road Suite 250	Address	701 Emerson Road Suite 250	E															
				F															
City/State/Zip	Creve Coeur, MO 63141	City/State/Zip	Creve Coeur MO 63141	G															
Phone	(314) 394-6125	Phone	(314) 984-8800	H															
Fax		Fax		I															
e-Mail Address	Rahel_Pommerenke@golder.com	e-Mail Address	USENVAccountspayable@wsp.com	J															
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold		
1	MW-45	5-30-23	0930	Groundwa	2,8	4	X	X	X										
2	PMW-19R	5-30-23	1005	Groundwa	2,8	2	X	X											
3	LMW-8	5-30-23	1040	Groundwa	2,8	2	X	X											
4	LMW-17	5-30-23	1110	Groundwa	2,8	2	X	X											
5	LMW-5	5-30-23	1145	Groundwa	2,8	2	X	X											
6	LMW-21	5-30-23	1215	Groundwa	2,8	2	X	X											
7	PMW-20R	5-30-23	1310	Groundwa	2,8	2	X	X											
8	MW-41	5-30-23	1345	Groundwa	2,8	2	X	X											
9	MW-47	5-30-23	1430	Groundwa	2,8	2	X	X											
10	LMW-9R	5-31-23	0800	Groundwa	2,8	2	X	X											
Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)				Other				Results Due Date:							
JOHN BRAYTON		FEDEX		☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour															
Relinquished by:		Date:	Time:	Received by:			Notes: Frisco CDC North CAMU GW												
Relinquished by:		Date:	Time:	Received by (Laboratory):			Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)										
Logged by (Laboratory):		Date:	Time:	Checked by (Laboratory):			51025	3.20	☐ Level II Std QC	☒ TRRP Checklist									
							1831		☐ Level III Std QC/Raw Data	☐ TRRP Level IV									
									☐ Level IV SW846/CLP										
									☐ Other										
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035																			

- Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

Copyright 2011 by ALS Environmental.



Cincinnati, OH
+1 513 733 5336

Everett, WA
+1 425 356 2600

Fort Collins, CO
+1 970 490 1511

Holland, MI
+1 616 399 6070

Chain of Custody Form

Page 2 of 2

COC ID: 241331

Houston, TX
+1 281 530 5656

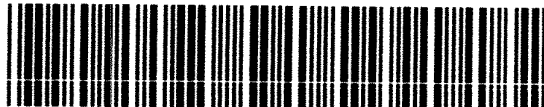
Middletown, PA
+1 717 944 5541

Spring City, PA
+1 610 948 4903

Salt Lake City, UT
+1 801 266 7700

South Charleston, WV
+1 304 356 3168

York, PA
+1 717 505 5280

Customer Information				Project Information				Parameter/Method Request for Analysis												
Purchase Order	GL2040906205			Project Name	Frisco CDC North CAMU GW Qty			A	ICP_TW (6020A - Total As, Cd, Pb, Se (QTY)) [120mlPHNO3											
Work Order				Project Number	GL2040906205			B	(6020A - DISSolved As, Cd, Pb, Se (QTY))-FIdFitr [120ml											
Company Name	WSP Golder			Bill To Company	WSP Golder			C	MS/MSD [1x120ml P HNO3 (T), 1x120ml P HNO3 (D)]											
Send Report To	Rahel Pommerenke			Invoice Attn	Accounts Payable WSP			D												
Address	701 Emerson Road Suite 250			Address	701 Emerson Road Suite 250			E	HS23060166 WSP Golder Frisco CDC GW North CAMU 											
								F												
City/State/Zip	Creve Coeur, MO 63141			City/State/Zip	Creve Coeur MO 63141			G												
Phone	(314) 394-6125			Phone	(314) 984-8800			H												
Fax				Fax				I												
e-Mail Address	Rahel_Pommerenke@golder.com			e-Mail Address	USENVAccountspayable@wsp.com			J												

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	LMW-22	5-31-23	0900	Groundwa	2,8	2	X	X									
2	DUP-01			Groundwa	2,8	2	X	X									
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign <i>JOHN BRAYTON</i>				Shipment Method FEDEX		Required Turnaround Time: (Check Box) ☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour				Results Due Date:			
Relinquished by <i>John</i>		Date: 5-31-23	Time: 1730	Received by:		Notes: Frisco CDC North CAMU GW							
Relinquished by:		Date:	Time:	Received by (Laboratory): <i>19 6-223 0915</i>		Cooler ID		Cooler Temp.		QC Package: (Check One Box Below)			
Logged by (Laboratory):		Date:	Time:	Checked by (Laboratory):						☐ Level II Std QC ☒ TRRP Checklist ☐ Level III Std QC/Raw Data ☐ TRRP Level IV ☐ Level IV SW846/CLP ☐ Other:			
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035													

- Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

Copyright 2011 by ALS Environmental.

 ALS 10450 Stancliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	CUSTODY SEAL		Seal Broken By: <i>SM</i>
	Date: <i>6-1-23</i>	Time: <i>1730</i>	Date: <i>06/02/23</i>
	Name: <i>[Signature]</i>	Company: <i>[Signature]</i>	

51075 JUN 02 2023



51075

Part # 159409-094 NTW/EXP 01/24 **

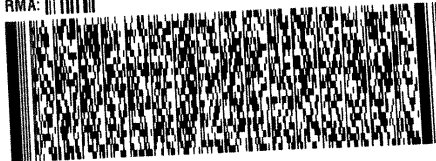
ORIGIN ID:SGRA (512) 695-8609
 JOHN BRAYTON
 GOLDER ASSOCIATES
 1823 CALLENDER HILL RD
 MANSFIELD, TX 760636091
 UNITED STATES US

SHIP DATE: 13MAY23
 ACTWGT: 12.50 LB MAN
 CAD: 0221247/CAFE3704

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

(281) 530-5656
 REF: GOLDER ASSOCIATES FRISCO B092966 D.W

RMA: ||| ||| |||



FedEx
Express



FedEx
 TRK# **6230 2999 6924**
 0221

FRI - 02 JUN 10:30A
PRIORITY OVERNIGHT

AB SGRA

77099
IAH
 TX-US



APPENDIX D

Data Usability Summaries



DATA USABILITY SUMMARY

ALS WORK ORDERS: HS23031023 & HS23060166

PROJECT NO: 2040906205.000

CLIENT: Frisco Community Development Corporation

SAMPLE DATES: March 15 and 16, 2023
May 30 and 31, 2023

LABORATORY: ALS Group

WORK ORDERS: HS23031023 and HS23060166

INTENDED USE: First Semiannual 2023 Groundwater Monitoring Report

SITE: Frisco Community Development Corporation Site, 7471 Old 5th Street,
Frisco, TX

TESTS/METHODS

- SW-846 6020A - Inductively Coupled Plasma-Mass Spectrometry (ICP/MS)
- SW-7470A – Mercury

SAMPLES

Eleven groundwater samples, one matrix spike and matrix spike duplicate sample, and one field duplicate sample were collected in March 2023 for the analyses of total and dissolved metals: antimony, arsenic, barium, cadmium, chromium, copper, lead, selenium, silver, zinc, and mercury. Eleven groundwater samples, one matrix spike and matrix spike duplicate sample, and one field duplicate sample were collected in May 2023 for the analyses of total and dissolved metals: arsenic, cadmium, lead, and selenium. See Table 1 for the sample list.

WSP completed a review of the chemical analysis data for conformance with the requirements of the Texas Risk Reduction Program (TRRP) guidance document, Review and Reporting of COC Concentration Data (RGG-366/TRRP-13 Revised May 2010) and for adherence to project objectives. The results of the review are discussed in this data usability summary (DUS). WSP completed the review using the following laboratory and project submittals:

- Laboratory reportable data as defined in TRRP-13;
- Laboratory review checklists (LRC) with the associated exception reports;
- Laboratory Electronic Data Deliverable (EDD); and
- Project field notes from the sampling event.

The review of the reportable data included the quality control (QC) parameters listed below, as required per TRRP-13, using the applicable analytical method and project requirements:

- Data Completeness

- Chain-of-Custody Procedures
- Sample Condition
- Field Procedures
- Results Reporting Procedures
- Field and Laboratory Blanks
- Laboratory Control Sample (LCS)
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries
- Field Duplicate Precision
- Detectability Check Sample (DCS)

Additionally, WSP used the LRC to evaluate the following QC parameters:

- Method Quantitation Limits (MQLs)
- Method Detection Limits (MDLs) and Sample Detection Limits (SDLs)
- Instrument Tuning, Calibration, and Performance
- Internal Standards

Criteria used for this data usability review are as follows:

- Precision: $\pm$ MQL difference or 30% relative percent difference (RPD) for laboratory duplicates and $\pm$ 2x MQL difference (if either result is less than 5x MQL) or 30% RPD for field duplicates as recommended in TRRP-13
- Accuracy: 70-130% spike recovery (and not less than 30% or data is rejected) as recommended in TRRP-13

If an item was found outside of the review criteria, the reviewer applied a data qualifier and bias code to the results for the affected samples in accordance with TRRP-13.

LABORATORY CERTIFICATION

At the time the laboratory data were generated for this project, the laboratory was NELAC accredited under the Texas Laboratory Accreditation Program (TLAP Certification T104704231) for the matrices, methods and parameters of analysis requested on the chain-of-custody forms.

USABILITY SUMMARY

Data are usable for the intended purpose. No data were qualified due to exceedances of quality control criteria (Table 2).

Preparer: Brenda Basile 07/10/2023

Senior Reviewer: Josh Hale 07/11/2023

QUALITY CONTROL PARAMETERS AND OUTCOMES

Data Completeness

The laboratory data package contains necessary data (i.e., the laboratory reportable data per TRRP-13) and the EDD contains sample results in acceptable format.

Chain-of-Custody

Proper sample custody procedures were used, which confirms that the integrity of the samples was maintained. The information on the custody records is complete and agrees with that in the field notes and laboratory reports.

Sample Condition

Samples were collected in appropriate containers, properly preserved in the field, and prepared and analyzed within the holding times as required in the analytical method. No data were qualified.

Field Procedures

The samples were collected and placed immediately into laboratory supplied containers and then into a cooler with ice for overnight delivery to the laboratory.

According to the Work Plan, groundwater samples with turbidity greater than 10 nephelometric turbidity units (NTU) would be field filtered with a 10-micron filter for analyses of total metals. None of the groundwater samples collected had a turbidity greater than 10 NTU during this sampling event. For dissolved metals, samples were field filtered with a 0.45-micron filter. According to the Groundwater Sample Collection Forms, samples were filtered appropriately.

Results Reporting Procedures

Water results are reported in milligrams per liter (mg/L). Non-detects are reported using the SDL as specified per TRRP and detects between the SDL and MQL are reported with a laboratory J-flag. The concentration reported for detects between the SDL and MQL is below the calibration range and thus is considered estimated.

The dissolved metals concentrations were slightly above the total metal concentration in some samples as shown on Table 3. Total and dissolved concentrations were evaluated using a criterion of 30 RPD or less than two times the MQL as shown in Table 3. No data were qualified.

Laboratory Blanks

Method blank and continuing calibration blank data provided by the laboratory were evaluated. Sample data associated with method blank data are qualified if the sample concentration is within five times the blank concentration. Sample data associated with continuing calibration blank data are qualified if the analyte is detected above the MDL and the sample concentration is detected. If data is qualified as estimated based on accuracy or precision criteria that was not met, the data is qualified with both a J-flag and a U-flag. No data are qualified as shown on Table 4.

Laboratory Control Sample

The LCS recoveries (%R) are within the TRRP-13 recommended criteria of 80 -120 percent recovery (%R).

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

WSP submitted one MS/MSD for this sampling event (MW-45). In addition, one sample in the March 2023 sample event, PMW-20R, was analyzed as a mercury MS/SMD. The MS/MSD recoveries were within the TRRP-13 recommended criteria of 70-130%R. Precision was within the TRRP-13 recommended criteria of 30 RPD. The post-digestion spike recovery was within the TRRP-13 recommended criteria of 70-130%R. The serial dilution percent difference was within the method criteria of 10% difference.

Field Duplicate Precision

One field duplicate was collected with these samples (LMW-5/DUP-01). Field duplicate results are presented in Table 5. Samples and COCs with duplicate precision were within the TRRP-13 recommended criteria of 30 RPD or less than two times the MQL as shown in Table 5.

Detectability Check Standards (DCS)

DCS data were provided in the laboratory report. DCS results support the SDLs in the laboratory report.

Instrument Tuning and Performance

According to the LRC, instrument tuning and interference check sample results met method requirements and therefore no data qualification was warranted.

Instrument Calibration

According to the LRC, calibrations were acceptable.

Internal Standards

According to the LRC, internal standard areas were acceptable.

Table 1
Cross-reference of Field Sample Identification and Laboratory Identifications
Frisco CDC GW North CAMU

Lab Sample Identification	Field Sample Identification	Sample Date	Total/Dissolved Metals	Comments
HS23031023-01	MW-45	3/15/2023	✓	Matrix Spike/Matrix Spike Duplicate
HS23031023-02	PMW-19R	3/15/2023	✓	
HS23031023-03	LMW-8	3/15/2023	✓	
HS23031023-04	LMW-17	3/15/2023	✓	
HS23031023-05	LMW-5	3/15/2023	✓	
HS23031023-06	LMW-21	3/15/2023	✓	
HS23031023-07	PMW-20R	3/15/2023	✓	Mercury MS/MSD
HS23031023-08	MW-41	3/15/2023	✓	
HS23031023-09	MW-47	3/15/2023	✓	
HS23031023-10	LMW-9R	3/15/2023	✓	
HS23031023-11	LMW-22	3/16/2023	✓	
HS23031023-12	DUP-01	3/15/2023	✓	Field duplicate of LMW-5
HS23060166-01	MW-45	5/30/2023	✓	Matrix Spike/Matrix Spike Duplicate
HS23060166-02	PMW-19R	5/30/2023	✓	
HS23060166-03	LMW-8	5/30/2023	✓	
HS23060166-04	LMW-17	5/30/2023	✓	
HS23060166-05	LMW-5	5/30/2023	✓	
HS23060166-06	LMW-21	5/30/2023	✓	
HS23060166-07	PMW-20R	5/30/2023	✓	
HS23060166-08	MW-41	5/30/2023	✓	
HS23060166-09	MW-47	5/30/2023	✓	
HS23060166-10	LMW-9R	5/31/2023	✓	
HS23060166-11	LMW-22	5/31/2023	✓	
HS23060166-12	DUP-01	5/30/2023	✓	Field duplicate of LMW-5

Table 2
Qualified Data
Frisco CDC GW North CAMU

Field Sample ID	Lab Sample ID	Analyte	Result	Units	Qualifier	Explanation
No data are qualified						

Notes:
J - Estimated data; data are qualified due to exceedance of one or more quality control criteria. The reported sample concentration is the approximate concentration of the analyte in the sample.
U - Analyte not detected at associated concentration (column labeled as "Result").
mg/L - milligrams per liter

Table 3
Total Versus Dissolved Comparison
Frisco CDC GW North CAMU

Sample	Analyte	Total Concentration (mg/L)	Dissolved Concentration (mg/L)	Precision (RPD)	MQL	Qualification
MW-45 (March 2023)	Copper	0.00136	0.00168	21	0.00200	None; less than 30% RPD
MW-45 (March 2023)	Selenium	< 0.00110	0.00137	22	0.00200	None; less than 30% RPD
MW-45 (March 2023)	Zinc	< 0.00200	0.00213	6.3	0.00400	None; less than 30% RPD
PMW-19R (March 2023)	Barium	0.0529	0.0572	7.8	0.00400	None; less than 30% RPD
LMW-17 (March 2023)	Arsenic	0.000865	0.00087	0.69	0.00200	None; less than 30% RPD
LMW-21 (March 2023)	Arsenic	0.000621	0.000648	4.3	0.00200	None; less than 30% RPD
LMW-21 (March 2023)	Barium	0.0295	0.0328	11	0.00400	None; less than 30% RPD
LMW-21 (March 2023)	Selenium	0.00563	0.00715	24	0.00200	None; less than 30% RPD
PMW-20R (March 2023)	Selenium	0.00233	0.00238	2.1	0.00200	None; less than 30% RPD
MW-41 (March 2023)	Barium	0.0686	0.0711	3.6	0.00400	None; less than 30% RPD
LMW-9R (March 2023)	Zinc	0.00213	0.00227	6.4	0.00400	None; less than 30% RPD
LMW-22 (March 2023)	Copper	0.00110	0.00160	37	0.00200	None; difference less than 2 times the MQL
DUP-01 (March 2023)	Arsenic	0.000484	0.00050	3.3	0.00200	None; less than 30% RPD
DUP-01 (March 2023)	Barium	0.0482	0.0496	2.9	0.00400	None; less than 30% RPD
DUP-01 (March 2023)	Zinc	< 0.00200	0.00205	2	0.00400	None; difference less than 2 times the MQL
DUP-01 (March 2023)	Mercury	< 0.0000300	0.000099	107	0.000200	None; difference less than 2 times the MQL
MW-45 (May 2023)	Selenium	0.00114	0.00168	38	0.00200	None; difference less than 2 times the MQL
PMW-19R (May 2023)	Arsenic	0.000583	0.000586	0.51	0.00200	None; less than 30% RPD
LMW-17 (May 2023)	Arsenic	0.000537	0.000566	5.3	0.00200	None; less than 30% RPD
LMW-5 (May 2023)	Arsenic	0.000486	0.000491	1.0	0.00400	None; less than 30% RPD
PMW-20R (May 2023)	Selenium	0.00139	0.00140	0.72	0.00200	None; less than 30% RPD
MW-41 (May 2023)	Arsenic	0.00218	0.00356	48	0.00200	None; difference less than 2 times the MQL
LMW-9R (May 2023)	Selenium	0.00199	0.00202	1.5	0.00200	None; less than 30% RPD
LMW-22 (May 2023)	Arsenic	0.00219	0.00264	19	0.00200	None; less than 30% RPD
DUP-01 (May 2023)	Arsenic	0.000433	0.000455	5.0	0.00200	None; less than 30% RPD

Notes:

No qualification necessary if the difference between dissolved and total did not exceed the analytical method error (i.e., + 2x MQL difference (if either result is less than 5x MQL) or 30% RPD).

mg/L - milligrams per liter

RPD - relative percent difference

MQL - Method quantitation limit

TABLE 4 - BLANK DETECTIONS

Lab Sample ID	Analyte	Result	Qualified Concentration	Units	Explanation
MBLK-191223	Chromium (Total)	0.000454	0.00227	mg/L	None qualified; either not detected or concentration greater than 5x the blank
ICPMS06_430778 CCB-15	Chromium (Total)	0.000464	0.00232	mg/L	None qualified; either not detected or concentration greater than 5x the blank

Notes:

U - Not detected; the analyte was detected <5x the concentration in an associated blank.

mg/L - milligrams per liter

Table 5
Field Duplicate Precision Calculations
Frisco CDC GW North CAMU

Duplicate and Parent Sample Field Identification	Analyte	Sample Result	Duplicate Result	RPD ^a	Qualifier	Qualifier Added
LMW-5/DUP-01 (March 2023)	Arsenic, total	0.000670 J	0.000484 J	32	A	None; absolute difference <2X MQL
	Arsenic, dissolved	0.000510 J	0.000500 J	2.0	A	None
	Barium, total	0.0571	0.0482	17	A	None
	Barium, dissolved	0.0509	0.0496	2.6	A	None
	Copper, total	0.00155 J	0.00121 J	25	A	None
	Copper, dissolved	0.00112 J	0.00117	4.4	A	None
	Lead, total	0.00135 J	0.000986 J	31	A	None; absolute difference <2X MQL
	Zinc, dissolved	0.00200 U	0.002050 J	2.5	A	None
	Mercury, dissolved	0.000030 U	0.000099 J	107	A	None; absolute difference <2X MQL
LMW-5/DUP-01 (May 2023)	Arsenic, total	0.000486 J	0.000433 J	12	A	None
	Arsenic, dissolved	0.000491 J	0.000455 J	7.6	A	None

Notes:

^a Relative Percent Difference (RPD) = ((SR - DR)*200)/(SR + DR), where SR is the sample result and DR is the duplicate result.

A - Acceptable Data

The RPD test (<30%) applies if both results are greater than 5x MQL. Otherwise, the absolute difference test (< 2x MQL) applies.

NA - Not applicable

MQL - Method quantitation limit

SDL - Sample detection limit

mg/L - milligrams per liter

J - estimated value; detected between the MQL and SDL.

U - not detected; analyte was detected below SDL.



WSP.com