January 28, 2025
SCS Project No. 16224008.00

Mr. Luke Johnson
Compliance Manager
NAES Corporation
2161 Rattlesnake Road
Riesel, Texas 76682

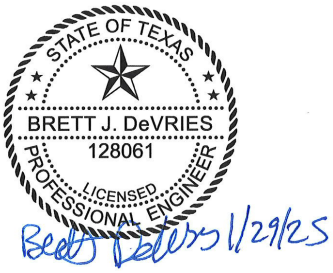
Subject: Sandy Creek Energy Station
Coal Combustion Residual Waste Management Facility
TCEQ Registration No. CCR107
McLennan County, Texas
2023 Annual Groundwater Monitoring and Corrective Action Report Submittal

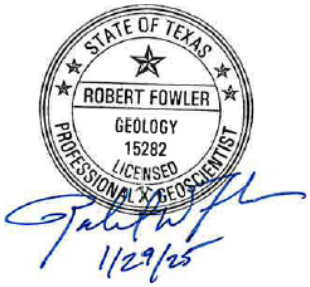
Dear Mr. Johnson:

SCS Engineers (SCS) is pleased to submit the 2024 Annual Groundwater Monitoring and Corrective Action Report to the Sandy Creek Energy Station (Plant) Coal Combustion Residual (CCR) Waste Management Facility (Landfill), in accordance with Coal Combustion Residual Rule (CCR) 40 CFR Part §257.105(h)(1), and the site Groundwater Sampling and Analysis Plan (GWSAP), prepared by SCS, dated January 13, 2022.

Please contact Robert Fowler at (501) 672-9320 if you have comments or require additional information.

Sincerely,





Morgan Spears
Associate Staff Professional
SCS ENGINEERS
TBPE Registration No. F-3407

Brett DeVries, Ph.D., P.E.
Senior Project Manager
SCS ENGINEERS

Robert Fowler, P.G.
Project Manager
SCS ENGINEERS

Attachment: 2024 Annual Groundwater Monitoring and Corrective Action Report

2024 Annual Groundwater Monitoring and Corrective Action Report

Sandy Creek Energy Station Coal Combustion Residual Waste Management Facility McLennan County, Texas

Prepared For:

Sandy Creek Energy Station
2161 Rattlesnake Road
Riesel, Texas 76682

SCS ENGINEERS

SCS Project 16224008.00 | January 2025

1901 Central Drive, Suite 550
Bedford, TX 76021
817-571-2288

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Figures

Appendices

1.0 INTRODUCTION AND BACKGROUND

SCS Engineers (SCS) is submitting this 2024 Annual Groundwater Monitoring and Corrective Action Report for the Sandy Creek Energy Station (Plant) Coal Combustion Residual Waste Management Facility (Landfill). This report is submitted in accordance with 40 CFR §257.105(h)(6), 30 TAC 352.931, and the site Groundwater Sampling and Analysis Plan (GWSAP) prepared by SCS, and sealed on January 13, 2022. This report includes results for two semiannual detection monitoring events, conducted in June 2024 and December 2024.

The Plant is a pulverized coal-fired electric generation facility which operates a landfill for disposal of dry scrubber ash and bottom ash generated during the coal combustion process at the facility. Incidental wastes generated during the operation of the facility may also be disposed in the landfill, as described in the initial registration notification to TCEQ. The landfill is currently comprised of disposal cells, Cells 1 and 2, which commenced receiving waste in early 2013 and October 2014, respectively. Additionally, a portion of Cell 3 (includes subcells 3A through 3D) was constructed in 2021. The approximate area of currently constructed Cells 1, 2, and 3 are 10.0, 14.3, and 10.3 acres, respectively. As of December 2024, there has been no CCR waste placed into Cell 3.

Sampling of groundwater monitoring wells is conducted in accordance with 40 CFR §257.93, 30 TAC §352.931, and the GWSAP. Groundwater monitoring of six wells must be performed (BW-1, MW-1, MW-2, MW-3, MW-4, MW-5; as depicted on **Figure 1** and **Figure 2** for well locations).

In accordance with 40 CFR §257.94(b), and 30 TAC 352.941 quarterly background monitoring must be performed for each well for eight consecutive quarters (i.e., eight independent samples collected for each well). The Appendix III and IV constituents monitored during the first eight quarters include 18 inorganic compounds, total dissolved solids, radium-226, and radium-228. In accordance with 40 CFR §257.94(a and b), the constituents monitored in subsequent events and during the 2024 monitoring events include Appendix III constituents only. Monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5 and BW-1 are currently in detection monitoring.

2.0 GROUNDWATER MONITORING SUMMARY

2.1 GROUNDWATER MONITORING SYSTEM

The current groundwater monitoring system at the SCES landfill consists of six wells, all of which are in detection monitoring (see **Table 1** below). Monitoring well BW-1 serves as an upgradient monitoring point and the remaining five monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5) serve as downgradient monitoring points. **Figure 1** and **Figure 2** depicts monitoring well locations at SCES.

Table 1 – Sandy Creek Energy Station Groundwater Monitoring System

Well ID (U/D)[1]	Status	Top of Casing Elevation (ft msl)[2]	Well Depth (ft, bgs)[2]	Screen Interval (ft, bgs)[2]	Water Level Elevation (ft msl, on 12/2/2024)
BW-1 (U)	Detection	485.57	38.63	28.30-38.30	469.17
MW-1 (D)	Detection	465.87	34.23	23.90-33.90	452.52
MW-2 (D)	Detection	442.15	19.63	9.30-19.30	429.42
MW-3 (D)	Detection	430.06	16.23	5.98-15.98	416.34
MW-4 (D)	Detection	436.91	30.30	20.00-30.00	423.19
MW-5 (D)	Detection	454.52	35.30	25.00-35.00	432.82

1 (U) = upgradient, (D) = downgradient; 2 Top of Casing Elevation, Well Depth, and Screen Interval information obtained from Table 1 – Monitoring Well and Piezometer Construction Details and Groundwater Elevations prepared by Geosyntec Consultants, dated March 11, 2016 and the November 2020 Groundwater Monitoring Well Install Report prepared by SCS Engineers dated January 22, 2021; ft msl = feet above mean sea level; ft bgs = feet below ground surface

2.2 SUMMARY OF 2024 SAMPLING EVENTS

All sampling events followed the groundwater sampling and laboratory analysis procedures outlined in the GWSAP. A duplicate sample was collected from one well during each event for Quality Assurance & Quality Control (QA/QC) purposes. All monitoring wells were sampled and analyzed for 40 CFR §257 Appendix III constituents, in accordance with 40 CFR §257.94(a).

June 2024 – Semiannual Detection Monitoring Event

All six wells (MW-1, MW-2, MW-3, MW-4, MW-5, and BW-1) were purged and sampled on June 14, 2024, using disposable PVC bailers. Quality Assurance/Quality Control (QA/QC) samples obtained included one duplicate (DUP). Field forms and laboratory results for this event are provided in **Appendices A** & **B**, respectively, and summarized in **Table 2**. The Laboratory Review Checklist was reviewed by SCS, and the data was determined to conform to the most current National Environmental Laboratory Accreditation Conference (NELAC) standards.

December 2024 – Annual Detection Monitoring Event

All six wells (MW-1, MW-2, MW-3, MW-4, MW-5, and BW-1) were purged and sampled on December 2, 2024, using disposable PVC bailers. Quality Assurance/Quality Control (QA/QC) samples obtained included one duplicate (DUP). Field forms and laboratory results for this event are provided in **Appendices A** & **B**, respectively, and summarized in **Table 2**. The Laboratory Review Checklist was reviewed by SCS, and the data was determined to conform to the most current National Environmental Laboratory Accreditation Conference (NELAC) standards.

3.0 RESULTS AND STATISTICAL ANALYSIS

A summary of June 2024 and December 2024 laboratory results and statistical limits in each well–constituent pair is provided in **Table 2**. Time series graphs of Appendix III constituent concentrations are provided in **Appendix D**. Statistical limits were determined in accordance with 40 CFR §257.93(f-g) and the GWSAP using the software program Sanitas®. Statistical limits for the June 2024 and December 2024 sampling events were determined in the Background Evaluation Report Update completed on October 6, 2023. Statistical limits were presented using Shewhart-CUSUM control charts, non-parametric prediction limits, or parametric prediction limits as deemed appropriate by background data distributions.

Table 2 – Sandy Creek Energy Station 2024 Sampling Results and Statistical Limits

MW-ID	Constituent	Lab Results June 2024	Lab Results December 2024	Statistical Limit June & December 2024*
MW-1 (D)	Boron (mg/L)	1.100	1.100	1.661
	Calcium (mg/L)	500.0	560.0	603.5
	Chloride (mg/L)	140	150	253
	pH at 25˚C	7.2	7.2	6.2 - 8.3
	Sulfate (mg/L)	2300	2300	3299
	TDS (mg/L)	3500	4600	5444
	Fluoride (mg/L)	ND	0.56	1.20
MW-2 (D)	Boron (mg/L)	1.100	1.600	3.533
	Calcium (mg/L)	470.0	660.0	827.1
	Chloride (mg/L)	1000	1400	3709
	pH at 25˚C	6.7	7.0	6.7 - 7.5
	Sulfate (mg/L)	2900	2300	4671
	TDS (mg/L)	5500	6300	13374
	Fluoride (mg/L)	ND	0.59	1.30
MW-3 (D)	Boron (mg/L)	0.930	1.200	1.565
	Calcium (mg/L)	420.0	540.0	697.5
	Chloride (mg/L)	170.0	300.0	595.7
	pH at 25˚C	6.7	6.6	6.5 – 7.3
	Sulfate (mg/L)	1800	3300	3926
	TDS (mg/L)	4400	6500	8507
	Fluoride (mg/L)	ND	ND	0.662
MW-4 (D)	Boron (mg/L)	4.90	5.10	6.58
	Calcium (mg/L)	460.0	440.0	641.8
	Chloride (mg/L)	790	930	1892
	pH at 25˚C	7.2	7.4	5.7 – 9.1

	Sulfate (mg/L)	2800	3100	3416
	TDS (mg/L)	6000	5800	7432
	Fluoride (mg/L)	ND	0.51	0.55
MW-5 (D)	Boron (mg/L)	3.3	2.9	4.5
	Calcium (mg/L)	530.0	600.0	706.6
	Chloride (mg/L)	1100	1400	1986
	pH at 25˚C	7.1	7.2	6.2 – 8.2
	Sulfate (mg/L)	3300	3600	4154
	TDS (mg/L)	7300	7300	9806
	Fluoride (mg/L)	ND	0.570	1.139
BW-1 (U)	Boron (mg/L)	3.40	3.00	4.837
	Calcium (mg/L)	600.0	550.0	738.4
	Chloride (mg/L)	1200	1400	1502
	pH at 25˚C	6.9	7.2	6.2 - 7.9
	Sulfate (mg/L)	2500	3500	3770
	TDS (mg/L)	6300	7100	7320
	Fluoride (mg/L)	ND	0.57	0.94
	*Calculated in October 6, 2023 Background Evaluation Report Update (U)=upgradient, (D)=downgradient ***Bolded italicized*** value indicates that constituent exceeded intrawell statistical limit (unconfirmed SSI) ND=Not detected			

No statistically significant increases (SSIs) were indicated for any Appendix III constituents during the 2024 detection monitoring events at the SCES landfill.

4.0 RECOMMENDATIONS

No SSIs were identified for any Appendix III constituents during the 2024 detection monitoring events at Sandy Creek Energy Station (Plant) Coal Combustion Residual Waste Management Facility. SCS recommends that the facility remain in semiannual detection monitoring, in accordance with 40 CFR §257.94. Due to the lack of confirmed SSIs for Appendix III constituents during 2024 detection monitoring, the landfill will continue monitoring for all constituents listed in 40 CFR § 257 Appendix III during semiannual groundwater monitoring events, in accordance with 40 CFR § 257.94(a). The Appendix IV constituent list will be analyzed if any confirmed statistical exceedances of the Appendix III list are indicated in future events. The next planned groundwater monitoring event is a semiannual detection monitoring event scheduled for the second quarter of 2025.

5.0 GROUNDWATER FLOW RATE AND DIRECTION CALCULATIONS JUNE 2024

In accordance with 40 CFR Part §257.93(c), the groundwater flow rate and direction in the uppermost aquifer in the area of the existing groundwater monitoring wells were calculated.

Flow Rate Calculation

$$Va = \frac{KI}{7.5N}$$ (Driscoll, 1986, Groundwater and Wells)

Where:

Va = Actual Velocity of Groundwater Flow (ft/day)
K = Hydraulic Conductivity (gpd/ft^2)
I = Hydraulic Gradient (ft/ft)
N = Effective Porosity (%)

Then:

K = 2.0 x 10^{-4} cm/sec (geometric mean hydraulic conductivity obtained from slug tests performed by Geosyntec in 2010)

Find K equivalent in units of gpd/ft^2:

(1 cm/sec = 21,200 gallons/day/ft^2)

2.0 x 10^{-4} cm/sec x 21,200 gallons/day/ft^2 = 4.24 gpd/ft^2

Find I: BW-1 elevation – MW-3 elevation: 469.57 ft – 422.30 ft = 0.0201 ft/ft
distance between wells: 2,350 ft

I = 0.0201 ft/ft (ave. gradient across the site, from June 2024 water levels)
N = 6% (representative effective porosity for clay from Morris and Johnson, 1967)

Therefore:

$$Va = \frac{4.24 \text{ gpd/ft}^2 \times (0.0201 \text{ ft/ft})}{7.5\ (0.06)} = 0.189 \text{ ft/day}$$

(0.189 ft/day)(365 days/year) = **69.126 ft/year**

Conclusion

The June 2024 site groundwater flow rate is **69.126 ft/year**. The gradient was measured using BW-1 and MW-3. The June 2024 groundwater flow direction is to the south-southwest. The groundwater flow rate and direction are consistent with conditions previously observed at the site. See **Figure 1** for details, provided in accordance with 40 CFR Part §257.93(c).

6.0 GROUNDWATER FLOW RATE AND DIRECTION CALCULATIONS DECEMBER 2024

In accordance with 40 CFR Part §257.93(c), the groundwater flow rate and direction in the uppermost aquifer in the area of the existing groundwater monitoring wells were calculated.

Flow Rate Calculation

$$Va = \frac{KI}{7.5N}$$ (Driscoll, 1986, Groundwater and Wells)

Where:

Va = Actual Velocity of Groundwater Flow (ft/day)
K = Hydraulic Conductivity (gpd/ft^2)
I = Hydraulic Gradient (ft/ft)
N = Effective Porosity (%)

Then:

K = 2.0 x 10^{-4} cm/sec (geometric mean hydraulic conductivity obtained from slug tests performed by Geosyntec in 2010)

Find K equivalent in units of gpd/ft^2:

(1 cm/sec = 21,200 gallons/day/ft^2)

2.0 x 10^{-4} cm/sec x 21,200 gallons/day/ft^2 = 4.24 gpd/ft^2

Find I: $\frac{\text{BW-1 elevation – MW-3 elevation}}{\text{distance between wells:}}$: $\frac{469.17 \text{ ft} - 416.34 \text{ ft}}{2{,}350 \text{ ft}}$ = 0.0224 ft/ft

I = 0.0224 ft/ft (ave. gradient across the site, from December 2024 water levels)
N = 6% (representative effective porosity for clay from Morris and Johnson, 1967)

Therefore:

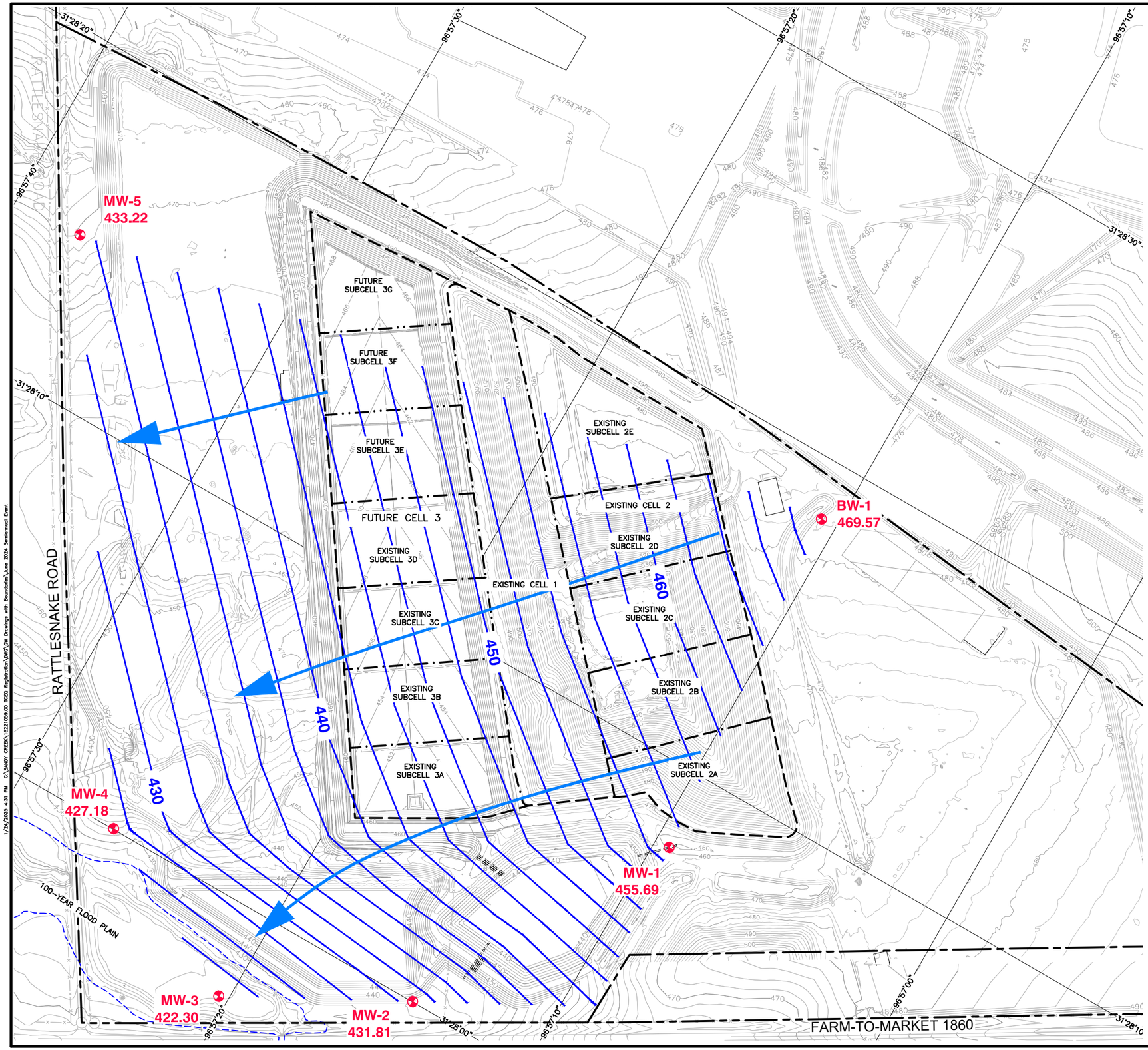
$$Va = \frac{4.24 \text{ gpd/ft}^2 \times (0.0224 \text{ ft/ft})}{7.5\ (0.06)} = 0.211 \text{ ft/day}$$

(0.211 ft/day)(365 days/year) = **77.015 ft/year**

Conclusion

The December 2024 site groundwater flow rate is **77.015 ft/year**. The gradient was measured using BW-1 and MW-3. The December 2024 groundwater flow direction is to the south-southwest. The groundwater flow rate and direction are consistent with conditions previously observed at the site. See **Figure 2** for details, provided in accordance with 40 CFR Part §257.93(c).

Figure 1. Groundwater Contour Map June 2024



N

0 150 300

SCALE IN FEET

LEGEND

- PLANT PROPERTY BOUNDARY
- LANDFILL REGISTRATION BOUNDARY
- REGISTERED LIMITS OF WASTE
- EXISTING CELL BOUNDARY
- FUTURE CELL BOUNDARY
- 96°57'10" — LATITUDE/LONGITUDE LINES
- 100-YEAR FLOOD PLAIN
- MW-1 — EXISTING MONITORING WELL
- 450 — PROPOSED/EXISTING EXCAVATION CONTOURS (SEE NOTE 3)
- 450 — GROUNDWATER CONTOUR
- GROUNDWATER FLOW DIRECTION

NOTES:

1. THE EXISTING CONTOUR MAP SHOWN ON THIS DRAWING WAS COMPILED FROM AN AERIAL SURVEY CONDUCTED BY DALLAS AERIAL SURVEY, INC. IN NOVEMBER, 2020 AND EXISTING TOPOGRAPHY BY BLACK & VEATCH CORPORATION DATED APRIL 2006. STATE PLANE COORDINATE GRID CORRESPONDS TO TEXAS STATE PLAN COORDINATE SYSTEM, TEXAS CENTRAL ZONE (4203), NORTH AMERICAN DATUM 83 (NAD83) 1983.
2. ELEVATION ARE IN FEET ABOVE MEAN SEA LEVEL (FT, MSL) AS DEFINED BY THE USGS NATIONAL GEODETIC VERTICAL DATUM (NGVD) OF 1988. STATE PLANE COORDINATE GRID CORRESPONDS TO TEXAS STATE COORDINATE SYSTEM, TEXAS CENTRAL ZONE (4203), NORTH AMERICAN DATUM OF 1983 (NAD-83).
3. EXISTING FEATURES IN SUBCELLS 3A THROUGH 3D ARE EXISTING AND SUBCELLS 3E THROUGH 3G ARE PROPOSED AT THE TIME OF THIS REGISTRATION APPLICATION DEVELOPMENT.
4. WATER LEVEL ELEVATIONS WERE TAKEN IN JUNE 14, 2024.

FOR INFORMATION PURPOSES ONLY

REV	DATE	DESCRIPTION	BY

DRAWING TITLE
GROUNDWATER CONTOUR MAP JUNE 2024

PROJECT TITLE
SANDY CREEK FIRST SEMIANNUAL REPORT JUNE 2024 SAMPLING EVENT

CLIENT
NAES CORPORATION
2161 RATTLESNAKE ROAD
RIESEL, TEXAS 76682

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
1901 CENTRAL DRIVE, SUITE 550, BEDFORD, TX 76021
PH (817) 571-2288 FAX NO. (817) 571-2186

PROJ. NO. 162724008.00 | DWN. BY: JG | CHK. BY: AB | QA/QC BY: GG | APP. BY: GG | DSN. BY: AB

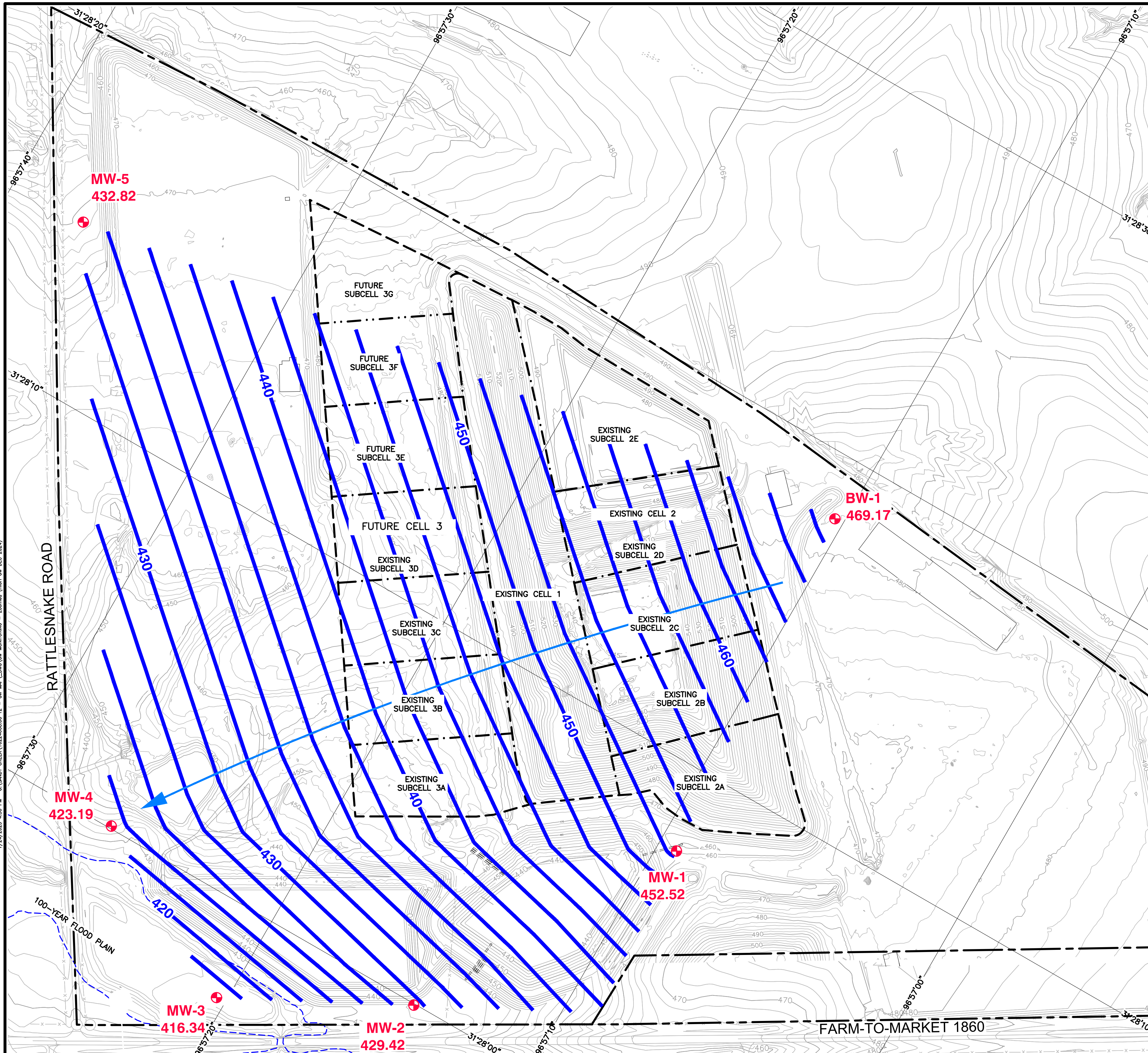
CADD FILE: JUNE 2024 SEMIANNUAL EVENT

DATE: 6/2024

SCALE: AS SHOWN

DRAWING NO. **1**

Figure 2. Groundwater Contour Map December 2024



0 150 300
SCALE IN FEET

LEGEND

— · —	PLANT PROPERTY BOUNDARY
— · —	LANDFILL REGISTRATION BOUNDARY
— — —	REGISTERED LIMITS OF WASTE
— · — · —	EXISTING CELL BOUNDARY
— · · — · · —	FUTURE CELL BOUNDARY
96°57'10"	LATITUDE/LONGITUDE LINES
- - - - -	100-YEAR FLOOD PLAIN
MW-1	EXISTING MONITORING WELL
450	PROPOSED/EXISTING EXCAVATION CONTOURS (SEE NOTE 3)
450	GROUNDWATER CONTOUR
←	GROUNDWATER FLOW DIRECTION

NOTES:

1. THE EXISTING CONTOUR MAP SHOWN ON THIS DRAWING WAS COMPILED FROM AN AERIAL SURVEY CONDUCTED BY DALLAS AERIAL SURVEY, INC. IN NOVEMBER, 2020 AND EXISTING TOPOGRAPHY BY BLACK & VEATCH CORPORATION DATED APRIL 2006. STATE PLANE COORDINATE GRID CORRESPONDS TO TEXAS STATE PLAN COORDINATE SYSTEM, TEXAS CENTRAL ZONE (4203), NORTH AMERICAN DATUM 83 (NAD83) 1983.
2. ELEVATION ARE IN FEET ABOVE MEAN SEA LEVEL (FT, MSL) AS DEFINED BY THE USGS NATIONAL GEODETIC VERTICAL DATUM (NGVD) OF 1988. STATE PLANE COORDINATE GRID CORRESPONDS TO TEXAS STATE COORDINATE SYSTEM, TEXAS CENTRAL ZONE (4203), NORTH AMERICAN DATUM OF 1983 (NAD-83).
3. EXISTING FEATURES IN SUBCELLS 3A THROUGH 3D ARE EXISTING AND SUBCELLS 3E THROUGH 3G ARE PROPOSED AT THE TIME OF THIS REGISTRATION APPLICATION DEVELOPMENT.
4. WATER LEVEL ELEVATIONS WERE TAKEN IN DECEMBER 2, 2024.

REV	DATE	DESCRIPTION	BY

TEXAS BOARD OF PROFESSIONAL ENGINEERS REG. NO. F-3407

DRAWING TITLE: GROUNDWATER CONTOUR MAP DECEMBER 2024

PROJECT TITLE: SANDY CREEK DECEMBER 2024 GROUNDWATER MONITORING REPORT

CLIENT: NAES CORPORATION 2161 RATTLESNAKE ROAD RIESEL, TEXAS 76682

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
1901 CENTRAL DRIVE, SUITE 550, BEDFORD, TX 76021
PH (817) 571-2288 FAX NO. (817) 571-2188

PROJ. NO. 16224008.00 | DSN. BY: BC | DWN. BY: JLJ | CHK. BY: MS | Q/A RVW BY: RF | APP. BY: RF

CADD FILE: GW MONITORING - ZOOMED (HIGH GW DEC 2024)

DATE: 12/2024

SCALE: AS SHOWN

FIGURE: 1

Appendix A

2024 Groundwater Monitoring Field Forms

Groundwater Monitoring Form

Facility name: Sandy Creek Energy Station
Permittee: Sandy Creek Energy Associates, L.P.
County: McLennan

1. Facility Type: Power Station
2. Monitor well no.: BW-1
3. Date of sampling: 6/14/2024

Name of sampler: Asher B
Affiliation of sampler: SCS Engineers
If split sampled, with whom? N/A
Integrity of well: Good
Installation date: 9/22/2015

Most recent previous sampling: 12/20/2023
Date of water level measurements: 6/14/2024
Datum reference point: Top of Casing
Datum elevation*: 485.57
Depth to water(below datum)*: 16.00
4. Water level elevation*: 469.57

5. Purging/Sampling method: Bailer (Enter bailer or pump)
Were low-flow methods used? ☐ yes ■ no (check one)
If yes, what volume was purged? N/A gal.
6. Well volumes purged: 3.0
7. Was the well dry before purging? ☐ yes ■ no (check one)
8. Was the well dry after purging? ☐ yes ■ no (check one)
9. How long before sampling? 3
10. Unit of measure? hours (Enter value as days, hours, or mins.)

11. Sample event: Detection
- Background - Corrective Action
- Detection - Other
- Assessment

12. Sample schedule: Semi-Annual
- Quarterly - Fourth Year
- Semi-Annual - Other
- Annual

13. Sample type: Regular
- Regular - Split
- Duplicate - Other
- Resample

Field Measurements:

14. pH 7.85
15. Spec. cond. 9.1
16. ■ mS/cm
17. Temp. 24.59
18. ☐ F or ■ C (check one)
19. Turbidity 41.3
20. ■ NTU

Laboratory:

21. Name Eurofins Dallas Phone: (214) 902-0300
Address: 9701 Harry Hines Blvd

Representative's Signature: Anita Patel Date: 1/24/25

Site Operator's Signature: _____ Date: _____

* Report depth to water and elevations to nearest 0.01 foot relative to mean sea level (msl).

Groundwater Monitoring Form

Facility name: Sandy Creek Energy Station
Permittee: Sandy Creek Energy Associates, L.P.
County: McLennan

1. Facility Type: Power Station
2. Monitor well no.: MW-1
3. Date of sampling: 6/14/2024

Name of sampler: Asher B.
Affiliation of sampler: SCS Engineers
If split sampled, with whom? N/A
Integrity of well: Good
Installation date: 9/21/2015

Most recent previous sampling: 12/20/2023
Date of water level measurements: 6/14/2024
Datum reference point: Top of Casing
Datum elevation*: 465.87
Depth to water(below datum)*: 10.18
4. Water level elevation*: 455.69

5. Purging/Sampling method: Bailer (Enter bailer or pump)
Were low-flow methods used? ☐ yes ■ no (check one)
If yes, what volume was purged? N/A gal.
6. Well volumes purged: 1.8
7. Was the well dry before purging? ☐ yes ■ no (check one)
8. Was the well dry after purging? ■ yes ☐ no (check one)
9. How long before sampling? 3
10. Unit of measure? hours (Enter value as days, hours, or mins.)

11. Sample event: Detection
- Background - Corrective Action
- Detection - Other
- Assessment

12. Sample schedule: Semi-Annual
- Quarterly - Fourth Year
- Semi-Annual - Other
- Annual

13. Sample type: Regular
- Regular - Split
- Duplicate - Other
- Resample

Field Measurements:

14. pH 8.87
15. Spec. cond. 4.83
16. ■ mS/cm
17. Temp. 24.99
18. ☐ F or ■ C (check one)
19. Turbidity 5.2
20. ■ NTU

Laboratory:

21. Name Eurofins Dallas Phone: (214) 902-0300
Address: 9701 Harry Hines Blvd

Representative's Signature: Anita Patel Date: 1/24/25

Site Operator's Signature: _____ Date: _____

* Report depth to water and elevations to nearest 0.01 foot relative to mean sea level (msl).

Groundwater Monitoring Form

Facility name: Sandy Creek Energy Station
Permittee: Sandy Creek Energy Associates, L.P.
County: McLennan

1. Facility Type: Power Station
2. Monitor well no.: MW-2
3. Date of sampling: 6/14/2024

Name of sampler: Asher B.
Affiliation of sampler: SCS Engineers
If split sampled, with whom? N/A
Integrity of well: Good
Installation date: 9/23/2015

Most recent previous sampling: 12/20/2023
Date of water level measurements: 6/14/2024
Datum reference point: Top of Casing
Datum elevation*: 442.15
Depth to water(below datum)*: 10.34
4. Water level elevation*: 431.81

5. Purging/Sampling method: Bailer (Enter bailer or pump)
Were low-flow methods used? ☐ yes ■ no (check one)
If yes, what volume was purged? N/A gal.
6. Well volumes purged: 2.3
7. Was the well dry before purging? ☐ yes ■ no (check one)
8. Was the well dry after purging? ■ yes ☐ no (check one)
9. How long before sampling? 2.5
10. Unit of measure? hours (Enter value as days, hours, or mins.)

11. Sample event: Detection
- Background - Corrective Action
- Detection - Other
- Assessment

12. Sample schedule: Semi-Annual
- Quarterly - Fourth Year
- Semi-Annual - Other
- Annual

13. Sample type: Regular
- Regular - Split
- Duplicate - Other
- Resample

Field Measurements:

14. pH 7.62
15. Spec. cond. 6.62 16. ■ mS/cm
17. Temp. 23.95 18. ☐ F or ■ C (check one)
19. Turbidity 3.3 20. ■ NTU

Laboratory:

21. Name Eurofins Dallas Phone: (214) 902-0300
Address: 9701 Harry Hines Blvd

Representative's Signature: Anita Patel Date: 1/24/25

Site Operator's Signature: _____ Date: _____

* Report depth to water and elevations to nearest 0.01 foot relative to mean sea level (msl).

Groundwater Monitoring Form

Facility name: Sandy Creek Energy Station
Permittee: Sandy Creek Energy Associates, L.P.
County: McLennan

1. Facility Type: Power Station
2. Monitor well no.: MW-3
3. Date of sampling: 6/14/2024

Name of sampler: Asher B.
Affiliation of sampler: SCS Engineers
If split sampled, with whom? N/A
Integrity of well: Good
Installation date: 9/1/2010

Most recent previous sampling: 12/20/2023
Date of water level measurements: 6/14/2024
Datum reference point: Top of Casing
Datum elevation*: 430.06
Depth to water(below datum)*: 7.76
4. Water level elevation*: 422.30

5. Purging/Sampling method: Bailer (Enter bailer or pump)
Were low-flow methods used? ☐ yes ■ no (check one)
If yes, what volume was purged? N/A gal.
6. Well volumes purged: 3.0
7. Was the well dry before purging? ☐ yes ■ no (check one)
8. Was the well dry after purging? ☐ yes ■ no (check one)
9. How long before sampling? 2.5
10. Unit of measure? hours (Enter value as days, hours, or mins.)

11. Sample event: Detection
- Background - Corrective Action
- Detection - Other
- Assessment

12. Sample schedule: Semi-Annual
- Quarterly - Fourth Year
- Semi-Annual - Other
- Annual

13. Sample type: Regular
- Regular - Split
- Duplicate - Other
- Resample

Field Measurements:

14. pH 7.89
15. Spec. cond. 6.23
16. ■ mS/cm
17. Temp. 25.58
18. ☐ F or ■ C (check one)
19. Turbidity 12.9
20. ■ NTU

Laboratory:

21. Name Eurofins Dallas Phone: (214) 902-0300
Address: 9701 Harry Hines Blvd

Representative's Signature: Anita Patel Date: 1/24/25

Site Operator's Signature: _____ Date: _____

* Report depth to water and elevations to nearest 0.01 foot relative to mean sea level (msl).

Groundwater Monitoring Form

Facility name: Sandy Creek Energy Station
Permittee: Sandy Creek Energy Associates, L.P.
County: McLennan

1. Facility Type: Power Station
2. Monitor well no.: MW-4
3. Date of sampling: 6/14/2024

Name of sampler: Asher B.
Affiliation of sampler: SCS Engineers
If split sampled, with whom? N/A
Integrity of well: Good
Installation date: 11/2/2020

Most recent previous sampling: 12/20/2023
Date of water level measurements: 6/14/2024
Datum reference point: Top of Casing
Datum elevation*: 436.91
Depth to water(below datum)*: 9.73
4. Water level elevation*: 427.18

5. Purging/Sampling method: Bailer (Enter bailer or pump)
Were low-flow methods used? ☐ yes ■ no (check one)
If yes, what volume was purged? N/A gal.
6. Well volumes purged: 2.3
7. Was the well dry before purging? ☐ yes ■ no (check one)
8. Was the well dry after purging? ■ yes ☐ no (check one)
9. How long before sampling? 2
10. Unit of measure? hours (Enter value as days, hours, or mins.)

11. Sample event: Background
- Background - Corrective Action
- Detection - Other
- Assessment

12. Sample schedule: Semi-Annual
- Quarterly - Fourth Year
- Semi-Annual - Other
- Annual

13. Sample type: Regular
- Regular - Split
- Duplicate - Other
- Resample

Field Measurements:

14. pH 8.03
15. Spec. cond. 8.31
16. ■ mS/cm
17. Temp. 26.40
18. ☐ F or ■ C (check one)
19. Turbidity 0.2
20. ■ NTU

Laboratory:

21. Name Eurofins Dallas
Phone: (214) 902-0300
Address: 9701 Harry Hines Blvd

Representative's Signature: Anita Patel
Date: 1/24/25

Site Operator's Signature: _____
Date: _____

* Report depth to water and elevations to nearest 0.01 foot relative to mean sea level (msl)

Groundwater Monitoring Form

Facility name: Sandy Creek Energy Station
Permittee: Sandy Creek Energy Associates, L.P.
County: McLennan

1. Facility Type: Power Station
2. Monitor well no.: MW-5
3. Date of sampling: 6/14/2024

Name of sampler: Asher B.
Affiliation of sampler: SCS Engineers
If split sampled, with whom? N/A
Integrity of well: Good
Installation date: 11/2/2020

Most recent previous sampling: 12/20/2023
Date of water level measurements: 6/14/2024
Datum reference point: Top of Casing
Datum elevation*: 454.52
Depth to water(below datum)*: 21.30
4. Water level elevation*: 433.22

5. Purging/Sampling method: Bailer (Enter bailer or pump)
Were low-flow methods used? ☐ yes ■ no (check one)
If yes, what volume was purged? N/A gal.
6. Well volumes purged: 3.0
7. Was the well dry before purging? ☐ yes ■ no (check one)
8. Was the well dry after purging? ☐ yes ■ no (check one)
9. How long before sampling? 2
10. Unit of measure? hours (Enter value as days, hours, or mins.)

11. Sample event: Background
- Background - Corrective Action
- Detection - Other
- Assessment

12. Sample schedule: Semi-Annual
- Quarterly - Fourth Year
- Semi-Annual - Other
- Annual

13. Sample type: Regular
- Regular - Split
- Duplicate - Other
- Resample

Field Measurements:

14. pH 8.04
15. Spec. cond. 9.7 16. ■ mS/cm
17. Temp. 25.64 18. ☐ F or ■ C (check one)
19. Turbidity 0 20. ■ NTU

Laboratory:

21. Name Eurofins Dallas Phone: (214) 902-0300
Address: 9701 Harry Hines Blvd

Representative's Signature: Anita Patil Date: 1/24/25

Site Operator's Signature: _____ Date: _____

* Report depth to water and elevations to nearest 0.01 foot relative to mean sea level (msl).

Groundwater Monitoring Form

Facility name: Sandy Creek Energy Station
Permittee: Sandy Creek Energy Associates, L.P.
County: McLennan

1. Facility Type: Power Station
2. Monitor well no.: DUP
3. Date of sampling: 6/14/2024

Name of sampler: Asher B.
Affiliation of sampler: SCS Engineers
If split sampled, with whom? N/A
Integrity of well: N/A
Installation date: N/A

Most recent previous sampling: N/A
Date of water level measurements: N/A
Datum reference point: Top of Casing
Datum elevation*: N/A
Depth to water(below datum)*: N/A
4. Water level elevation*: N/A

5. Purging/Sampling method: N/A (Enter bailer or pump)
Were low-flow methods used? ☐ yes ☐ no (check one)
If yes, what volume was purged? N/A gal.
6. Well volumes purged: N/A
7. Was the well dry before purging? ☐yes ☐ no (check one)
8. Was the well dry after purging? ☐ yes ☐ no (check one)
9. How long before sampling? N/A
10. Unit of measure? N/A (Enter value as days, hours, or mins.)

11. Sample event: Background
- Background - Corrective Action
- Detection - Other
- Assessment

12. Sample schedule: Semi-Annual
- Quarterly - Fourth Year
- Semi-Annual - Other
- Annual

13. Sample type: Duplicate
- Regular - Split
- Duplicate - Other
- Resample

Field Measurements:

14. pH N/A
15. Spec. cond. N/A
16. ☐ mS/cm
17. Temp. N/A
18. ☐ F or ☐ C (check one)
19. Turbidity N/A
20. ☐NTU

Laboratory:

21. Name Eurofins Dallas
Phone: (214) 902-0300
Address: 9701 Harry Hines Blvd

Representative's Signature: Anita Patel
Date: 1/24/25

Site Operator's Signature: _____
Date: _____

* Report depth to water and elevations to nearest 0.01 foot relative to mean sea level (msl).

Groundwater Monitoring Form

Facility name: Sandy Creek Energy Station
Permittee: Sandy Creek Energy Associates, L.P.
County: McLennan

1. Facility Type: Power Station
2. Monitor well no.: BW-1
3. Date of sampling: 12/2/2024

Name of sampler: Morgan S.
Affiliation of sampler: SCS Engineers
If split sampled, with whom? N/A
Integrity of well: Good
Installation date: 9/22/2015

Most recent previous sampling: 6/14/2024
Date of water level measurements: 12/2/2024
Datum reference point: Top of Casing
Datum elevation*: 485.57
Depth to water(below datum)*: 16.40
4. Water level elevation*: 469.17

5. Purging/Sampling method: Bailer (Enter bailer or pump)
Were low-flow methods used? ☐ yes ■ no (check one)
If yes, what volume was purged? N/A gal.
6. Well volumes purged: 3.0
7. Was the well dry before purging? ☐yes ■ no (check one)
8. Was the well dry after purging? ☐ yes ■ no (check one)
9. How long before sampling? 2.5
10. Unit of measure? hours (Enter value as days, hours, or mins.)

11. Sample event: Detection
- Background - Corrective Action
- Detection - Other
- Assessment

12. Sample schedule: Semi-Annual
- Quarterly - Fourth Year
- Semi-Annual - Other
- Annual

13. Sample type: Regular
- Regular - Split
- Duplicate - Other
- Resample

Field Measurements:

14. pH	6.58	
15. Spec. cond.	6.51	16. ■ mS/cm
17. Temp.	21.30	18. ☐ F or ■ C (check one)
19. Turbidity	55.8	20. ■NTU

Laboratory:

21. Name: Eurofins Dallas Phone: (214) 902-0300
Address: 9701 Harry Hines Blvd

Representative's Signature: Anita Patel Date: 12/30/2024

Site Operator's Signature: _____ Date: _____

* Report depth to water and elevations to nearest 0.01 foot relative to mean sea level (msl).

Groundwater Monitoring Form

Facility name: Sandy Creek Energy Station
Permittee: Sandy Creek Energy Associates, L.P.
County: McLennan

1. Facility Type: Power Station
2. Monitor well no.: MW-1
3. Date of sampling: 12/2/2024

Name of sampler: Morgan S.
Affiliation of sampler: SCS Engineers
If split sampled, with whom? N/A
Integrity of well: Good
Installation date: 9/21/2015

Most recent previous sampling: 6/14/2024
Date of water level measurements: 12/2/2024
Datum reference point: Top of Casing
Datum elevation*: 465.87
Depth to water(below datum)*: 13.35
4. Water level elevation*: 452.52

5. Purging/Sampling method: Bailer (Enter bailer or pump)
Were low-flow methods used? ☐ yes ■ no (check one)
If yes, what volume was purged? N/A gal.
6. Well volumes purged: 2.0
7. Was the well dry before purging? ☐yes ■ no (check one)
8. Was the well dry after purging? ■ yes ☐ no (check one)
9. How long before sampling? 2.5
10. Unit of measure? hours (Enter value as days, hours, or mins.)

11. Sample event: Detection
- Background - Corrective Action
- Detection - Other
- Assessment

12. Sample schedule: Semi-Annual
- Quarterly - Fourth Year
- Semi-Annual - Other
- Annual

13. Sample type: Regular
- Regular - Split
- Duplicate - Other
- Resample

Field Measurements:

14. pH	6.82	
15. Spec. cond.	2.94	16. ■ mS/cm
17. Temp.	20.60	18. ☐ F or ■ C (check one)
19. Turbidity	20.6	20. ■NTU

Laboratory:

21. Name: Eurofins Dallas Phone: (214) 902-0300
Address: 9701 Harry Hines Blvd

Representative's Signature: Anita Patel Date: 12/30/2024

Site Operator's Signature: _____ Date: _____

* Report depth to water and elevations to nearest 0.01 foot relative to mean sea level (msl).

Groundwater Monitoring Form

Facility name: Sandy Creek Energy Station
Permittee: Sandy Creek Energy Associates, L.P.
County: McLennan

1. Facility Type: Power Station
2. Monitor well no.: MW-2
3. Date of sampling: 12/2/2024

Name of sampler: Morgan S.
Affiliation of sampler: SCS Engineers
If split sampled, with whom? N/A
Integrity of well: Good
Installation date: 9/23/2015

Most recent previous sampling: 6/14/2024
Date of water level measurements: 12/2/2024
Datum reference point: Top of Casing
Datum elevation*: 442.15
Depth to water(below datum)*: 12.73
4. Water level elevation*: 429.42

5. Purging/Sampling method: Bailer (Enter bailer or pump)
Were low-flow methods used? ☐ yes ■ no (check one)
If yes, what volume was purged? N/A gal.
6. Well volumes purged: 2.8
7. Was the well dry before purging? ☐yes ■ no (check one)
8. Was the well dry after purging? ■ yes ☐ no (check one)
9. How long before sampling? 2
10. Unit of measure? hours (Enter value as days, hours, or mins.)

11. Sample event: Detection
- Background - Corrective Action
- Detection - Other
- Assessment

12. Sample schedule: Semi-Annual
- Quarterly - Fourth Year
- Semi-Annual - Other
- Annual

13. Sample type: Regular
- Regular - Split
- Duplicate - Other
- Resample

Field Measurements:

14. pH	6.48		
15. Spec. cond.	6.14	16. ■ mS/cm	
17. Temp.	20.40	18. ☐ F or ■ C	(check one)
19. Turbidity	10.2	20. ■NTU	

Laboratory:

21. Name: Eurofins Dallas Phone: (214) 902-0300
Address: 9701 Harry Hines Blvd

Representative's Signature: *Anita Patel* Date: 12/30/2024

Site Operator's Signature: _____ Date: _____

* Report depth to water and elevations to nearest 0.01 foot relative to mean sea level (msl).

Groundwater Monitoring Form

Facility name: Sandy Creek Energy Station
Permittee: Sandy Creek Energy Associates, L.P.
County: McLennan

1. Facility Type: Power Station
2. Monitor well no.: MW-3
3. Date of sampling: 12/2/2024

Name of sampler: Morgan S.
Affiliation of sampler: SCS Engineers
If split sampled, with whom? N/A
Integrity of well: Good
Installation date: 9/1/2010

Most recent previous sampling: 6/14/2024
Date of water level measurements: 12/2/2024
Datum reference point: Top of Casing
Datum elevation*: 430.06
Depth to water(below datum)*: 13.72
4. Water level elevation*: 416.34

5. Purging/Sampling method: Bailer (Enter bailer or pump)
Were low-flow methods used? ☐ yes ■ no (check one)
If yes, what volume was purged? N/A gal.
6. Well volumes purged: 3.0
7. Was the well dry before purging? ☐yes ■ no (check one)
8. Was the well dry after purging? ☐ yes ■ no (check one)
9. How long before sampling? 3
10. Unit of measure? hours (Enter value as days, hours, or mins.)

11. Sample event: Detection
- Background - Corrective Action
- Detection - Other
- Assessment

12. Sample schedule: Semi-Annual
- Quarterly - Fourth Year
- Semi-Annual - Other
- Annual

13. Sample type: Regular
- Regular - Split
- Duplicate - Other
- Resample

Field Measurements:

14. pH	6.35		
15. Spec. cond.	5.52	16. ■ mS/cm	
17. Temp.	22.70	18. ☐ F or ■ C	(check one)
19. Turbidity	25.5	20. ■NTU	

Laboratory:

21. Name: Eurofins Dallas Phone: (214) 902-0300
Address: 9701 Harry Hines Blvd

Representative's Signature: Anita Patel Date: 12/30/2024

Site Operator's Signature: _____ Date: _____

* Report depth to water and elevations to nearest 0.01 foot relative to mean sea level (msl).

Groundwater Monitoring Form

Facility name: Sandy Creek Energy Station
Permittee: Sandy Creek Energy Associates, L.P.
County: McLennan

1. Facility Type: Power Station
2. Monitor well no.: MW-4
3. Date of sampling: 12/2/2024

Name of sampler: Morgan S.
Affiliation of sampler: SCS Engineers
If split sampled, with whom? N/A
Integrity of well: Good
Installation date: 11/2/2020

Most recent previous sampling: 6/14/2024
Date of water level measurements: 12/2/2024
Datum reference point: Top of Casing
Datum elevation*: 436.91
Depth to water(below datum)*: 13.72
4. Water level elevation*: 423.19

5. Purging/Sampling method: Bailer (Enter bailer or pump)
Were low-flow methods used? ☐ yes ■ no (check one)
If yes, what volume was purged? N/A gal.
6. Well volumes purged: 2.8
7. Was the well dry before purging? ☐yes ■ no (check one)
8. Was the well dry after purging? ■ yes ☐ no (check one)
9. How long before sampling? 2
10. Unit of measure? hours (Enter value as days, hours, or mins.)

11. Sample event: Background
- Background - Corrective Action
- Detection - Other
- Assessment

12. Sample schedule: Semi-Annual
- Quarterly - Fourth Year
- Semi-Annual - Other
- Annual

13. Sample type: Regular
- Regular - Split
- Duplicate - Other
- Resample

Field Measurements:

14. pH	6.87		
15. Spec. cond.	5.93	16. ■ mS/cm	
17. Temp.	18.60	18. ☐ F or ■ C	(check one)
19. Turbidity	11.1	20. ■NTU	

Laboratory:

21. Name: Eurofins Dallas Phone: (214) 902-0300
Address: 9701 Harry Hines Blvd

Representative's Signature: Anita Patel Date: 12/30/2024

Site Operator's Signature: _____ Date: _____

* Report depth to water and elevations to nearest 0.01 foot relative to mean sea level (msl)

Groundwater Monitoring Form

Facility name: Sandy Creek Energy Station
Permittee: Sandy Creek Energy Associates, L.P.
County: McLennan

1. Facility Type: Power Station
2. Monitor well no.: MW-5
3. Date of sampling: 12/2/2024

Name of sampler: Morgan S.
Affiliation of sampler: SCS Engineers
If split sampled, with whom? N/A
Integrity of well: Good
Installation date: 11/2/2020

Most recent previous sampling: 6/14/2024
Date of water level measurements: 12/2/2024
Datum reference point: Top of Casing
Datum elevation*: 454.52
Depth to water(below datum)*: 21.70
4. Water level elevation*: 432.82

5. Purging/Sampling method: Bailer (Enter bailer or pump)
Were low-flow methods used? ☐ yes ■ no (check one)
If yes, what volume was purged? N/A gal.
6. Well volumes purged: 3.0
7. Was the well dry before purging? ☐ yes ■ no (check one)
8. Was the well dry after purging? ☐ yes ■ no (check one)
9. How long before sampling? 3
10. Unit of measure? hours (Enter value as days, hours, or mins.)

11. Sample event: Background
- Background
- Corrective Action
- Detection
- Other
- Assessment

12. Sample schedule: Semi-Annual
- Quarterly
- Fourth Year
- Semi-Annual
- Other
- Annual

13. Sample type: Regular
- Regular
- Split
- Duplicate
- Other
- Resample

Field Measurements:

14. pH 6.78
15. Spec. cond. 7.34
16. ■ mS/cm
17. Temp. 21.50
18. ☐ F or ■ C (check one)
19. Turbidity 9.74
20. ■ NTU

Laboratory:

21. Name Eurofins Dallas Phone: (214) 902-0300
Address: 9701 Harry Hines Blvd

Representative's Signature: Anita Patel Date: 12/30/2024

Site Operator's Signature: _____ Date: _____

* Report depth to water and elevations to nearest 0.01 foot relative to mean sea level (msl).

Groundwater Monitoring Form

Facility name: Sandy Creek Energy Station
Permittee: Sandy Creek Energy Associates, L.P.
County: McLennan

1. Facility Type: Power Station
2. Monitor well no.: DUP
3. Date of sampling: 12/2/2024

Name of sampler: Morgan S.
Affiliation of sampler: SCS Engineers
If split sampled, with whom? N/A
Integrity of well: N/A
Installation date: N/A

Most recent previous sampling: N/A
Date of water level measurements: N/A
Datum reference point: Top of Casing
Datum elevation*: N/A
Depth to water(below datum)*: N/A
4. Water level elevation*: N/A

5. Purging/Sampling method: N/A (Enter bailer or pump)
Were low-flow methods used? ☐ yes ☐ no (check one)
If yes, what volume was purged? N/A gal.
6. Well volumes purged: N/A
7. Was the well dry before purging? ☐ yes ☐ no (check one)
8. Was the well dry after purging? ☐ yes ☐ no (check one)
9. How long before sampling? N/A
10. Unit of measure? N/A (Enter value as days, hours, or mins.)

11. Sample event: Background
- Background
- Corrective Action
- Detection
- Other
- Assessment

12. Sample schedule: Semi-Annual
- Quarterly
- Fourth Year
- Semi-Annual
- Other
- Annual

13. Sample type: Duplicate
- Regular
- Split
- Duplicate
- Other
- Resample

Field Measurements:

14. pH N/A
15. Spec. cond. N/A
16. ☐ mS/cm
17. Temp. N/A
18. ☐ F or ☐ C (check one)
19. Turbidity N/A
20. ☐ NTU

Laboratory:

21. Name: Eurofins Dallas
Phone: (214) 902-0300
Address: 9701 Harry Hines Blvd

Representative's Signature: Anita Patel
Date: 12/30/2024

Site Operator's Signature: _____
Date: _____

* Report depth to water and elevations to nearest 0.01 foot relative to mean sea level (msl).

Appendix B

2024 Laboratory Reports with Chain of Custody Forms

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Asher Boudreaux
SCS Engineers
1901 Central Avenue
Suite 550
Bedford, Texas 76021

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JOB DESCRIPTION

Sandy Creek Groundwater

JOB NUMBER

870-27839-1

Eurofins Dallas
9701 Harry Hines Blvd
Dallas TX 75220

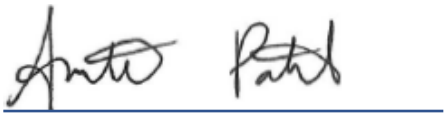
See page two for job notes and contact information.

Job Notes

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

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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7/1/2024 5:52:12 PM

Authorized for release by
Anita Patel, Project Manager
Anita.Patel@et.eurofinsus.com
(832)776-2275

Table of Contents

Client: SCS Engineers
Job ID: 870-27839-1
Project/Site: Sandy Creek Groundwater

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Glossary

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

Job ID: 870-27839-1 — Eurofins Dallas

Job Narrative
870-27839-1

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

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

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/15/2024 12:15 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.2°C.

HPLC/IC
Method 9056A_ORGFM_28D: The instrument blank/CCB for analytical batch 860-167926 contained Chloride and Sulfate greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been qualified and reported.

Method 9056A_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-167926 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 9056A_ORGFM_28D: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-2 (870-27839-3), MW-3 (870-27839-4), MW-4 (870-27839-5), MW-5 (870-27839-6) and DUP (870-27839-7). Elevated reporting limits (RLs) are provided.

Method 9056A_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-168510 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 9056A_ORGFM_28D: Due to the high concentration of Chloride and Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 860-168510 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 9056A_ORGFM_28D: The instrument blank/CCB for analytical batch 860-168510 contained Chloride greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been reported.

Method 9056A_ORGFM_28D: The instrument blank for analytical batch 860-168510 contained Bromide, Chloride and Sulfate greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 860-166842 and analytical batch 860-167113 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: BW-1
Lab Sample ID: 870-27839-1

Date Collected: 06/14/24 16:50
Matrix: Water
Date Received: 06/15/24 12:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1200		2.5	2.5	mg/L			06/25/24 23:38	10
Fluoride	ND		0.50	0.10	mg/L			06/25/24 23:31	1
Sulfate	2500		20	20	mg/L			06/28/24 06:09	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.4		0.080	0.080	mg/L		06/19/24 08:00	06/20/24 12:03	20
Calcium	600		1.5	1.5	mg/L		06/19/24 08:00	06/19/24 20:43	50

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	6.9	HF			SU			06/25/24 19:48	1
Temperature (SW846 9040C)	18.2	HF			Degrees C			06/25/24 19:48	1
Corrosivity (SW846 9040C)	6.9	HF			SU			06/25/24 19:48	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	6300		40	40	mg/L			06/18/24 09:50	1

Client Sample ID: MW-1
Lab Sample ID: 870-27839-2

Date Collected: 06/14/24 17:10
Matrix: Water
Date Received: 06/15/24 12:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		0.50	0.25	mg/L			06/25/24 23:46	1
Fluoride	ND		0.50	0.10	mg/L			06/25/24 23:46	1
Sulfate	2300		20	20	mg/L			06/28/24 07:09	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.1		0.080	0.080	mg/L		06/19/24 08:00	06/20/24 12:05	20
Calcium	500		1.5	1.5	mg/L		06/19/24 08:00	06/19/24 20:45	50

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.2	HF			SU			06/25/24 19:58	1
Temperature (SW846 9040C)	18.0	HF			Degrees C			06/25/24 19:58	1
Corrosivity (SW846 9040C)	7.2	HF			SU			06/25/24 19:58	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	3500		40	40	mg/L			06/18/24 09:50	1

Client Sample ID: MW-2
Lab Sample ID: 870-27839-3

Date Collected: 06/14/24 17:25
Matrix: Water
Date Received: 06/15/24 12:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.50	0.10	mg/L			06/26/24 00:01	1
Sulfate	2900		20	20	mg/L			06/28/24 06:54	100

Client Sample ID: MW-2
Lab Sample ID: 870-27839-3

Date Collected: 06/14/24 17:25
Matrix: Water
Date Received: 06/15/24 12:15

Method: SW846 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1000		2.5	2.5	mg/L			06/26/24 00:08	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.1		0.080	0.080	mg/L		06/19/24 08:00	06/20/24 12:08	20
Calcium	470		1.5	1.5	mg/L		06/19/24 08:00	06/19/24 20:51	50

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	6.7	HF			SU			06/25/24 19:57	1
Temperature (SW846 9040C)	18.6	HF			Degrees C			06/25/24 19:57	1
Corrosivity (SW846 9040C)	6.7	HF			SU			06/25/24 19:57	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	5500		40	40	mg/L			06/18/24 09:50	1

Client Sample ID: MW-3
Lab Sample ID: 870-27839-4

Date Collected: 06/14/24 18:15
Matrix: Water
Date Received: 06/15/24 12:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.50	0.10	mg/L			06/26/24 00:16	1

Method: SW846 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		2.5	2.5	mg/L			06/26/24 00:23	10
Sulfate	1800		2.0	2.0	mg/L			06/26/24 00:23	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.93		0.080	0.080	mg/L		06/19/24 08:00	06/20/24 12:10	20
Calcium	420		1.5	1.5	mg/L		06/19/24 08:00	06/19/24 20:53	50

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	6.7	HF			SU			06/25/24 19:46	1
Temperature (SW846 9040C)	16.8	HF			Degrees C			06/25/24 19:46	1
Corrosivity (SW846 9040C)	6.7	HF			SU			06/25/24 19:46	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	4400		40	40	mg/L			06/18/24 09:50	1

Client Sample ID: MW-4
Lab Sample ID: 870-27839-5

Date Collected: 06/14/24 18:00
Matrix: Water
Date Received: 06/15/24 12:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.50	0.10	mg/L			06/26/24 00:46	1
Sulfate	2800		20	20	mg/L			06/28/24 06:39	100

Client Sample ID: MW-4

Lab Sample ID: 870-27839-5

Date Collected: 06/14/24 18:00

Matrix: Water

Date Received: 06/15/24 12:15

Method: SW846 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	790		2.5	2.5	mg/L			06/26/24 00:53	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	4.9		0.40	0.40	mg/L		06/19/24 08:00	06/20/24 12:12	100
Calcium	460		1.5	1.5	mg/L		06/19/24 08:00	06/19/24 20:55	50

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.2	HF			SU			06/25/24 19:54	1
Temperature (SW846 9040C)	17.3	HF			Degrees C			06/25/24 19:54	1
Corrosivity (SW846 9040C)	7.2	HF			SU			06/25/24 19:54	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	6000		40	40	mg/L			06/18/24 09:50	1

Client Sample ID: MW-5

Lab Sample ID: 870-27839-6

Date Collected: 06/14/24 17:45

Matrix: Water

Date Received: 06/15/24 12:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.50	0.10	mg/L			06/26/24 01:01	1
Sulfate	3300		20	20	mg/L			06/28/24 08:17	100

Method: SW846 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1100		2.5	2.5	mg/L			06/26/24 01:08	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.3		0.40	0.40	mg/L		06/19/24 08:00	06/20/24 12:14	100
Calcium	530		1.5	1.5	mg/L		06/19/24 08:00	06/19/24 20:57	50

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.1	HF			SU			06/25/24 19:45	1
Temperature (SW846 9040C)	16.0	HF			Degrees C			06/25/24 19:45	1
Corrosivity (SW846 9040C)	7.1	HF			SU			06/25/24 19:45	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	7300		100	100	mg/L			06/18/24 09:50	1

Client Sample ID: DUP

Lab Sample ID: 870-27839-7

Date Collected: 06/14/24 16:50

Matrix: Water

Date Received: 06/15/24 12:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		0.50	0.25	mg/L			06/26/24 01:16	1
Fluoride	ND		0.50	0.10	mg/L			06/26/24 01:16	1

Client: SCS Engineers
Project/Site: Sandy Creek Groundwater

Job ID: 870-27839-1

Client Sample ID: DUP
Date Collected: 06/14/24 16:50
Date Received: 06/15/24 12:15

Lab Sample ID: 870-27839-7
Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1800		2.0	2.0	mg/L			06/26/24 01:23	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.1		0.080	0.080	mg/L		06/19/24 08:00	06/20/24 12:16	20
Calcium	500		1.5	1.5	mg/L		06/19/24 08:00	06/19/24 20:59	50

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.2	HF			SU			06/25/24 19:55	1
Temperature (SW846 9040C)	18.7	HF			Degrees C			06/25/24 19:55	1
Corrosivity (SW846 9040C)	7.2	HF			SU			06/25/24 19:55	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	3600		40	40	mg/L			06/18/24 09:50	1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 860-167926/36
Matrix: Water
Analysis Batch: 167926

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			06/25/24 20:39	1
Fluoride	ND		0.50	0.10	mg/L			06/25/24 20:39	1
Sulfate	ND		0.50	0.20	mg/L			06/25/24 20:39	1

Lab Sample ID: LCS 860-167926/37
Matrix: Water
Analysis Batch: 167926

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromide			10.0	9.92		mg/L		99	90 - 110		
Chloride			10.0	9.33		mg/L		93	90 - 110		
Fluoride			10.0	9.51		mg/L		95	90 - 110		
Sulfate			10.0	9.89		mg/L		99	90 - 110		
Sulfur			3.33	3.30		mg/L		99	90 - 110		

Lab Sample ID: LCSD 860-167926/38
Matrix: Water
Analysis Batch: 167926

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide			10.0	9.91		mg/L		99	90 - 110	0	20
Chloride			10.0	9.33		mg/L		93	90 - 110	0	20
Fluoride			10.0	9.51		mg/L		95	90 - 110	0	20
Sulfate			10.0	9.77		mg/L		98	90 - 110	1	20
Sulfur			3.33	3.26		mg/L		98	90 - 110	1	30

Lab Sample ID: LLCS 860-167926/7
Matrix: Water
Analysis Batch: 167926

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

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromide			0.500	0.452	J	mg/L		90	50 - 150		
Chloride			0.500	0.488	J	mg/L		98	50 - 150		
Fluoride			0.500	0.467	J	mg/L		93	50 - 150		
Sulfate			0.500	0.505		mg/L		101	50 - 150		
Sulfur			0.167	ND		mg/L		101	50 - 150		

Lab Sample ID: 880-45080-A-1 MS
Matrix: Water
Analysis Batch: 167926

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromide	ND	F1	10.0	9.03		mg/L		90	90 - 110		
Chloride	16		10.0	25.7		mg/L		92	90 - 110		
Fluoride	ND		10.0	9.43		mg/L		93	90 - 110		
Sulfate	5.3		10.0	14.2		mg/L		90	90 - 110		
Sulfur	1.8		3.33	4.75		mg/L		90	90 - 110		

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-45080-A-1 MSD
Client Sample ID: Matrix Spike Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 167926

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	ND	F1	10.0	8.94	F1	mg/L		89	90 - 110	1	15
Chloride	16		10.0	25.7		mg/L		93	90 - 110	0	15
Fluoride	ND		10.0	9.46		mg/L		94	90 - 110	0	15
Sulfate	5.3		10.0	14.3		mg/L		90	90 - 110	0	15
Sulfur	1.8		3.33	4.75		mg/L		90	90 - 110	0	30

Lab Sample ID: MB 860-168510/117
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 168510

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			06/28/24 07:32	1
Fluoride	ND		0.50	0.10	mg/L			06/28/24 07:32	1
Sulfate	ND		0.50	0.20	mg/L			06/28/24 07:32	1

Lab Sample ID: MB 860-168510/3
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 168510

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			06/27/24 15:27	1
Fluoride	ND		0.50	0.10	mg/L			06/27/24 15:27	1
Sulfate	ND		0.50	0.20	mg/L			06/27/24 15:27	1

Lab Sample ID: MB 860-168510/62
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 168510

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			06/28/24 00:41	1
Fluoride	ND		0.50	0.10	mg/L			06/28/24 00:41	1
Sulfate	ND		0.50	0.20	mg/L			06/28/24 00:41	1

Lab Sample ID: LCS 860-168510/118
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 168510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	10.0	10.2		mg/L		102	90 - 110
Chloride	10.0	9.53		mg/L		95	90 - 110
Fluoride	10.0	9.71		mg/L		97	90 - 110
Sulfate	10.0	9.40		mg/L		94	90 - 110
Sulfur	3.33	3.13		mg/L		94	90 - 110

Lab Sample ID: LCS 860-168510/63
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 168510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	10.0	10.2		mg/L		102	90 - 110

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-168510/63
Matrix: Water
Analysis Batch: 168510

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.58		mg/L		96	90 - 110
Fluoride	10.0	9.70		mg/L		97	90 - 110
Sulfate	10.0	9.37		mg/L		94	90 - 110
Sulfur	3.33	3.12		mg/L		94	90 - 110

Lab Sample ID: LCSD 860-168510/119
Matrix: Water
Analysis Batch: 168510

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	10.0	10.0		mg/L		100	90 - 110	2	20
Chloride	10.0	9.53		mg/L		95	90 - 110	0	20
Fluoride	10.0	9.72		mg/L		97	90 - 110	0	20
Sulfate	10.0	9.39		mg/L		94	90 - 110	0	20
Sulfur	3.33	3.13		mg/L		94	90 - 110	0	30

Lab Sample ID: LCSD 860-168510/64
Matrix: Water
Analysis Batch: 168510

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	10.0	10.2		mg/L		102	90 - 110	0	20
Chloride	10.0	9.57		mg/L		96	90 - 110	0	20
Fluoride	10.0	9.72		mg/L		97	90 - 110	0	20
Sulfate	10.0	9.36		mg/L		94	90 - 110	0	20
Sulfur	3.33	3.12		mg/L		94	90 - 110	0	30

Lab Sample ID: LLCS 860-168510/7
Matrix: Water
Analysis Batch: 168510

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	0.500	0.430	J	mg/L		86	50 - 150
Chloride	0.500	0.663		mg/L		133	50 - 150
Fluoride	0.500	0.469	J	mg/L		94	50 - 150
Sulfate	0.500	0.524		mg/L		105	50 - 150
Sulfur	0.167	ND		mg/L		105	50 - 150

Lab Sample ID: 870-27839-6 MS
Matrix: Water
Analysis Batch: 168510

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	16	F1	10.0	28.5	F1	mg/L		126	90 - 110
Fluoride	ND		10.0	9.38		mg/L		93	90 - 110
Sulfur	520		3.33	522	4	mg/L		66	90 - 110

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 870-27839-6 MSD — **Client Sample ID: MW-5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 168510

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	16	F1	10.0	27.4	F1	mg/L		115	90 - 110	4	15
Fluoride	ND		10.0	9.43		mg/L		93	90 - 110	1	15
Sulfur	520		3.33	524	4	mg/L		129	90 - 110	0	30

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 860-166842/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 167113 — **Prep Batch: 166842**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.010	0.0040	mg/L		06/19/24 08:00	06/19/24 20:04	1
Calcium	ND		0.10	0.030	mg/L		06/19/24 08:00	06/19/24 20:04	1

Lab Sample ID: LCS 860-166842/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 167113 — **Prep Batch: 166842**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.100	0.0951		mg/L		95	80 - 120
Calcium	2.50	2.44		mg/L		98	80 - 120

Lab Sample ID: LCSD 860-166842/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 167113 — **Prep Batch: 166842**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.100	0.0973		mg/L		97	80 - 120	2	20
Calcium	2.50	2.46		mg/L		98	80 - 120	1	20

Lab Sample ID: 870-27833-E-4-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 167113 — **Prep Batch: 166842**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.19	F1	0.100	0.393	F1	mg/L		203	75 - 125
Calcium	120		2.50	270	4	mg/L		6089	75 - 125

Lab Sample ID: 870-27833-E-4-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 167113 — **Prep Batch: 166842**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.19	F1	0.100	0.409	F1	mg/L		219	75 - 125	4	20
Calcium	120		2.50	275	4	mg/L		6313	75 - 125	2	20

Method: 9040C - pH

Lab Sample ID: 880-45066-I-1 DU
Matrix: Water
Analysis Batch: 168081

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.9			8.0		SU				0.6	20
Temperature	16.6			15.9		Degrees C				4	20
Corrosivity	7.9			8.0		SU				0.6	

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 860-166609/1
Matrix: Water
Analysis Batch: 166609

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0	5.0	mg/L			06/18/24 09:50	1

Lab Sample ID: LCS 860-166609/2
Matrix: Water
Analysis Batch: 166609

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	984		mg/L		98	80 - 120		

Lab Sample ID: LCSD 860-166609/3
Matrix: Water
Analysis Batch: 166609

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	944		mg/L		94	80 - 120	4	10

Lab Sample ID: LLCS 860-166609/4
Matrix: Water
Analysis Batch: 166609

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

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			5.00	ND		mg/L		90	50 - 150		

Lab Sample ID: 860-76456-A-1 DU
Matrix: Water
Analysis Batch: 166609

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	470			443		mg/L				6	10

HPLC/IC

Analysis Batch: 167926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27839-1	BW-1	Total/NA	Water	9056A	
870-27839-1	BW-1	Total/NA	Water	9056A	
870-27839-2	MW-1	Total/NA	Water	9056A	
870-27839-3	MW-2	Total/NA	Water	9056A	
870-27839-3 - DL	MW-2	Total/NA	Water	9056A	
870-27839-4	MW-3	Total/NA	Water	9056A	
870-27839-4 - DL	MW-3	Total/NA	Water	9056A	
870-27839-5	MW-4	Total/NA	Water	9056A	
870-27839-5 - DL	MW-4	Total/NA	Water	9056A	
870-27839-6	MW-5	Total/NA	Water	9056A	
870-27839-6 - DL	MW-5	Total/NA	Water	9056A	
870-27839-7	DUP	Total/NA	Water	9056A	
870-27839-7 - DL	DUP	Total/NA	Water	9056A	
MB 860-167926/36	Method Blank	Total/NA	Water	9056A	
LCS 860-167926/37	Lab Control Sample	Total/NA	Water	9056A	
LCSD 860-167926/38	Lab Control Sample Dup	Total/NA	Water	9056A	
LLCS 860-167926/7	Lab Control Sample	Total/NA	Water	9056A	
880-45080-A-1 MS	Matrix Spike	Total/NA	Water	9056A	
880-45080-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	9056A	

Analysis Batch: 168510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27839-1	BW-1	Total/NA	Water	9056A	
870-27839-2	MW-1	Total/NA	Water	9056A	
870-27839-3	MW-2	Total/NA	Water	9056A	
870-27839-5	MW-4	Total/NA	Water	9056A	
870-27839-6	MW-5	Total/NA	Water	9056A	
MB 860-168510/117	Method Blank	Total/NA	Water	9056A	
MB 860-168510/3	Method Blank	Total/NA	Water	9056A	
MB 860-168510/62	Method Blank	Total/NA	Water	9056A	
LCS 860-168510/118	Lab Control Sample	Total/NA	Water	9056A	
LCS 860-168510/63	Lab Control Sample	Total/NA	Water	9056A	
LCSD 860-168510/119	Lab Control Sample Dup	Total/NA	Water	9056A	
LCSD 860-168510/64	Lab Control Sample Dup	Total/NA	Water	9056A	
LLCS 860-168510/7	Lab Control Sample	Total/NA	Water	9056A	
870-27839-6 MS	MW-5	Total/NA	Water	9056A	
870-27839-6 MSD	MW-5	Total/NA	Water	9056A	

Metals

Prep Batch: 166842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27839-1	BW-1	Total/NA	Water	3010A	
870-27839-2	MW-1	Total/NA	Water	3010A	
870-27839-3	MW-2	Total/NA	Water	3010A	
870-27839-4	MW-3	Total/NA	Water	3010A	
870-27839-5	MW-4	Total/NA	Water	3010A	
870-27839-6	MW-5	Total/NA	Water	3010A	
870-27839-7	DUP	Total/NA	Water	3010A	
MB 860-166842/1-A	Method Blank	Total/NA	Water	3010A	
LCS 860-166842/2-A	Lab Control Sample	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 166842 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 860-166842/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
870-27833-E-4-B MS	Matrix Spike	Total/NA	Water	3010A	
870-27833-E-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	

Analysis Batch: 167113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27839-1	BW-1	Total/NA	Water	6020B	166842
870-27839-2	MW-1	Total/NA	Water	6020B	166842
870-27839-3	MW-2	Total/NA	Water	6020B	166842
870-27839-4	MW-3	Total/NA	Water	6020B	166842
870-27839-5	MW-4	Total/NA	Water	6020B	166842
870-27839-6	MW-5	Total/NA	Water	6020B	166842
870-27839-7	DUP	Total/NA	Water	6020B	166842
MB 860-166842/1-A	Method Blank	Total/NA	Water	6020B	166842
LCS 860-166842/2-A	Lab Control Sample	Total/NA	Water	6020B	166842
LCSD 860-166842/3-A	Lab Control Sample Dup	Total/NA	Water	6020B	166842
870-27833-E-4-B MS	Matrix Spike	Total/NA	Water	6020B	166842
870-27833-E-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020B	166842

Analysis Batch: 167245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27839-1	BW-1	Total/NA	Water	6020B	166842
870-27839-2	MW-1	Total/NA	Water	6020B	166842
870-27839-3	MW-2	Total/NA	Water	6020B	166842
870-27839-4	MW-3	Total/NA	Water	6020B	166842
870-27839-5	MW-4	Total/NA	Water	6020B	166842
870-27839-6	MW-5	Total/NA	Water	6020B	166842
870-27839-7	DUP	Total/NA	Water	6020B	166842

General Chemistry

Analysis Batch: 166609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27839-1	BW-1	Total/NA	Water	SM 2540C	
870-27839-2	MW-1	Total/NA	Water	SM 2540C	
870-27839-3	MW-2	Total/NA	Water	SM 2540C	
870-27839-4	MW-3	Total/NA	Water	SM 2540C	
870-27839-5	MW-4	Total/NA	Water	SM 2540C	
870-27839-6	MW-5	Total/NA	Water	SM 2540C	
870-27839-7	DUP	Total/NA	Water	SM 2540C	
MB 860-166609/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-166609/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-166609/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
LLCS 860-166609/4	Lab Control Sample	Total/NA	Water	SM 2540C	
860-76456-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 168081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27839-1	BW-1	Total/NA	Water	9040C	
870-27839-2	MW-1	Total/NA	Water	9040C	
870-27839-3	MW-2	Total/NA	Water	9040C	

General Chemistry (Continued)

Analysis Batch: 168081 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27839-4	MW-3	Total/NA	Water	9040C	
870-27839-5	MW-4	Total/NA	Water	9040C	
870-27839-6	MW-5	Total/NA	Water	9040C	
870-27839-7	DUP	Total/NA	Water	9040C	
880-45066-I-1 DU	Duplicate	Total/NA	Water	9040C	

Lab Chronicle

Client: SCS Engineers
Project/Site: Sandy Creek Groundwater

Job ID: 870-27839-1

Client Sample ID: BW-1

Lab Sample ID: 870-27839-1

Date Collected: 06/14/24 16:50
Matrix: Water
Date Received: 06/15/24 12:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1			167926	06/25/24 23:31	WP	EET HOU
Total/NA	Analysis	9056A		10			167926	06/25/24 23:38	WP	EET HOU
Total/NA	Analysis	9056A		100			168510	06/28/24 06:09	A1S	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	166842	06/19/24 08:00	MD	EET HOU
Total/NA	Analysis	6020B		50			167113	06/19/24 20:43	DP	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	166842	06/19/24 08:00	MD	EET HOU
Total/NA	Analysis	6020B		20			167245	06/20/24 12:03	DP	EET HOU
Total/NA	Analysis	9040C		1			168081	06/25/24 19:48	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	166609	06/18/24 09:50	TR	EET HOU

Client Sample ID: MW-1

Lab Sample ID: 870-27839-2

Date Collected: 06/14/24 17:10
Matrix: Water
Date Received: 06/15/24 12:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1			167926	06/25/24 23:46	WP	EET HOU
Total/NA	Analysis	9056A		100			168510	06/28/24 07:09	A1S	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	166842	06/19/24 08:00	MD	EET HOU
Total/NA	Analysis	6020B		50			167113	06/19/24 20:45	DP	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	166842	06/19/24 08:00	MD	EET HOU
Total/NA	Analysis	6020B		20			167245	06/20/24 12:05	DP	EET HOU
Total/NA	Analysis	9040C		1			168081	06/25/24 19:58	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	166609	06/18/24 09:50	TR	EET HOU

Client Sample ID: MW-2

Lab Sample ID: 870-27839-3

Date Collected: 06/14/24 17:25
Matrix: Water
Date Received: 06/15/24 12:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1			167926	06/26/24 00:01	WP	EET HOU
Total/NA	Analysis	9056A	DL	10			167926	06/26/24 00:08	WP	EET HOU
Total/NA	Analysis	9056A		100			168510	06/28/24 06:54	A1S	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	166842	06/19/24 08:00	MD	EET HOU
Total/NA	Analysis	6020B		50			167113	06/19/24 20:51	DP	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	166842	06/19/24 08:00	MD	EET HOU
Total/NA	Analysis	6020B		20			167245	06/20/24 12:08	DP	EET HOU
Total/NA	Analysis	9040C		1			168081	06/25/24 19:57	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	166609	06/18/24 09:50	TR	EET HOU

Lab Chronicle

Client: SCS Engineers
Project/Site: Sandy Creek Groundwater

Job ID: 870-27839-1

Client Sample ID: MW-3

Lab Sample ID: 870-27839-4

Date Collected: 06/14/24 18:15

Matrix: Water

Date Received: 06/15/24 12:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1			167926	06/26/24 00:16	WP	EET HOU
Total/NA	Analysis	9056A	DL	10			167926	06/26/24 00:23	WP	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	166842	06/19/24 08:00	MD	EET HOU
Total/NA	Analysis	6020B		50			167113	06/19/24 20:53	DP	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	166842	06/19/24 08:00	MD	EET HOU
Total/NA	Analysis	6020B		20			167245	06/20/24 12:10	DP	EET HOU
Total/NA	Analysis	9040C		1			168081	06/25/24 19:46	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	166609	06/18/24 09:50	TR	EET HOU

Client Sample ID: MW-4

Lab Sample ID: 870-27839-5

Date Collected: 06/14/24 18:00

Matrix: Water

Date Received: 06/15/24 12:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1			167926	06/26/24 00:46	WP	EET HOU
Total/NA	Analysis	9056A	DL	10			167926	06/26/24 00:53	WP	EET HOU
Total/NA	Analysis	9056A		100			168510	06/28/24 06:39	A1S	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	166842	06/19/24 08:00	MD	EET HOU
Total/NA	Analysis	6020B		50			167113	06/19/24 20:55	DP	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	166842	06/19/24 08:00	MD	EET HOU
Total/NA	Analysis	6020B		100			167245	06/20/24 12:12	DP	EET HOU
Total/NA	Analysis	9040C		1			168081	06/25/24 19:54	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	166609	06/18/24 09:50	TR	EET HOU

Client Sample ID: MW-5

Lab Sample ID: 870-27839-6

Date Collected: 06/14/24 17:45

Matrix: Water

Date Received: 06/15/24 12:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1			167926	06/26/24 01:01	WP	EET HOU
Total/NA	Analysis	9056A	DL	10			167926	06/26/24 01:08	WP	EET HOU
Total/NA	Analysis	9056A		100			168510	06/28/24 08:17	A1S	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	166842	06/19/24 08:00	MD	EET HOU
Total/NA	Analysis	6020B		50			167113	06/19/24 20:57	DP	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	166842	06/19/24 08:00	MD	EET HOU
Total/NA	Analysis	6020B		100			167245	06/20/24 12:14	DP	EET HOU
Total/NA	Analysis	9040C		1			168081	06/25/24 19:45	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	166609	06/18/24 09:50	TR	EET HOU

Lab Chronicle

Client: SCS Engineers
Job ID: 870-27839-1
Project/Site: Sandy Creek Groundwater

Client Sample ID: DUP
Lab Sample ID: 870-27839-7

Date Collected: 06/14/24 16:50
Matrix: Water

Date Received: 06/15/24 12:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1			167926	06/26/24 01:16	WP	EET HOU
Total/NA	Analysis	9056A	DL	10			167926	06/26/24 01:23	WP	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	166842	06/19/24 08:00	MD	EET HOU
Total/NA	Analysis	6020B		50			167113	06/19/24 20:59	DP	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	166842	06/19/24 08:00	MD	EET HOU
Total/NA	Analysis	6020B		20			167245	06/20/24 12:16	DP	EET HOU
Total/NA	Analysis	9040C		1			168081	06/25/24 19:55	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	166609	06/18/24 09:50	TR	EET HOU

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: SCS Engineers
Job ID: 870-27839-1
Project/Site: Sandy Creek Groundwater

Laboratory: Eurofins Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00759	08-03-24
Florida	NELAP	E871002	06-30-24
Louisiana (All)	NELAP	03054	06-30-24
Oklahoma	NELAP	1306	08-31-24
Oklahoma	State	2023-139	08-31-24
Texas	NELAP	T104704215	06-30-24
Texas	TCEQ Water Supply	T104704215	12-28-25
USDA	US Federal Programs	525-23-79-79507	03-20-26

Method Summary

Client: SCS Engineers
Job ID: 870-27839-1
Project/Site: Sandy Creek Groundwater

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET HOU
6020B	Metals (ICP/MS)	SW846	EET HOU
9040C	pH	SW846	EET HOU
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET HOU
3010A	Preparation, Total Metals	SW846	EET HOU

Protocol References:

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

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

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: SCS Engineers
Job ID: 870-27839-1
Project/Site: Sandy Creek Groundwater

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
870-27839-1	BW-1	Water	06/14/24 16:50	06/15/24 12:15
870-27839-2	MW-1	Water	06/14/24 17:10	06/15/24 12:15
870-27839-3	MW-2	Water	06/14/24 17:25	06/15/24 12:15
870-27839-4	MW-3	Water	06/14/24 18:15	06/15/24 12:15
870-27839-5	MW-4	Water	06/14/24 18:00	06/15/24 12:15
870-27839-6	MW-5	Water	06/14/24 17:45	06/15/24 12:15
870-27839-7	DUP	Water	06/14/24 16:50	06/15/24 12:15

Eurofins Dallas
9701 Harry Hines Blvd
Dallas, TX 75220
Phone (214) 902-0300

Chain of Custody Record

eurofins | Environment Testing

7/1/2024

Client Information	Sampler: Asher Boudreaux	Lab PM: Patel, Anita	Carrier Tracking No(s):	COC No: 870-9082-2645.1
Client Contact: Asher Boudreaux	Phone: 817-368-0837	E-Mail: Anita.Patel@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: SCS Engineers	PWSID:	Analysis Requested		Job #:
Address: 1901 Central Avenue Suite 550	Due Date Requested:			Preservation Codes: N - None
City: Bedford	TAT Requested (days):			
State, Zip: TX, 76021	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: aboudreaux@scsengineers.com	WO #: 16224008.00			
Project Name: Sandy Creek Groundwater	Project #: 87001717			
Site:	SSOW#:			Other:

870-27839 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	pH 9040C, Anions 9056A_ORGFM_28D	6010D - Total Metals - B and Ca	2540C_Calcd - Solids, Total Dissolved (TDS)	Total Number of containe	Special Instructions/Note:
Preservation Code:					X	X	N	D	N		
BW-1	6/14/24	16:50		Water			X	X	X		
MW-1		17:10		Water							
MW-2		17:25		Water							
MW-3		18:15		Water							
MW-4		18:00		Water							
MW-5		17:45		Water							
DUP		16:50		Water							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Asher Boudreaux	Date/Time: 6/15/24 12:10	Company SCS	Received by:	Date/Time: 6/15/24 12:15	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: CF -0.2 3.5 3.2

Ver: 04/02/2024

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 870-27839-1

Login Number: 27839

List Source: Eurofins Dallas

List Number: 1

Creator: Dabinett, Ian

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 870-27839-1

Login Number: 27839
List Number: 2
Creator: Baker, Jeremiah

List Source: Eurofins Houston
List Creation: 06/18/24 09:33 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Asher Boudreaux
SCS Engineers
1901 Central Avenue
Suite 550
Bedford, Texas 76021

Generated 12/11/2024 2:49:25 PM

JOB DESCRIPTION

Sandy Creek Groundwater

JOB NUMBER

870-32074-1

Eurofins Dallas
9701 Harry Hines Blvd
Dallas TX 75220

See page two for job notes and contact information.

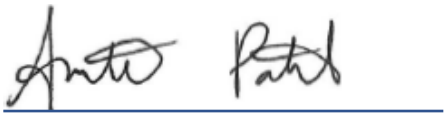
Eurofins Dallas

Job Notes

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

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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Authorized for release by
Anita Patel, Project Manager
Anita.Patel@et.eurofinsus.com
(832)776-2275

Table of Contents

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Glossary

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

Job ID: 870-32074-1 — Eurofins Dallas

Job Narrative
870-32074-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

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

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 12/3/2024 10:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.3°C.

HPLC/IC
Method 9056A_ORGFM_28D: The following samples were diluted to bring the concentration of target analytes within the calibration range: BW-1 (870-32074-1), MW-1 (870-32074-2), MW-2 (870-32074-3), MW-3 (870-32074-4), MW-4 (870-32074-5), MW-5 (870-32074-6) and DUP (870-32074-7). Elevated reporting limits (RLs) are provided.

Method 9056A_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-204191 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 9056A_ORGFM_28D: The following sample was diluted to bring the concentration of target analytes within the calibration range: BW-1 (870-32074-1). Elevated reporting limits (RLs) are provided.

Method 9056A_ORGFM_28D: The instrument blank/CCB for analytical batch 860-204203 contained Fluoride greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been reported.

Method 9056A_ORGFM_28D: The instrument blank/CCB for analytical batch 860-204203 contained Fluoride and Chloride greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been reported.

Method 9056A_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-204203 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 9056A_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-204203 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 9056A_ORGFM_28D: The instrument blank/CCB for analytical batch 860-204203 contained Fluoride, Chloride and Sulfate greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 860-203568 and analytical batch 860-203914 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6020B: The following samples were diluted due to the nature of the sample matrix: BW-1 (870-32074-1), MW-1 (870-32074-2), MW-2 (870-32074-3), MW-3 (870-32074-4), MW-4 (870-32074-5), MW-5 (870-32074-6) and DUP (870-32074-7).

Job ID: 870-32074-1 (Continued) Eurofins Dallas

Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: BW-1

Lab Sample ID: 870-32074-1

Date Collected: 12/02/24 17:00

Matrix: Water

Date Received: 12/03/24 10:55

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1300		1.3	1.3	mg/L			12/09/24 17:50	5
Fluoride	0.57		0.50	0.50	mg/L			12/09/24 17:50	5

Method: SW846 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	3100		10	10	mg/L			12/09/24 14:37	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.1		0.20	0.20	mg/L		12/05/24 10:30	12/09/24 12:25	50
Calcium	630		3.0	3.0	mg/L		12/05/24 10:30	12/06/24 16:32	100

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.1	HF			SU			12/05/24 18:59	1
Temperature (SW846 9040C)	17.7	HF			Degrees C			12/05/24 18:59	1
Corrosivity (SW846 9040C)	7.1	HF			SU			12/05/24 18:59	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	6100		20	20	mg/L			12/03/24 12:54	1

Client Sample ID: MW-1

Lab Sample ID: 870-32074-2

Date Collected: 12/02/24 17:20

Matrix: Water

Date Received: 12/03/24 10:55

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		1.3	1.3	mg/L			12/09/24 17:58	5
Fluoride	0.56		0.50	0.50	mg/L			12/09/24 17:58	5
Sulfate	2300		1.0	1.0	mg/L			12/09/24 17:58	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.1		0.080	0.080	mg/L		12/05/24 10:30	12/09/24 12:27	20
Calcium	560		3.0	3.0	mg/L		12/05/24 10:30	12/06/24 16:35	100

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.2	HF			SU			12/05/24 18:57	1
Temperature (SW846 9040C)	17.4	HF			Degrees C			12/05/24 18:57	1
Corrosivity (SW846 9040C)	7.2	HF			SU			12/05/24 18:57	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	4600		20	20	mg/L			12/03/24 12:54	1

Client Sample ID: MW-2

Lab Sample ID: 870-32074-3

Date Collected: 12/02/24 17:35

Matrix: Water

Date Received: 12/03/24 10:55

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1400		1.3	1.3	mg/L			12/09/24 18:05	5
Fluoride	0.59		0.50	0.50	mg/L			12/09/24 18:05	5

Client Sample ID: MW-2
Lab Sample ID: 870-32074-3

Date Collected: 12/02/24 17:35
Matrix: Water
Date Received: 12/03/24 10:55

Method: SW846 9056A - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2300		1.0	1.0	mg/L			12/09/24 18:05	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.6		0.080	0.080	mg/L		12/05/24 10:30	12/09/24 12:33	20
Calcium	660		3.0	3.0	mg/L		12/05/24 10:30	12/06/24 16:38	100

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.0	HF			SU			12/05/24 19:01	1
Temperature (SW846 9040C)	17.1	HF			Degrees C			12/05/24 19:01	1
Corrosivity (SW846 9040C)	7.0	HF			SU			12/05/24 19:01	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	6300		50	50	mg/L			12/03/24 12:54	1

Client Sample ID: MW-3
Lab Sample ID: 870-32074-4

Date Collected: 12/02/24 16:15
Matrix: Water
Date Received: 12/03/24 10:55

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	300		1.3	1.3	mg/L			12/09/24 18:12	5
Fluoride	ND		0.50	0.50	mg/L			12/09/24 18:12	5

Method: SW846 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	3300		10	10	mg/L			12/09/24 18:20	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.2		0.080	0.080	mg/L		12/05/24 10:30	12/09/24 12:35	20
Calcium	540		3.0	3.0	mg/L		12/05/24 10:30	12/06/24 16:41	100

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	6.6	HF			SU			12/05/24 19:02	1
Temperature (SW846 9040C)	17.5	HF			Degrees C			12/05/24 19:02	1
Corrosivity (SW846 9040C)	6.6	HF			SU			12/05/24 19:02	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	6500		20	20	mg/L			12/03/24 12:54	1

Client Sample ID: MW-4
Lab Sample ID: 870-32074-5

Date Collected: 12/02/24 17:50
Matrix: Water
Date Received: 12/03/24 10:55

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	930		1.3	1.3	mg/L			12/09/24 18:42	5
Fluoride	0.51		0.50	0.50	mg/L			12/09/24 18:42	5

Client Sample ID: MW-4
Lab Sample ID: 870-32074-5

Date Collected: 12/02/24 17:50
Matrix: Water
Date Received: 12/03/24 10:55

Method: SW846 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	3100		10	10	mg/L			12/09/24 18:50	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	5.1		0.20	0.20	mg/L		12/05/24 10:30	12/09/24 12:37	50
Calcium	440		3.0	3.0	mg/L		12/05/24 10:30	12/06/24 16:44	100

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.4	HF			SU			12/05/24 18:55	1
Temperature (SW846 9040C)	16.7	HF			Degrees C			12/05/24 18:55	1
Corrosivity (SW846 9040C)	7.4	HF			SU			12/05/24 18:55	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	5800		20	20	mg/L			12/03/24 12:54	1

Client Sample ID: MW-5
Lab Sample ID: 870-32074-6

Date Collected: 12/02/24 16:35
Matrix: Water
Date Received: 12/03/24 10:55

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1400		1.3	1.3	mg/L			12/09/24 18:57	5
Fluoride	0.57		0.50	0.50	mg/L			12/09/24 18:57	5

Method: SW846 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	3600		10	10	mg/L			12/09/24 19:05	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.9		0.20	0.20	mg/L		12/05/24 10:30	12/09/24 12:39	50
Calcium	600		3.0	3.0	mg/L		12/05/24 10:30	12/06/24 16:53	100

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.2	HF			SU			12/05/24 18:56	1
Temperature (SW846 9040C)	16.8	HF			Degrees C			12/05/24 18:56	1
Corrosivity (SW846 9040C)	7.2	HF			SU			12/05/24 18:56	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	7300		20	20	mg/L			12/03/24 12:54	1

Client Sample ID: DUP
Lab Sample ID: 870-32074-7

Date Collected: 12/02/24 16:40
Matrix: Water
Date Received: 12/03/24 10:55

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1400		1.3	1.3	mg/L			12/09/24 19:12	5
Fluoride	0.57		0.50	0.50	mg/L			12/09/24 19:12	5

Client: SCS Engineers
Project/Site: Sandy Creek Groundwater

Job ID: 870-32074-1

Client Sample ID: DUP

Date Collected: 12/02/24 16:40
Date Received: 12/03/24 10:55

Lab Sample ID: 870-32074-7
Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	3500		10	10	mg/L			12/09/24 19:20	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.0		0.080	0.080	mg/L		12/05/24 10:30	12/09/24 12:41	20
Calcium	550		3.0	3.0	mg/L		12/05/24 10:30	12/06/24 16:56	100

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.2	HF			SU			12/05/24 19:00	1
Temperature (SW846 9040C)	17.2	HF			Degrees C			12/05/24 19:00	1
Corrosivity (SW846 9040C)	7.2	HF			SU			12/05/24 19:00	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	7100		20	20	mg/L			12/03/24 12:54	1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 860-204191/3
Matrix: Water
Analysis Batch: 204191

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			12/09/24 14:19	1
Fluoride	ND		0.50	0.10	mg/L			12/09/24 14:19	1
Sulfate	ND		0.50	0.20	mg/L			12/09/24 14:19	1

Lab Sample ID: LCS 860-204191/4
Matrix: Water
Analysis Batch: 204191

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			10.0	9.96		mg/L		100	90 - 110		
Fluoride			10.0	9.95		mg/L		100	90 - 110		
Sulfate			10.0	9.25		mg/L		92	90 - 110		

Lab Sample ID: LCSD 860-204191/5
Matrix: Water
Analysis Batch: 204191

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			10.0	10.1		mg/L		101	90 - 110	1	20
Fluoride			10.0	10.0		mg/L		100	90 - 110	1	20
Sulfate			10.0	9.78		mg/L		98	90 - 110	6	20

Lab Sample ID: LLCS 860-204191/7
Matrix: Water
Analysis Batch: 204191

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

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			0.500	0.537		mg/L		107	50 - 150		
Fluoride			0.500	0.545		mg/L		109	50 - 150		
Sulfate			0.500	0.442	J	mg/L		88	50 - 150		

Lab Sample ID: 830-6680-A-1 MS
Matrix: Water
Analysis Batch: 204191

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	340		10.0	346	4	mg/L		88	90 - 110		
Fluoride	0.95		10.0	10.3		mg/L		93	90 - 110		
Sulfate	360		10.0	371	4	mg/L		71	90 - 110		

Lab Sample ID: 830-6680-A-1 MSD
Matrix: Water
Analysis Batch: 204191

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	340		10.0	346	4	mg/L		88	90 - 110	0	15
Fluoride	0.95		10.0	10.3		mg/L		93	90 - 110	0	15
Sulfate	360		10.0	372	4	mg/L		74	90 - 110	0	15

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-204203/3
Matrix: Water
Analysis Batch: 204203

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			12/09/24 13:37	1
Fluoride	ND		0.50	0.10	mg/L			12/09/24 13:37	1
Sulfate	ND		0.50	0.20	mg/L			12/09/24 13:37	1

Lab Sample ID: LCS 860-204203/4
Matrix: Water
Analysis Batch: 204203

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			10.0	10.3		mg/L		103	90 - 110		
Sulfate			10.0	10.2		mg/L		102	90 - 110		

Lab Sample ID: LCSD 860-204203/5
Matrix: Water
Analysis Batch: 204203

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			10.0	10.5		mg/L		105	90 - 110	2	20
Sulfate			10.0	10.5		mg/L		105	90 - 110	2	20

Lab Sample ID: 870-32090-F-1 MS
Matrix: Water
Analysis Batch: 204203

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	140		10.0	154	4	mg/L		99	90 - 110		
Fluoride	0.66	*+ F1	10.0	12.1	F1	mg/L		114	90 - 110		
Sulfate	220		10.0	231	4	mg/L		80	90 - 110		

Lab Sample ID: 870-32090-F-1 MSD
Matrix: Water
Analysis Batch: 204203

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	140		10.0	155	4	mg/L		103	90 - 110	0	15
Fluoride	0.66	*+ F1	10.0	12.2	F1	mg/L		115	90 - 110	1	15
Sulfate	220		10.0	232	4	mg/L		89	90 - 110	0	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 860-203568/1-A
Matrix: Water
Analysis Batch: 203914

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 203568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.010	0.0040	mg/L		12/05/24 10:30	12/06/24 15:45	1
Calcium	ND		0.10	0.030	mg/L		12/05/24 10:30	12/06/24 15:45	1

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

Lab Sample ID: LCS 860-203568/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 203914 — **Prep Batch: 203568**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			0.100	0.0926		mg/L		93	80 - 120		
Calcium			2.50	2.53		mg/L		101	80 - 120		

Lab Sample ID: LCSD 860-203568/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 203914 — **Prep Batch: 203568**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron			0.100	0.0964		mg/L		96	80 - 120	4	20
Calcium			2.50	2.52		mg/L		101	80 - 120	0	20

Lab Sample ID: 670-51807-G-39-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 203914 — **Prep Batch: 203568**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	0.30	^2 F1	0.100	0.374	F1	mg/L		74	75 - 125		
Calcium	20		2.50	23.0	4	mg/L		113	75 - 125		

Lab Sample ID: 670-51807-H-39-A MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 203914 — **Prep Batch: 203568**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.30	^2 F1	0.100	0.402		mg/L		103	75 - 125	7	20
Calcium	20		2.50	24.4	4	mg/L		167	75 - 125	6	20

Method: 9040C - pH

Lab Sample ID: 880-51775-C-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 203794

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	8.7			8.7		SU				0.1	20
Temperature	16.7			16.4		Degrees C				2	20
Corrosivity	8.7			8.7		SU				0.1	

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 870-24862/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 24862

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		2.5	2.5	mg/L			12/03/24 12:54	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 870-24862/2
Matrix: Water
Analysis Batch: 24862

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	982		mg/L		98	80 - 120

Lab Sample ID: LCSD 870-24862/3
Matrix: Water
Analysis Batch: 24862

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	1000	1010		mg/L		101	80 - 120	3	10

Lab Sample ID: 870-32074-6 DU
Matrix: Water
Analysis Batch: 24862

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	7300		7210		mg/L		0.7	10

Lab Sample ID: 870-32074-7 DU
Matrix: Water
Analysis Batch: 24862

Client Sample ID: DUP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	7100		7030		mg/L		2	10

HPLC/IC

Analysis Batch: 204191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-32074-1	BW-1	Total/NA	Water	9056A	
870-32074-2	MW-1	Total/NA	Water	9056A	
870-32074-3	MW-2	Total/NA	Water	9056A	
870-32074-4	MW-3	Total/NA	Water	9056A	
870-32074-4 - DL	MW-3	Total/NA	Water	9056A	
870-32074-5	MW-4	Total/NA	Water	9056A	
870-32074-5 - DL	MW-4	Total/NA	Water	9056A	
870-32074-6	MW-5	Total/NA	Water	9056A	
870-32074-6 - DL	MW-5	Total/NA	Water	9056A	
870-32074-7	DUP	Total/NA	Water	9056A	
870-32074-7 - DL	DUP	Total/NA	Water	9056A	
MB 860-204191/3	Method Blank	Total/NA	Water	9056A	
LCS 860-204191/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 860-204191/5	Lab Control Sample Dup	Total/NA	Water	9056A	
LLCS 860-204191/7	Lab Control Sample	Total/NA	Water	9056A	
830-6680-A-1 MS	Matrix Spike	Total/NA	Water	9056A	
830-6680-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	9056A	

Analysis Batch: 204203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-32074-1 - DL	BW-1	Total/NA	Water	9056A	
MB 860-204203/3	Method Blank	Total/NA	Water	9056A	
LCS 860-204203/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 860-204203/5	Lab Control Sample Dup	Total/NA	Water	9056A	
870-32090-F-1 MS	Matrix Spike	Total/NA	Water	9056A	
870-32090-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	9056A	

Metals

Prep Batch: 203568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-32074-1	BW-1	Total/NA	Water	3010A	
870-32074-2	MW-1	Total/NA	Water	3010A	
870-32074-3	MW-2	Total/NA	Water	3010A	
870-32074-4	MW-3	Total/NA	Water	3010A	
870-32074-5	MW-4	Total/NA	Water	3010A	
870-32074-6	MW-5	Total/NA	Water	3010A	
870-32074-7	DUP	Total/NA	Water	3010A	
MB 860-203568/1-A	Method Blank	Total/NA	Water	3010A	
LCS 860-203568/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 860-203568/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
670-51807-G-39-A MS	Matrix Spike	Total/NA	Water	3010A	
670-51807-H-39-A MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	

Analysis Batch: 203914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-32074-1	BW-1	Total/NA	Water	6020B	203568
870-32074-2	MW-1	Total/NA	Water	6020B	203568
870-32074-3	MW-2	Total/NA	Water	6020B	203568
870-32074-4	MW-3	Total/NA	Water	6020B	203568
870-32074-5	MW-4	Total/NA	Water	6020B	203568

Metals (Continued)

Analysis Batch: 203914 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-32074-6	MW-5	Total/NA	Water	6020B	203568
870-32074-7	DUP	Total/NA	Water	6020B	203568
MB 860-203568/1-A	Method Blank	Total/NA	Water	6020B	203568
LCS 860-203568/2-A	Lab Control Sample	Total/NA	Water	6020B	203568
LCSD 860-203568/3-A	Lab Control Sample Dup	Total/NA	Water	6020B	203568
670-51807-G-39-A MS	Matrix Spike	Total/NA	Water	6020B	203568
670-51807-H-39-A MSD	Matrix Spike Duplicate	Total/NA	Water	6020B	203568

Analysis Batch: 204179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-32074-1	BW-1	Total/NA	Water	6020B	203568
870-32074-2	MW-1	Total/NA	Water	6020B	203568
870-32074-3	MW-2	Total/NA	Water	6020B	203568
870-32074-4	MW-3	Total/NA	Water	6020B	203568
870-32074-5	MW-4	Total/NA	Water	6020B	203568
870-32074-6	MW-5	Total/NA	Water	6020B	203568
870-32074-7	DUP	Total/NA	Water	6020B	203568

General Chemistry

Analysis Batch: 24862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-32074-1	BW-1	Total/NA	Water	SM 2540C	
870-32074-2	MW-1	Total/NA	Water	SM 2540C	
870-32074-3	MW-2	Total/NA	Water	SM 2540C	
870-32074-4	MW-3	Total/NA	Water	SM 2540C	
870-32074-5	MW-4	Total/NA	Water	SM 2540C	
870-32074-6	MW-5	Total/NA	Water	SM 2540C	
870-32074-7	DUP	Total/NA	Water	SM 2540C	
MB 870-24862/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 870-24862/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 870-24862/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
870-32074-6 DU	MW-5	Total/NA	Water	SM 2540C	
870-32074-7 DU	DUP	Total/NA	Water	SM 2540C	

Analysis Batch: 203794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-32074-1	BW-1	Total/NA	Water	9040C	
870-32074-2	MW-1	Total/NA	Water	9040C	
870-32074-3	MW-2	Total/NA	Water	9040C	
870-32074-4	MW-3	Total/NA	Water	9040C	
870-32074-5	MW-4	Total/NA	Water	9040C	
870-32074-6	MW-5	Total/NA	Water	9040C	
870-32074-7	DUP	Total/NA	Water	9040C	
880-51775-C-1 DU	Duplicate	Total/NA	Water	9040C	

Lab Chronicle

Client: SCS Engineers
Job ID: 870-32074-1
Project/Site: Sandy Creek Groundwater

Client Sample ID: BW-1
Lab Sample ID: 870-32074-1
Date Collected: 12/02/24 17:00
Matrix: Water
Date Received: 12/03/24 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A	DL	50			204203	12/09/24 14:37	WP	EET HOU
Total/NA	Analysis	9056A		5			204191	12/09/24 17:50	HN	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	203568	12/05/24 10:30	MD	EET HOU
Total/NA	Analysis	6020B		100			203914	12/06/24 16:32	DP	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	203568	12/05/24 10:30	MD	EET HOU
Total/NA	Analysis	6020B		50			204179	12/09/24 12:25	DP	EET HOU
Total/NA	Analysis	9040C		1			203794	12/05/24 18:59	MR	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	24862	12/03/24 12:54	OOE	EET DAL

Client Sample ID: MW-1
Lab Sample ID: 870-32074-2
Date Collected: 12/02/24 17:20
Matrix: Water
Date Received: 12/03/24 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5			204191	12/09/24 17:58	HN	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	203568	12/05/24 10:30	MD	EET HOU
Total/NA	Analysis	6020B		100			203914	12/06/24 16:35	DP	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	203568	12/05/24 10:30	MD	EET HOU
Total/NA	Analysis	6020B		20			204179	12/09/24 12:27	DP	EET HOU
Total/NA	Analysis	9040C		1			203794	12/05/24 18:57	MR	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	24862	12/03/24 12:54	OOE	EET DAL

Client Sample ID: MW-2
Lab Sample ID: 870-32074-3
Date Collected: 12/02/24 17:35
Matrix: Water
Date Received: 12/03/24 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5			204191	12/09/24 18:05	HN	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	203568	12/05/24 10:30	MD	EET HOU
Total/NA	Analysis	6020B		100			203914	12/06/24 16:38	DP	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	203568	12/05/24 10:30	MD	EET HOU
Total/NA	Analysis	6020B		20			204179	12/09/24 12:33	DP	EET HOU
Total/NA	Analysis	9040C		1			203794	12/05/24 19:01	MR	EET HOU
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	24862	12/03/24 12:54	OOE	EET DAL

Client Sample ID: MW-3
Lab Sample ID: 870-32074-4
Date Collected: 12/02/24 16:15
Matrix: Water
Date Received: 12/03/24 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5			204191	12/09/24 18:12	HN	EET HOU
Total/NA	Analysis	9056A	DL	50			204191	12/09/24 18:20	HN	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	203568	12/05/24 10:30	MD	EET HOU
Total/NA	Analysis	6020B		100			203914	12/06/24 16:41	DP	EET HOU

Lab Chronicle

Client: SCS Engineers
Job ID: 870-32074-1
Project/Site: Sandy Creek Groundwater

Client Sample ID: MW-3
Lab Sample ID: 870-32074-4
Date Collected: 12/02/24 16:15
Matrix: Water
Date Received: 12/03/24 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	203568	12/05/24 10:30	MD	EET HOU
Total/NA	Analysis	6020B		20			204179	12/09/24 12:35	DP	EET HOU
Total/NA	Analysis	9040C		1			203794	12/05/24 19:02	MR	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	24862	12/03/24 12:54	OOE	EET DAL

Client Sample ID: MW-4
Lab Sample ID: 870-32074-5
Date Collected: 12/02/24 17:50
Matrix: Water
Date Received: 12/03/24 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5			204191	12/09/24 18:42	HN	EET HOU
Total/NA	Analysis	9056A	DL	50			204191	12/09/24 18:50	HN	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	203568	12/05/24 10:30	MD	EET HOU
Total/NA	Analysis	6020B		100			203914	12/06/24 16:44	DP	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	203568	12/05/24 10:30	MD	EET HOU
Total/NA	Analysis	6020B		50			204179	12/09/24 12:37	DP	EET HOU
Total/NA	Analysis	9040C		1			203794	12/05/24 18:55	MR	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	24862	12/03/24 12:54	OOE	EET DAL

Client Sample ID: MW-5
Lab Sample ID: 870-32074-6
Date Collected: 12/02/24 16:35
Matrix: Water
Date Received: 12/03/24 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5			204191	12/09/24 18:57	HN	EET HOU
Total/NA	Analysis	9056A	DL	50			204191	12/09/24 19:05	HN	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	203568	12/05/24 10:30	MD	EET HOU
Total/NA	Analysis	6020B		100			203914	12/06/24 16:53	DP	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	203568	12/05/24 10:30	MD	EET HOU
Total/NA	Analysis	6020B		50			204179	12/09/24 12:39	DP	EET HOU
Total/NA	Analysis	9040C		1			203794	12/05/24 18:56	MR	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	24862	12/03/24 12:54	OOE	EET DAL

Client Sample ID: DUP
Lab Sample ID: 870-32074-7
Date Collected: 12/02/24 16:40
Matrix: Water
Date Received: 12/03/24 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5			204191	12/09/24 19:12	HN	EET HOU
Total/NA	Analysis	9056A	DL	50			204191	12/09/24 19:20	HN	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	203568	12/05/24 10:30	MD	EET HOU
Total/NA	Analysis	6020B		100			203914	12/06/24 16:56	DP	EET HOU
Total/NA	Prep	3010A			50 mL	50 mL	203568	12/05/24 10:30	MD	EET HOU
Total/NA	Analysis	6020B		20			204179	12/09/24 12:41	DP	EET HOU

Lab Chronicle

Client: SCS Engineers
Job ID: 870-32074-1
Project/Site: Sandy Creek Groundwater

Client Sample ID: DUP
Lab Sample ID: 870-32074-7
Date Collected: 12/02/24 16:40
Matrix: Water
Date Received: 12/03/24 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9040C		1			203794	12/05/24 19:00	MR	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	24862	12/03/24 12:54	OOE	EET DAL

Laboratory References:

EET DAL = Eurofins Dallas, 9701 Harry Hines Blvd, Dallas, TX 75220, TEL (214)902-0300

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: SCS Engineers
Job ID: 870-32074-1
Project/Site: Sandy Creek Groundwater

Laboratory: Eurofins Dallas

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oklahoma	NELAP	TX01468_2310	12-31-24
Texas	NELAP	T104704295-23-34	06-30-25

Laboratory: Eurofins Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00759	08-03-25
Florida	NELAP	E871002	06-30-25
Louisiana (All)	NELAP	03054	06-30-25
Oklahoma	NELAP	1306	08-31-25
Texas	NELAP	T104704215	06-30-25
Texas	TCEQ Water Supply	T104704215	12-28-25
USDA	US Federal Programs	525-23-79-79507	03-20-26

Method Summary

Client: SCS Engineers
Job ID: 870-32074-1
Project/Site: Sandy Creek Groundwater

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET HOU
6020B	Metals (ICP/MS)	SW846	EET HOU
9040C	pH	SW846	EET HOU
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DAL
3010A	Preparation, Total Metals	SW846	EET HOU

Protocol References:

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

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

Laboratory References:

EET DAL = Eurofins Dallas, 9701 Harry Hines Blvd, Dallas, TX 75220, TEL (214)902-0300

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: SCS Engineers
Job ID: 870-32074-1
Project/Site: Sandy Creek Groundwater

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
870-32074-1	BW-1	Water	12/02/24 17:00	12/03/24 10:55
870-32074-2	MW-1	Water	12/02/24 17:20	12/03/24 10:55
870-32074-3	MW-2	Water	12/02/24 17:35	12/03/24 10:55
870-32074-4	MW-3	Water	12/02/24 16:15	12/03/24 10:55
870-32074-5	MW-4	Water	12/02/24 17:50	12/03/24 10:55
870-32074-6	MW-5	Water	12/02/24 16:35	12/03/24 10:55
870-32074-7	DUP	Water	12/02/24 16:40	12/03/24 10:55

Eurofins Dallas
9701 Harry Hines Blvd
Dallas, TX 75220
Phone (214) 902-0300

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Morgan Spears	Lab PM: Patel, Anita	Carrier Tracking No(s):	COC No: 870-9082-2645.1
Client Contact: Asher Boudreaux	Phone: 903-818-0717	E-Mail: Anita.Patel@et.eurofinsus.com	State of Origin: TX	Page: Page 1 of 1
Company: SCS Engineers	PWSID:	Analysis Requested		Job #:
Address: 1901 Central Avenue Suite 550	Due Date Requested:			Preservation Codes: N - None D - HNO3
City: Bedford	TAT Requested (days):			
State, Zip: TX, 76021	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: aboudreaux@scsengineers.com	WO #: 16224008.00			
Project Name: Sandy Creek Groundwater	Project #: 87001717			
Site: Sandy Creek Energy Station	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	pH 9040C; Anions 9056A_ORGFM_28D	6010D - Total Metals - B and Ca	2540C_Calcd - Solids, Total Dissolved (TDS)	Total Number of cont	Special Instructions/Note:
			Preservation Code:				N	D	N		
BW-1	12/2/24	17:00		Water			✓	✓	✓		
MW-1	12/2/24	17:20		Water			✓	✓	✓		
MW-2	12/2/24	17:35		Water			✓	✓	✓		
MW-3	12/2/24	16:15		Water			✓	✓	✓		
MW-4	12/2/24	17:50		Water			✓	✓	✓		
MW-5	12/2/24	16:35		Water			✓	✓	✓		
DUP	12/2/24	16:40		Water			✓	✓	✓		

870-32074 Chain of Custody

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Morgan Spears	Date/Time: 12/3/24 10:55	Company SCS	Received by:	Date/Time: 12/03/24	Company 1055
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: IR-03 CF -0.1 1.4/1.3

Ver: 04/02/2024

12/11/2024

Eurofins Dallas
9701 Harry Hines Blvd
Dallas, TX 75220
Phone: 214-902-0300

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Patel, Anita	Carrier Tracking No(s): N/A	COC No: 870-7548.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Anita.Patel@et.eurofinsus.com	State of Origin: Texas	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP Texas		Job #: 870-32074-1
Address: 4145 Greenbriar Dr	Due Date Requested: 12/12/2024			Preservation Codes:
City: Stafford	TAT Requested (days): N/A			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Sandy Creek Groundwater	Project #: 87001717			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9040C/ pH	9056A_ORGFM_28D/ (MOD) Chloride, Fluoride, Sulfate	6020B/3010A Total Metals B and Ca	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
BW-1 (870-32074-1)	12/2/24	17:00 Central	G	Water			X	X	X	2	
MW-1 (870-32074-2)	12/2/24	17:20 Central	G	Water			X	X	X	2	
MW-2 (870-32074-3)	12/2/24	17:35 Central	G	Water			X	X	X	2	
MW-3 (870-32074-4)	12/2/24	16:15 Central	G	Water			X	X	X	2	
MW-4 (870-32074-5)	12/2/24	17:50 Central	G	Water			X	X	X	2	
MW-5 (870-32074-6)	12/2/24	16:35 Central	G	Water			X	X	X	2	
DUP (870-32074-7)	12/2/24	16:40 Central	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	12/03/24 - 17 00				
Relinquished by:	Date/Time:	Company	Received by: Linda	Date/Time: 12/4/24 06:06	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 4.0 3.0 IR308

Ver 10/10/2024

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 870-32074-1

Login Number: 32074

List Source: Eurofins Dallas

List Number: 1

Creator: Dabinett, Ian

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 870-32074-1

Login Number: 32074
List Number: 2
Creator: Torrez, Lisandra

List Source: Eurofins Houston
List Creation: 12/04/24 08:20 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Appendix C
Historical Groundwater Analytical Data

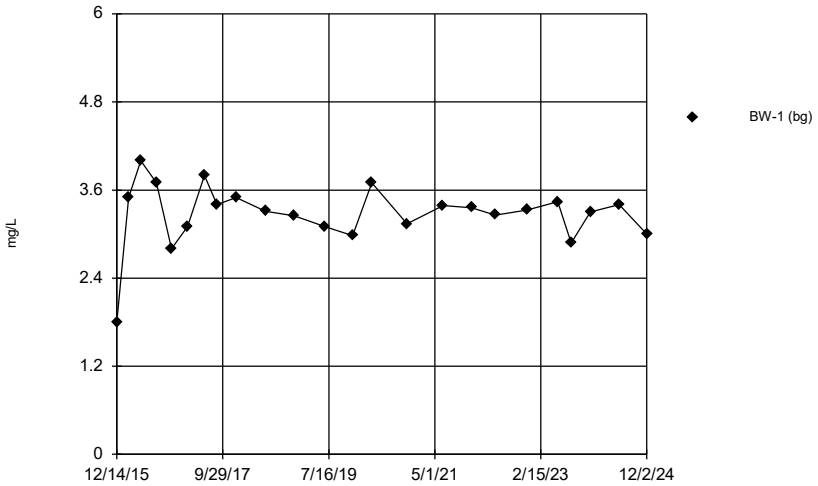
APPENDIX C - GROUNDWATER ANALYTICAL DATA
2024 SEMIANNUAL GROUNDWATER MONITORING REPORT
SANDY CREEK ENERGY STATION
2161 RATTLESNAKE ROAD
RIESEL, TX 76682

	Water Level	Conductiviy	Boron	Calcium	Chloride	pH at 25°C	Sulfate	Total Dissolved Solids	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium-226	Radium-228	Combined Radium	Fluoride
Units	ft msl	mS/cm	mg/L	mg/L	mg/L	Std. Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	pCi/L	mg/L
MW-1																									
12/14/2015	453.53	4.51	1.2	454	253	7.6	2090	4090	<0.0010	<0.0050	0.044	<0.0010	<0.0010	0.0073	<0.0025	<0.0050	0.43	<0.00020	<0.010	0.16	<0.00050	1.04 ± 0.838	1.09 ± 0.523	2.13	<0.30
2/25/2016	453.38	4.98	1.4	520	236	7.5	2190	4060	<0.0010	<0.0050	0.033	<0.0010	<0.0010	0.0074	<0.0025	0.0084	0.39	<0.00020	<0.010	0.2	<0.00050	0.922 ± 0.720	1.46 ± 0.496	2.382	<0.30
5/11/2016	454.14	4.83	2.6	1030	402	7.2	2580	5260	<0.0010	0.12	1	0.029	<0.0020	0.69	0.087	0.21	0.78	<0.00020	<0.020	0.039	0.00089	3.94 ± 1.31	8.39 ± 1.74	12.33	<0.30
8/16/2016	453.67	4.47	1.3	535	239	6.8	2300	3880	<0.0010	<0.0050	0.022	<0.0010	<0.0010	<0.0050	<0.0025	<0.0050	0.41	<0.00020	<0.010	0.13	<0.00050	0.593 ± 0.620	3.29 ± 0.828	3.883	0.35
11/17/2016	454.43	4.45	1.2	542	216	7	2130	3720	<0.0010	<0.0050	0.018	<0.0010	<0.0010	<0.0050	<0.0025	<0.0050	0.37	<0.00020	<0.020	0.16	<0.00050	0.338 ± 0.339	2.49 ± 0.783	2.828	<0.30
2/23/2017	454.72	5.08	1.3	531	223	7	2350	3980	<0.0010	<0.010	<0.20	<0.0050	<0.0050	<0.010	<0.010	<0.0050	0.44	<0.00020	<0.010	0.066	<0.00050	-0.207 ± 0.945	3.13 ± 0.908	2.923	<0.30
6/7/2017	454.42	4.77	1.2	530	203	7.5	2010	3680	<0.0010	<0.0050	0.019	<0.0010	<0.0010	<0.0050	<0.0025	<0.0050	0.36	<0.00020	<0.020	0.15	<0.00050	0.000 ± 0.449	1.30 ± 0.518	1.3	<0.30
8/24/2017	454.69	4.58	1.2	518	241	7.1	2620	4550	<0.0010	<0.0050	0.02	<0.0010	<0.0010	<0.0050	<0.0025	<0.0050	0.395	<0.00020	<0.020	0.17	<0.00050	0.577 ± 0.429	1.69 ± 0.634	2.267	0.4
12/20/2017	454.22	4.287	1.3	548	248	7.4	2340	4250	<0.0010	<0.0060	0.017	<0.0010	<0.0050	<0.0070	<0.0025	<0.010	0.38	<0.00020	<0.030	0.18	<0.00050	1.26 ± 0.680	2.46 ± 0.888	3.72	1.1
6/21/2018	453.85	4.67	1.25	587	247	7.38	2530	4270	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.3 J
12/13/2018	454.86	4.369	1.35	515	241	7.52	2570	4100	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.585
6/24/2019	455.38	4.142	1.1	492	169	7.2	2430	4030	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.73
12/10/2019	453.99	4.278	1.1	534	192	7.43	2420	3720	n/a	0.000667	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0809	n/a	n/a	n/a	n/a	0.236
4/8/2020	454.99	4.66	1.3	524	152	7.1	2430	4330	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.20
11/10/2020	454.45	4.73	1.18	539	168	7.2	2350	4060	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.26 J
6/22/2021	455.29	4.32	1.1	510	161	7.19	2470	3830	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.20
12/15/2021	455.13	4.45	1.16	534	144	7.15	2360	3940	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.271
5/10/2022	455.09	5.32	1.17	521	161	7.24	2460	4090	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
11/22/2022	454.06	4.56	1.3	512	145	7.13	2500	3960	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.336
6/1/2023	455.37	4.45	1.17	491	153	7.44	2730	4750	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1.2
8/22/2023	n/a	n/a	1.12	506	132	7.37	2340	4310	0.0074	<0.0050	0.0105	<0.0010	<0.0050	<0.0050	<0.0050	0.0047	0.382	<0.00050	<0.020	0.0801	<0.00050	n/a	n/a	3.33	0.581
12/20/2023	454.33	4.69	1.2	660	150	7.2	2300	4100	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ND
6/14/2024	455.69	4.83	1.1	500	140	7.2	2300	3500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ND
12/2/2024	452.52	2.94	1.1	560	150	7.2	2300	4600	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.56
MW-2																									
12/14/2015	424.11	10.6	1.9	569	1890	6.7	2810	8520	<0.0010	<0.0050	0.031	<0.0010	<0.0010	<0.0050	0.0061	<0.0050	0.69	<0.00020	<0.010	<0.010	<0.00050	1.41 ± 0.938	2.76 ± 0.771	4.17	0.98
2/25/2016	429.50	11.3	2.4	697	2080	7.3	2890	8070	<0.0010	0.014	0.038	<0.0010	<0.0010	<0.0050	<0.011	<0.0050	0.74	<0.00020	<0.010	<0.010	<0.00050	0.857 ± 0.590	2.57 ± 0.665	3.427	<0.30
5/11/2016	430.72	10.8	2.2	613	2340	6.7	3010	9930	<0.0010	0.0059	0.027	<0.0010	<0.0010	<0.0050	0.0079	<0.0050	0.87	<0.00020	<0.010	<0.010	<0.00050	0.859 ± 0.561	3.13 ± 0.822	3.989	<0.30
8/16/2016	430.78	11.9	2.1	680	2440	6.7	3080	7870	<0.0020	<0.0050	0.021	<0.0010	<0.0010	<0.0050	0.0084	<0.0050	0.84	<0.00020	<0.010	<0.010	<0.0010	0.237 ± 0.329	3.28 ± 0.775	3.517	0.64
11/17/2016	430.80	10.7	1.9	701	2140	6.7	2770	9680	<0.0010	0.0059	0.024	<0.0010	<0.0010	<0.0050	0.0064	<0.0050	0.82	<0.00020	0.024	<0.010	<0.00050	0.923 ± 0.594	3.16 ± 0.826	4.083	0.35
2/23/2017	430.85	13.7	1.9	646	2320	6.9	3110	9630	<0.0010	<0.010	<0.20	<0.0050	<0.0050	<0.010	<0.010	<0.0050	0.8	<0.00020	<0.010	<0.020	<0.00050	1.52 ± 1.50	4.27 ± 1.07	5.79	0.46
6/7/2017	431.12	11	1.9	640	2420	7.5	2970	14200	<0.0010	<0.0050	0.016	<0.0010	<0.0010	<0.0050	0.0051	<0.0050	0.75	<0.00020	<0.020	<0.010	<0.00050	0.344 ± 0.415	3.82 ± 0.931	4.164	1.3
8/24/2017	431.20	11.4	1.9	664	2520	6.8	3710	9600	<0.0010	<0.010	0.017	<0.0010	<0.0020	<0.0050	0.0065	<0.010	0.729	<0.00020	<0.020	0.026	<0.00050	1.12 ± 0.610	3.78 ± 0.960	4.9	0.32
12/20/2017	429.47	6.198	2.2	716	2590	7.2	3100	9600	<0.0010	<0.012	0.022	<0.0010	<0.010	<0.014	0.0072	<0.020	0.74	<0.00020	<0.030	<0.040	<0.00050	0.945 ± 0.578	4.07 ± 0.940	5.015	<0.50
6/21/2018	430.02	12.66	1.9	706	2840	7.09	3400	10200	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.6
12/13/2018	430.72	11.89	2.58	690	2740	6.71	3220	10500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.618
6/24/2019	432.28	10.77	1.7	656	2420	7.0	3480	9560	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.18
12/10/2019	430.19	8.676	1.48	660	2180	6.93	2620	8120	n/a	0.00219	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.010	n/a	n/a	n/a	n/a	0.229
4/8/2020	430.07	13	1.9	650	2410	6.8	3120	9820	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.20
11/10/2020	430.96	13.7	2.13	715	2350	6.8	2830	9670	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.20
6/22/2021	431.88	11.3	1.83	704	2780	6.82	3370	9500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.20
12/15/2021	430.79	12	2.02	656	2350	6.83	2970	8780	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.254
5/10/2022	430.63	14.5	2.28	630	2370	6.93	3040	8900	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
11/22/2022	429.45	10.2	2.39	687	2700	6.74	3420	10500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.341
6/1/2023	431.45	12.7	1.29	509	2810	7.35	3760	12800	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.944
8/22/2023	n/a	n/a	1.4	650	1550	6.74	2290	7700	0.0077	<0.0050	0.0194	<0.0010	<0.0050	<0.0050	<0.0050	<0.020	0.512	<0.00050	<0.010	<0.020	<0.00050	n/a	n/a	4.686	0.577
12/20/2023	429.42	8.81	1.6	690	1400	7.1	2400	8000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ND
6/14/2024	431.81	6.62	1.1	470	1000	6.7	2900	5500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ND
12/2/2024	429.42	6.14	1.6	660	1400	7	2300	6300	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.59
MW-3																									
12/14/2015	421.77	1.17	0.35	67.6	12.3	7.2	135	586	<0.0010	<0.0050	0.021	<0.0010	<0.0010	<0.0050	<0.0025	<0.0050	<0.050	<0.00020	<0.010	<0.010	<0.00050	0.997 ± 0.813	0.736 ± 0.505	1.733	0.62
2/25/2016	421.66	6.04	1.2	479	347	7	2430	5400	<0.0010	0.0061	0.052	<0.0010	<0.0010	<0.0050	0.0098	<0.0050	0.85	<0.00020	<0.010	<0.010	<0.00050	1.26 ± 0.762	3.02 ± 0.791	4.28	0.9
5/11/2016	421.94	3.82	1.1	465	349	6.5	2330	5440	<0.0010	<0.0050	0.024	<0.0010	<0.0010	<0.0050	0.0059	<0.0050	0.65	<0.00020	<0.010	<0.010	<0.00050	1.54 ± 0.797	1.62 ± 0.547	3.16	<0.30
8/16/2016	420.42	6.01	1.2	505	381	7.3	2950	5680	<0.0010	<0.0050	0.018	<0.0010	<0.0010	<0.0050	0.006	<0.0050	0.98	<0.00020	<0.010	<0.010	<0.00050	0.891 ± 0.626	5.10 ± 1.13	5.991	<0.30
11/17/2016	421.03	5.43	1.1	494	322	6.6	2420	5420	<0.0010	<0.0050	0.028	<0.0010	<0.0010	<0.0050	0.0068	<0.0050	0.94	<0.00020	<0.020	<0.010	<0.00050	0.872 ± .0579	5.23 ± 1.30	6.102	<0.30
2/23/2017	422.58	6.79	1.1	389	202	7	1450	2900	<0.0010	<0.010	<0.20	<0.0050	<0.0050	<0.010	<0.010	<0.0050	0.7	<0.00020	<0.010	<0.020	<0.00050	-0.239 ± 1.09	4.07 ± 1.03	3.831	0.45
6/7/2017	422.23	3.68	1.2	486	327	7.1	2260	4740	<0.0010	<0.0050	0.015	<0.0010	<0.0010	<0.0050	0.0058	<0.0050	0.62	<0.00020	<0.020	<0.010	<0.00050	0.941 ± 0.658	2.76 ± 0.765	3.701	0.57
8/24/2017	419.66	6.55	1.1	519	401	6.5	2890	6160	<0.0010	<0.010	0.014	<0.0010	<0.0020	<0.0050	0.0084	<0.010	1.03	<0.00020	<0.020	<0.020	<0.00050	1.26 ± 0.600	4.41 ± 1.07	5.67	<0.30
12/20/2017	421.08	6.459	1.3	563	380	6.8	2830	5790	<0.0010	<0.0060	0.034	<0.0010	<0.0050	<0.0070	0.0086	<0.010	0.92	<0.00020	<0.030	<0.020	<0.00050	0.626 ± 0.567	2.77 ± 0.728	3.396	0.61
6/21/2018	418.68	6.633	1.13	526	396	6.76	3160	6090	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.3
12/13/2018	422.36	4.47	1.08	327	206	6.61	1790	3520	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.662
6/24/2019	423.00	5.659	0.99	452	306	6.6	3130	5740	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.18
12/10/2019	419.87	6.189	1.26	572	345	6.67	3140	5830	n/a	0.0024	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.010	n/a	n/a	n/a	n/a	0.137
4/8/2020	422.06	6.46	1.1	530	307	6.5	3020	5980	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.20
11/10/2020	420.03	7.21	3.07	597	1160	7.1	2950	6920	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.20
6/22/2021	421.46	6.06	1.02	469	300	6.77	3170	5080	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.20
12/15/2021	420.96	6.71	1.24	518	318	6.54	2970	5500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.50
5/10/2022	420.24	6.89	1.07	420	299	6.66	2760	5060	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
11/22/2022	420.29	6.75	1.61	589	295	6.56	3130	6560	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.225
6/1/2023	421.06	6.55	1.18	491	293	7.11	3430	7840	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1
8/22/2023	n/a	n/a	1.13	533	287	6.71	3120	5610	<0.0010	0.0468	0.0111	<0.0010	<0.0050	<0.0050	0.0043	0.0072	1.12	<0.00020	<0.010	<0.020	<0.00050	n/a	n/a	3.746	0.476
12/20/2023	418.34	7.09	1.1	580	320	6.8	2800	6200	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ND
6/14/2024	422.30	6.23	0.93	420	170	6.7	1800	4400	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ND
12/2/2024	416.34	5.52	1.2	540	30	6.6	3300	6500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ND
BW-1																									
12/14/2015	465.60	5.35	1.8	465	727	9.5	2130	4900	<0.0010	<0.0050	0.17	<0.0010	<0.0010	0.015	0.0026	<0.0050	0.7	<0.00020	<0.010	<0.010	0.00073	0.900 ± 0.728	1.13 ± 0.513	2.03	<0.30
2/25/2016	465.44	5.8	3.5	586	1050	7.4	2690	6420	<0.0010	0.015	0.055	<0.0010	<0.0010	0.0053	0.0035	0.0069	0.71	<0.00020	<0.010	<0.010	<0.00050	0.887 ± 0.697	1.82 ± 0.541	2.707	0.67
5/11/2016	465.56	7.5	4	566	1120	7	2610	6360	<0.0010	0.0084	0.04	<0.0010	<0.0010	0.011	0.0035	0.0091	0.79	<0.00020	<0.010	<0.010	<0.00050	2.40 ± 0.944	2.80 ± 0.710	5.2	0.32
8/16/2016	465.71	7.52	3.7	566	1130	7.2	2720	6280	<0.0010	0.0064	0.04	<0.0010	<0.0010	0.0073	0.0029	<0.0050	0.78	<0.00020	<0.010	<0.010	<0.00050	0.610 ± 0.483	3.42 ± 0.777	4.03	0.94
11/17/2016	466.12	7.36	2.8	548	991	6.8	2590	6400	<0.0010	0.0066	0.023	<0.0010	<0.0010	<0.0050	<0.0025	<0.0050	0.74	<0.00020	0.022	<0.010	<0.00050	0.605 ± 0.548	2.94 ± 0.799	3.545	0.85
2/23/2017	466.57	7.17	3.1	532	1080	7.2	2760	6280	<0.0010	<0.010	<0.20	<0.0050	<0.0050	<0.010	<0.010	<0.0050	0.73	<0.00020	<0.010	<0.020	<0.00050	0.816 ± .0983	4.07 ± 1.08	4.886	<0.30
6/7/2017	466.17	7.58	3.8	539	1020	7.7	2220	7320	<0.0010	<0.0050	0.026	<0.0010	<0.0010	<0.0050	<0.0025	<0.0050	0.79	<0.00020	<0.020	<0.010	<0.00050	1.36 ± 0.685	3.13 ± 0.783	4.49	<0.30
8/24/2017	466.38	7.81	3.4	531	1160	7.1	2870	7260	<0.0010	<0.010	0.037	<0.0010	<0.0020	<0.0050	<0.0050	<0.010	0.738	<0.00020	<0.020	<0.020	<0.00050	1.58 ± 0.602	2.80 ± 0.759	4.38	0.37
12/20/2017	466.51	7.063	3.5	658	1030	7.2	2620	6140	<0.0010	<0.0060	0.044	<0.0010	<0.0050	<0.0070	0.0034	<0.010	0.73	<0.00020	<0.030	<0.020	<0.00050	1.07 ± 0.681	3.13 ± 0.788	4.2	<0.50
6/21/2018	466.13	7.755	3.31	610	1200	7.22	3030	6640	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.3
12/13/2018	467.24	7.159	3.25	637	1120	7.1	2780	6400	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.586
6/24/2019	467.37	7.21	3.1	564	1160	7.1	2930	6380	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.9
12/10/2019	467.39	6.612	2.98	591	1150	7.11	2830	6300	n/a	0.00236	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.010	n/a	n/a	n/a	n/a	0.309
4/8/2020	467.63	8.15	3.7	545	1070	6.9	2760	6660	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.20
11/10/2020	468.39	8.28	3.14	612	1170	7.1	2710	6000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.20
6/22/2021	468.37	7.54	3.39	607	1290	7.05	3170	6560	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.512
12/15/2021	468.76	8.31	3.36	616	1140	6.92	2820	6380	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.50
5/10/2022	468.67	10.6	3.26	623	1110	7.01	2810	6530	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
11/22/2022	468.67	8.1	3.33	619	1210	6.9	3090	6460	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.3
6/1/2023	469.32	8.12	3.44	528	1210	7.53	3220	8660	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.864
8/22/2023	n/a	n/a	2.88	539	1050	7.18	2740	6250	0.00766	0.0112	0.0168	<0.0050	<0.0050	0.0028	<0.0050	<0.020	0.741	<0.00020	<0.010	<0.020	<0.00050	n/a	n/a	3.94	<0.50
12/20/2023	468.97	8.43	3.3	710	1100	7.1	2700	6800	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ND
6/14/2024	469.57	9.10	3.4	300	1200	6.9	2500	6300	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
12/2/2024	469.17	6.51	3	550	1400	7.2	3500	7100	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.57
MW-4																									
3/24/2021	427.00	7.16	4.1	463	544	7.4	3060	6080	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.38
6/22/2021	427.52	7.43	4.94	418	1100	7.23	3080	5830	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.50
9/17/2021	425.55	7.88	5.35	431	978	7.46	2940	6390	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.34
12/15/2021	425.18	8.17	5.15	417	1020	7.23	3110	6120	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.50
3/17/2022	n/a	n/a	5.26	404	1120	6.93	2970	6240	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.341
5/10/2022	425.03	11	5.01	456	1060	7.96	2960	6450	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.50
9/8/2022	488.82	7.98	4.11	512	827	7.09	2880	6570	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.286
11/22/2022	421.13	7.79	5.21	492	935	7.71	2900	6330	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.406
6/1/2023	426.31	8.03	4.97	372	300	7.84	792	1560	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.285
12/20/2023	421.11	7.83	4.7	550	760	7.4	2600	6900	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ND
6/14/2024	427.18	8.31	4.9	460	790	7.2	2800	6000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ND
12/2/2024	423.19	5.93	5.1	440	930	7.4	3100	5800	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.51
MW-5																									
3/24/2021	432.58	9.19	2.7	535	1190	7.2	3400	7760	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.22
6/22/2021	432.29	8.36	2.6	466	1290	7.23	3570	7960	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.50
9/17/2021	432.13	9.4	2.85	507	1250	7.27	3290	7650	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.378
12/15/2021	432.30	9.4	3.13	513	1330	7.16	3590	7000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.265
3/17/2022	n/a	n/a	3.18	561	1310	6.96	3470	7260	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.50
5/10/2022	432.40	13.8	3.2	575	1600	6.91	3610	8330	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<0.50
9/8/2022	432.30	8.9	2.49	555	1140	7.07	3240	7140	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.284
11/22/2022	n/a	n/a	3.32	508	1250	7.56	3340	7610	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.504
6/1/2023	433.02	8.82	2.6	470	1280	7.86	3740	9160	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1.14
12/20/2023	438.72	9.19	3.3	550	320	7.0	2700	5700	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ND
6/14/2024	433.22	9.7	3.3	530	1100	7.1	3300	7300	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ND
12/2/2024	432.82	7.34	2.9	600	1400	7.2	3600	7300	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.57

40 CFR 257 Appendix III Constituent
40 CFR 257 Appendix IV Constituent
40 CFR 257 Appendix III & IV Constituent
"<" - Indicates analyte was not detected above the laboratory reporting limit
"J" Indicates value is above method detection limit (MDL) but below laboratory reporting limit
ND- indicates constituent was non-detect

Appendix D
Time Series Graphs

Time Series

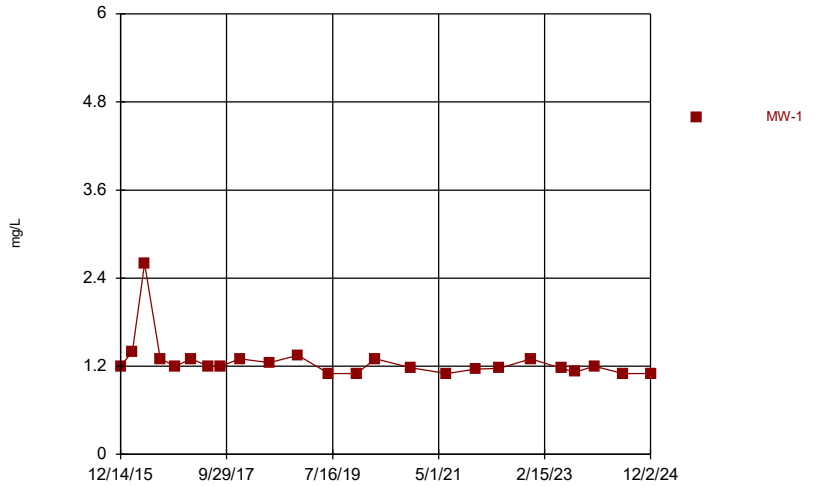


Constituent: Boron Analysis Run 12/26/2024 1:37 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Time Series

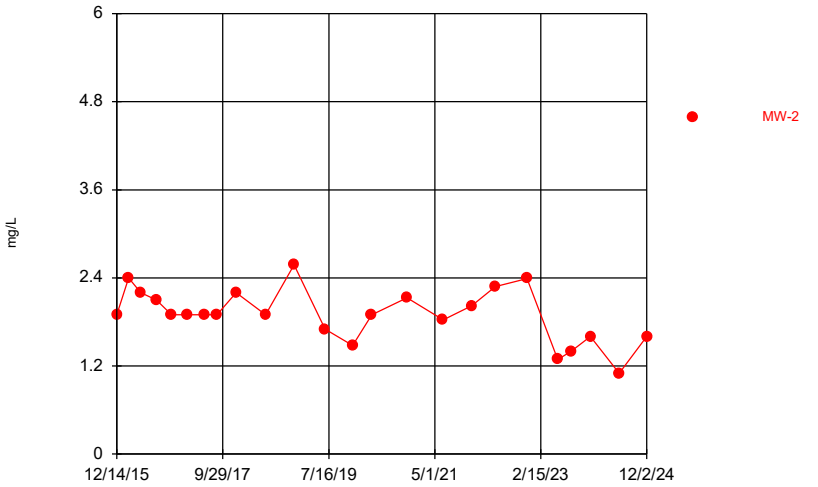


Constituent: Boron Analysis Run 12/26/2024 1:37 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Time Series



Constituent: Boron Analysis Run 12/26/2024 1:37 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

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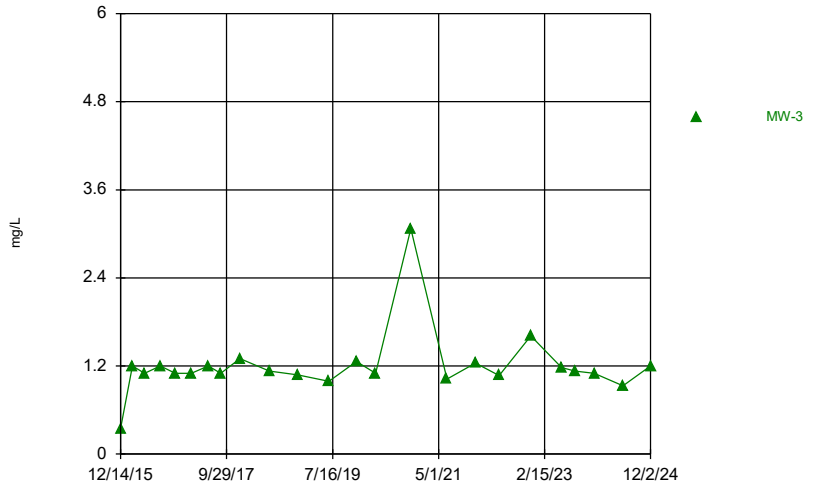
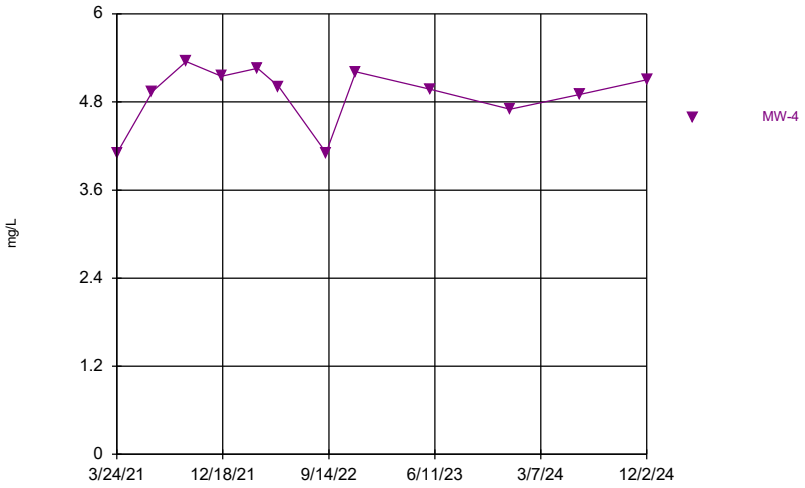
Time Series



Constituent: Boron Analysis Run 12/26/2024 1:37 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Time Series

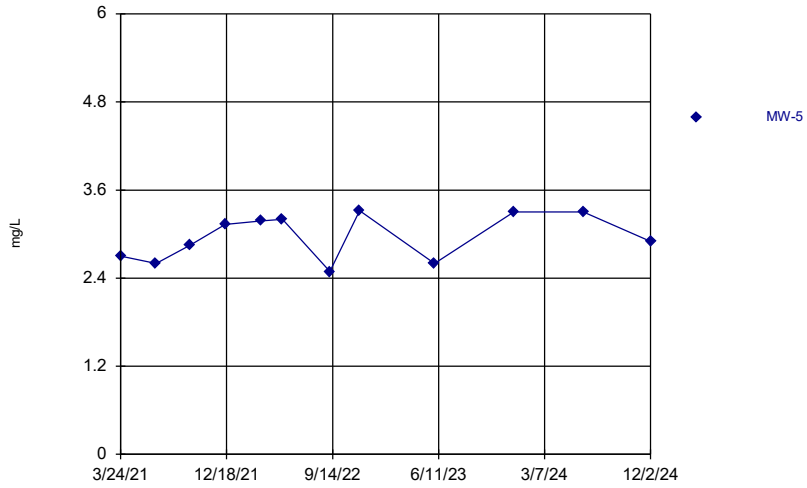


Constituent: Boron Analysis Run 12/26/2024 1:37 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Time Series

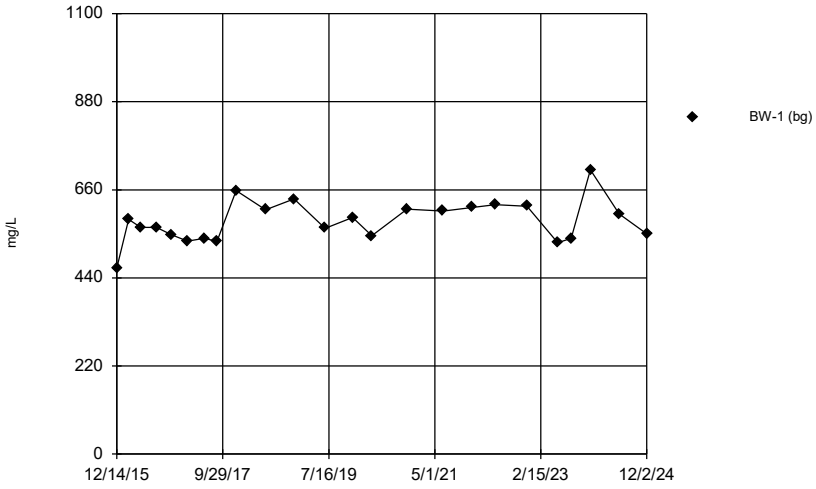


Constituent: Boron Analysis Run 12/26/2024 1:37 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Time Series

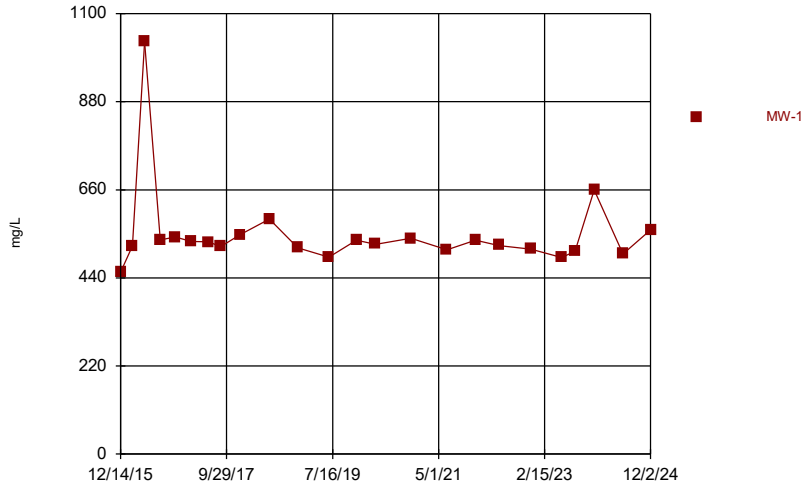


Constituent: Calcium Analysis Run 12/26/2024 1:37 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

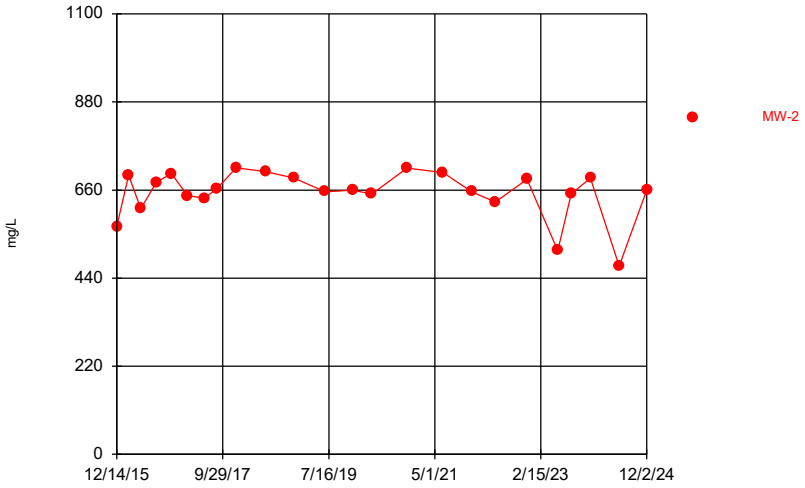
Time Series



Constituent: Calcium Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Time Series

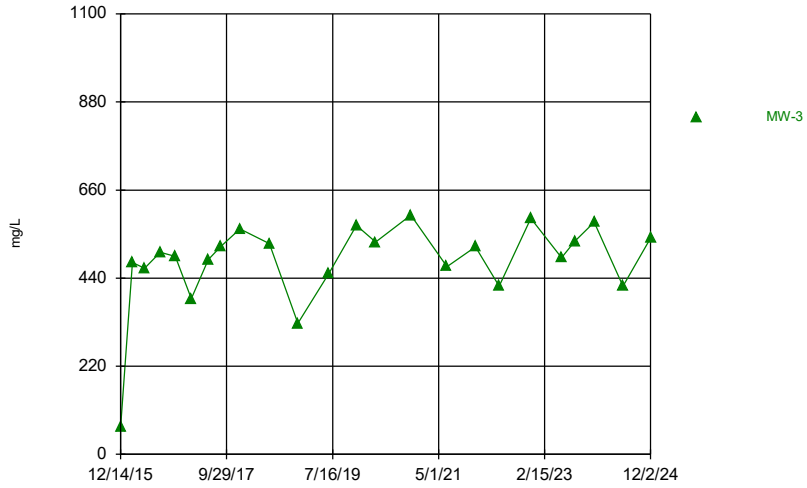


Constituent: Calcium Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Time Series

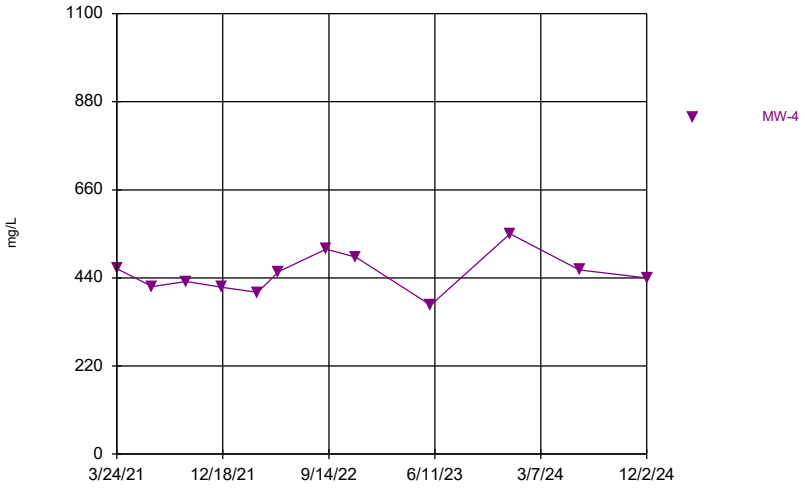


Constituent: Calcium Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Time Series

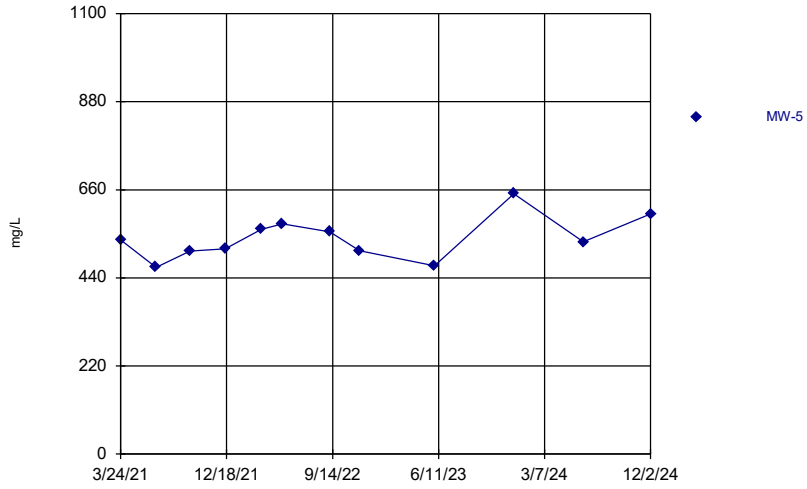


Constituent: Calcium Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

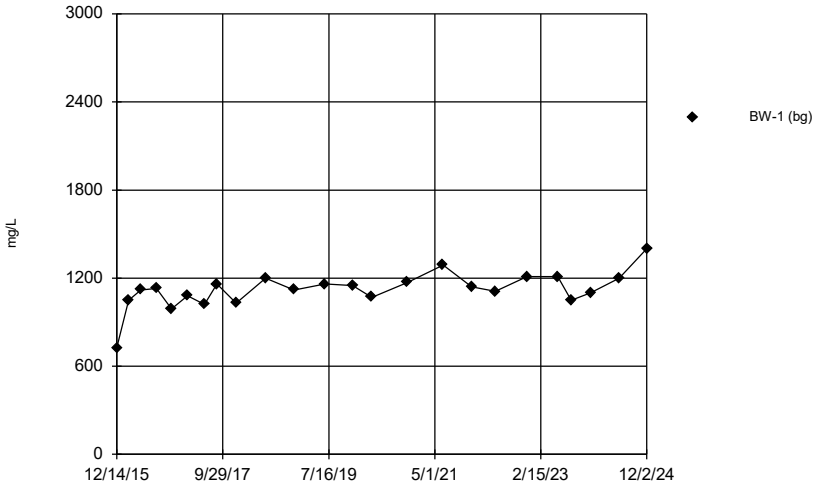
Time Series



Constituent: Calcium Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Time Series

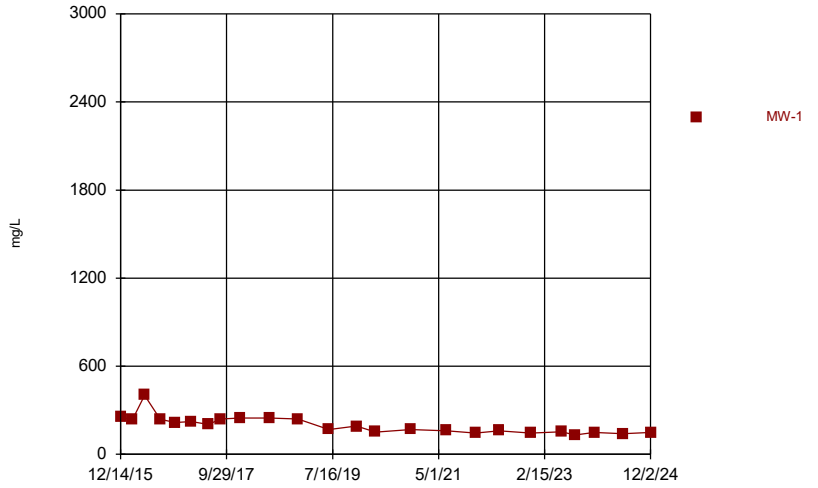


Constituent: Chloride Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Time Series

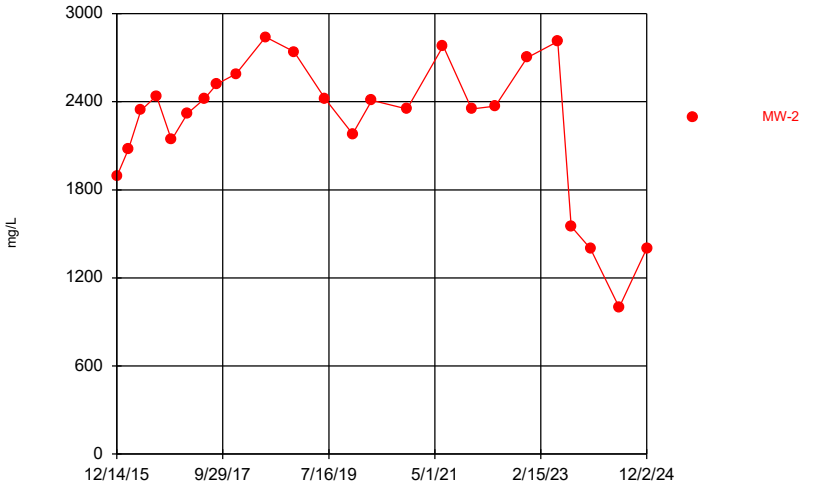


Constituent: Chloride Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Time Series

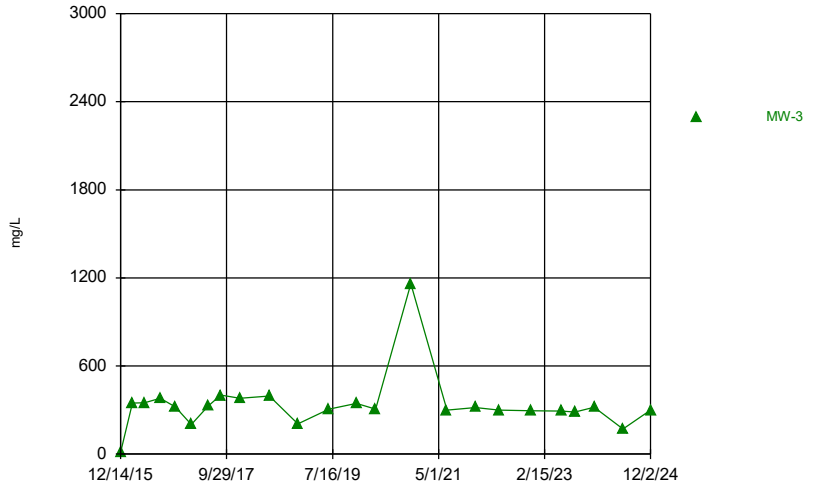


Constituent: Chloride Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

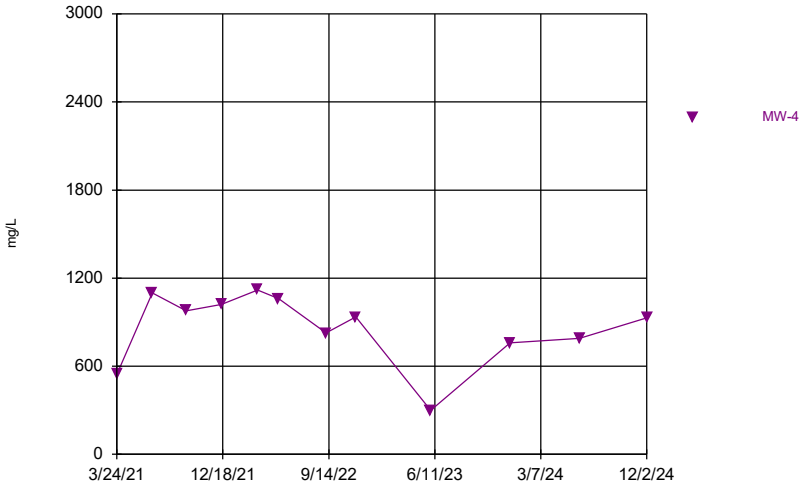
Time Series



Constituent: Chloride Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Time Series

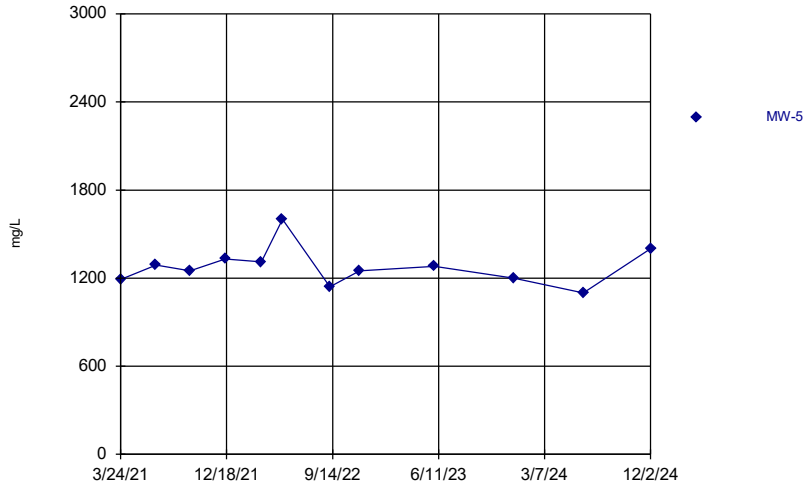


Constituent: Chloride Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Time Series



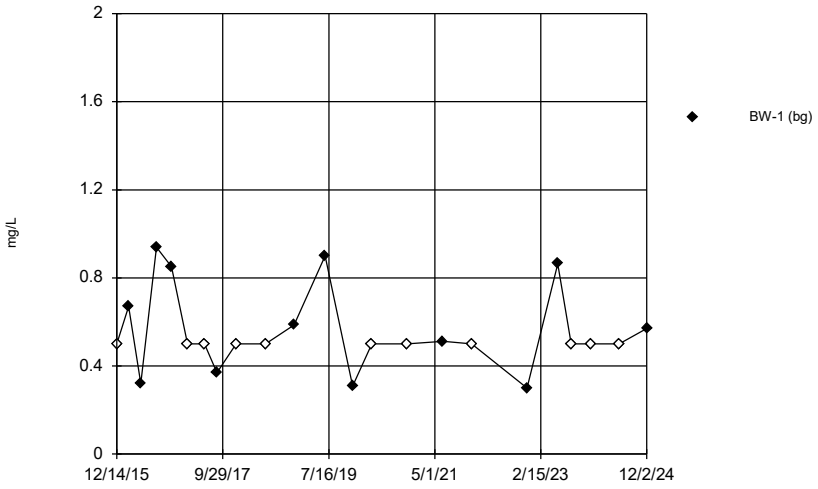
Constituent: Chloride Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Hollow symbols indicate censored values.

Time Series



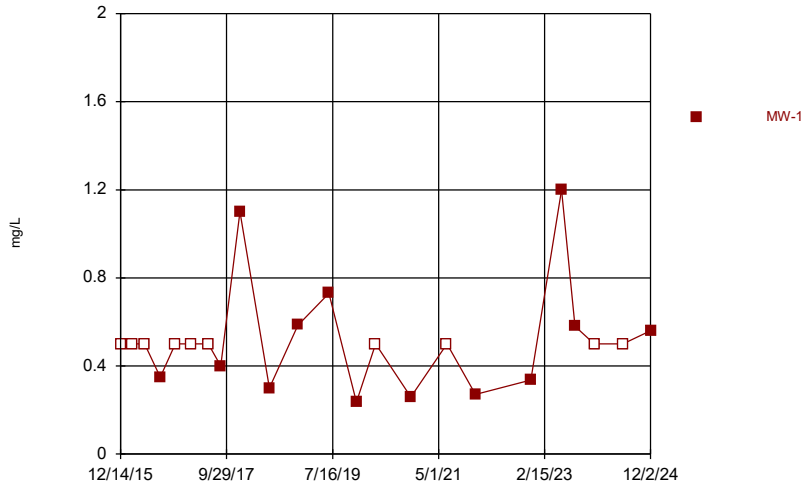
Constituent: Fluoride Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Hollow symbols indicate censored values.

Time Series

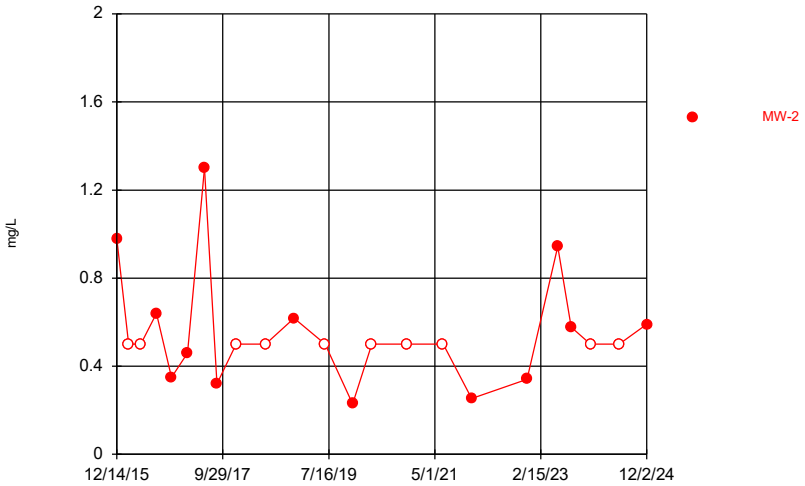


Constituent: Fluoride Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG
Hollow symbols indicate censored values.

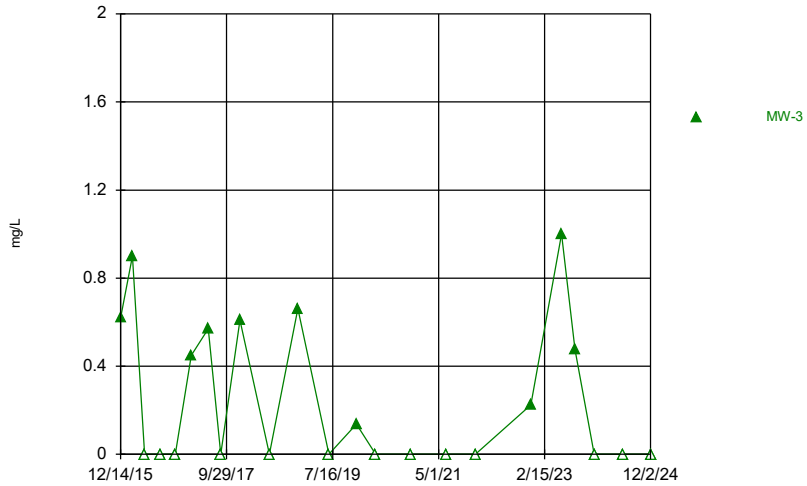
Time Series



Constituent: Fluoride Analysis Run 12/26/2024 1:38 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG
Hollow symbols indicate censored values.

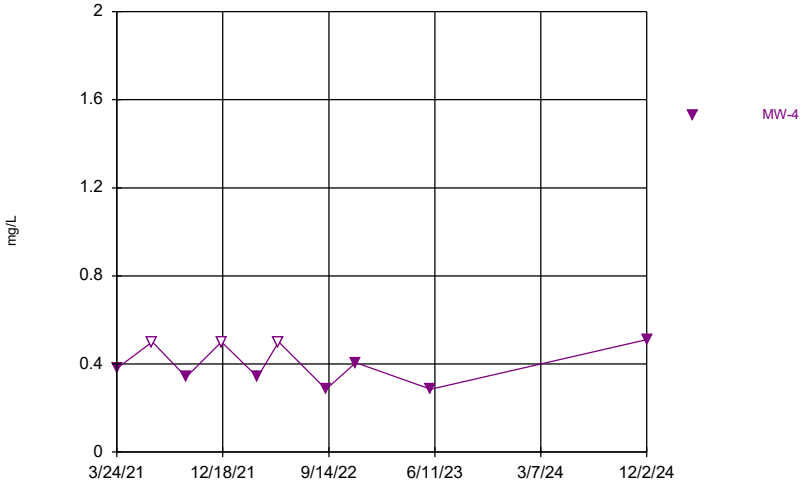
Time Series



Constituent: Fluoride Analysis Run 12/26/2024 1:38 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG
Hollow symbols indicate censored values.

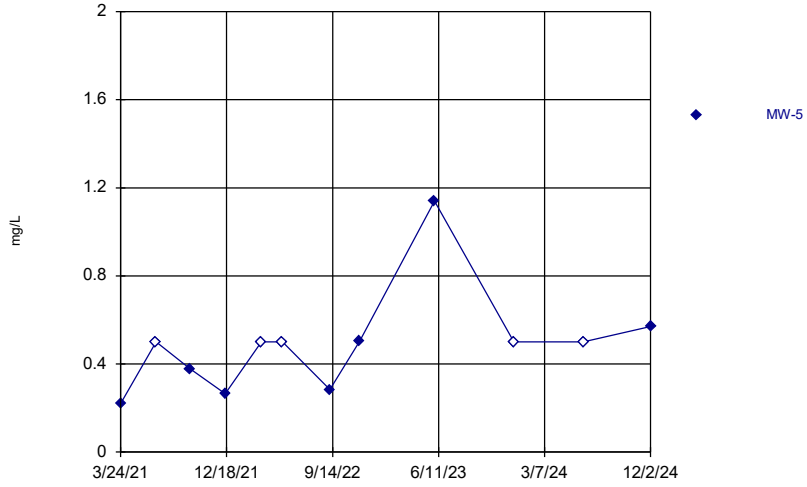
Time Series



Constituent: Fluoride Analysis Run 12/26/2024 1:38 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

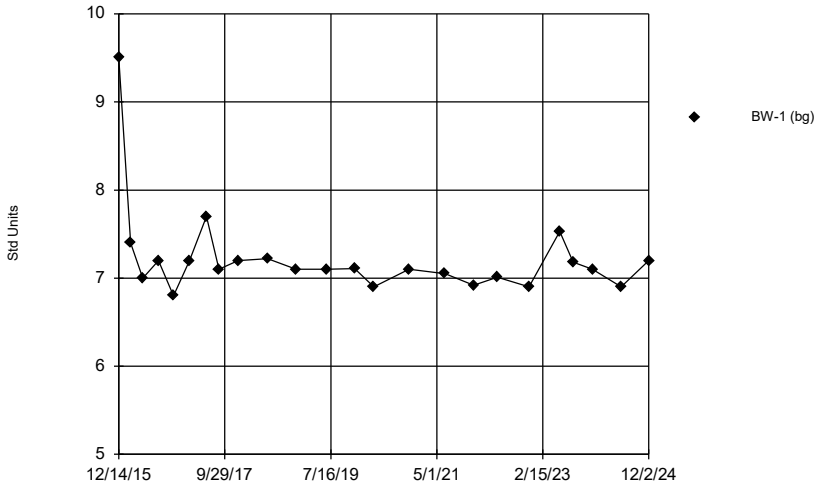
Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Fluoride Analysis Run 12/26/2024 1:38 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

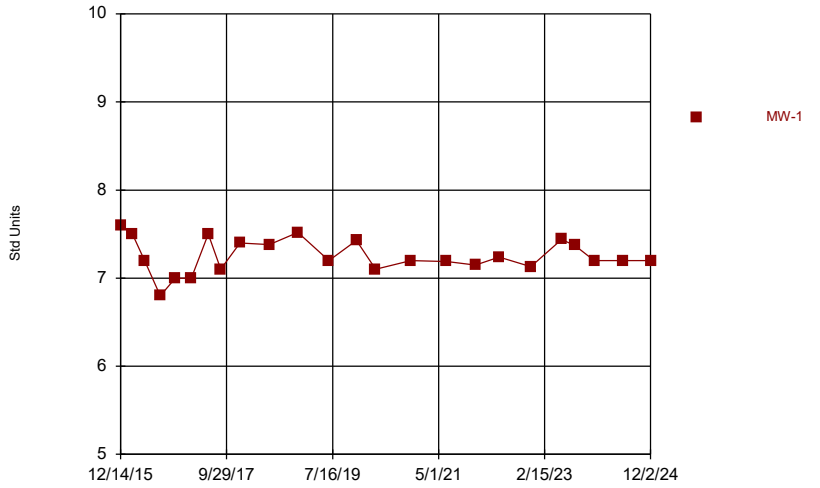
Time Series



Constituent: pH Analysis Run 12/26/2024 1:38 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

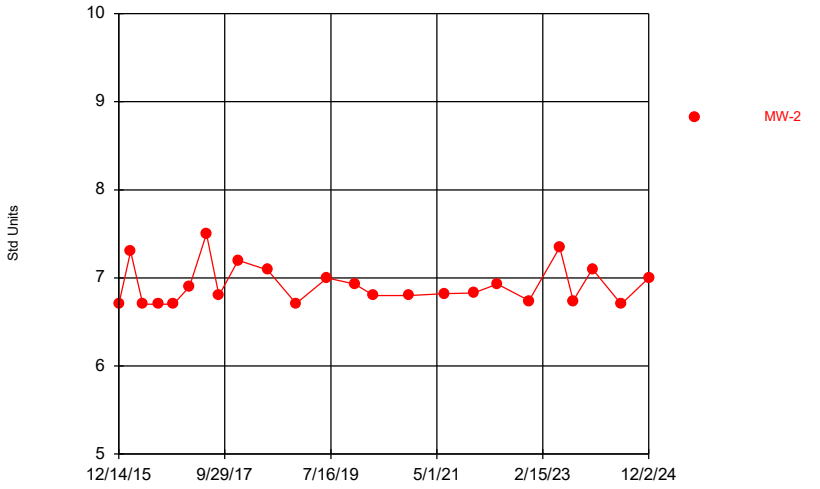
Time Series



Constituent: pH Analysis Run 12/26/2024 1:38 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

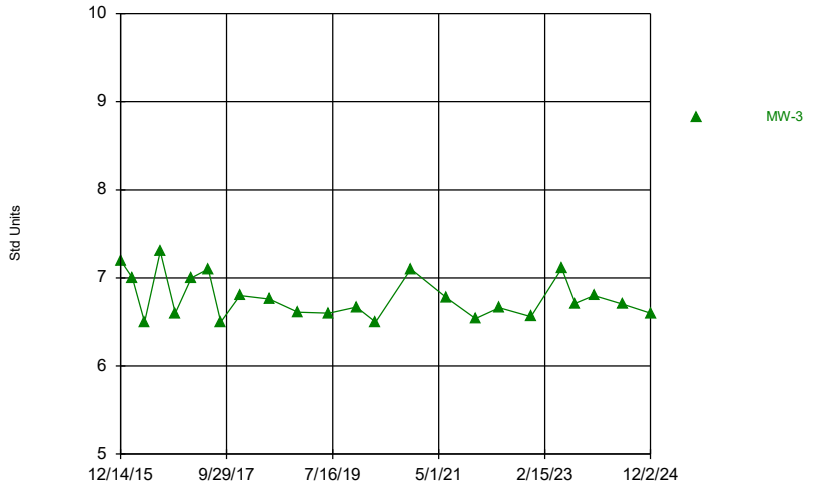
Time Series



Constituent: pH Analysis Run 12/26/2024 1:38 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

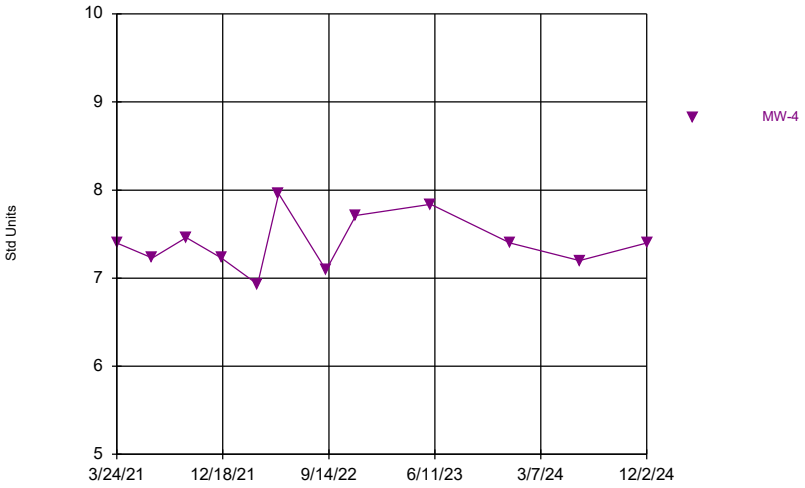
Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Time Series



Constituent: pH Analysis Run 12/26/2024 1:38 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

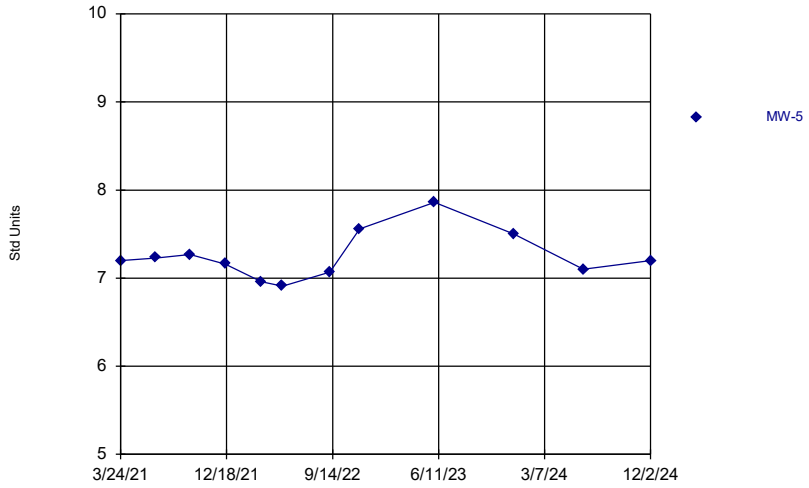
Time Series



Constituent: pH Analysis Run 12/26/2024 1:38 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

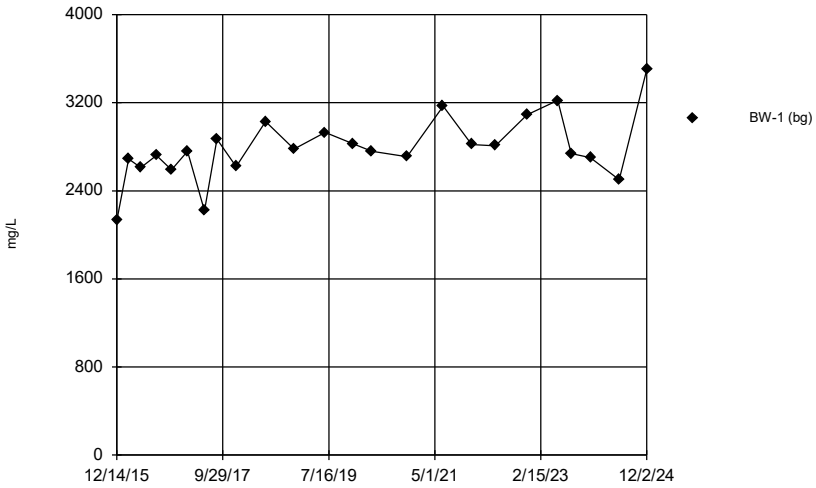
Time Series



Constituent: pH Analysis Run 12/26/2024 1:38 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

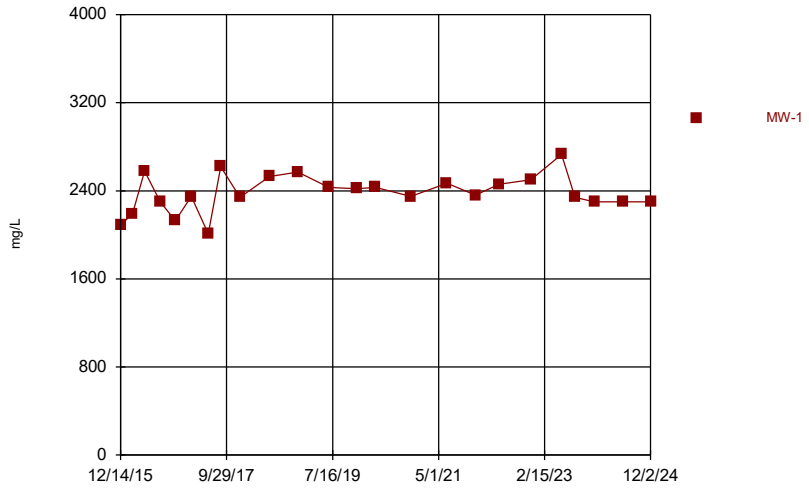
Time Series



Constituent: Sulfate Analysis Run 12/26/2024 1:38 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

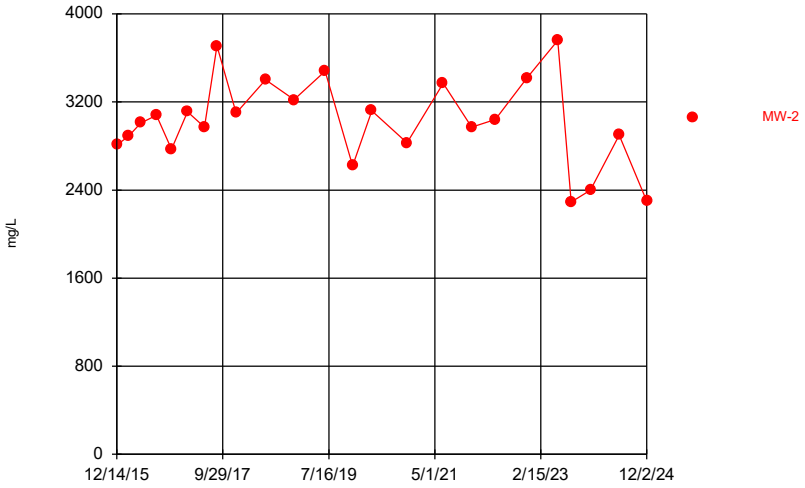
Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Time Series



Constituent: Sulfate Analysis Run 12/26/2024 1:38 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Time Series

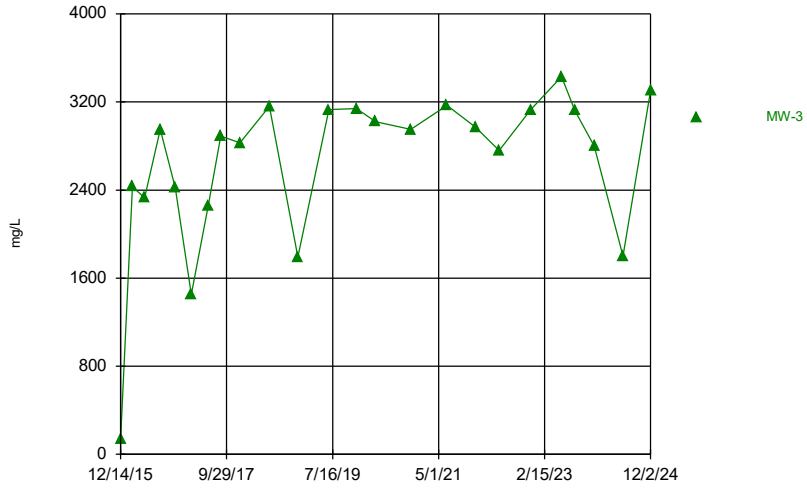


Constituent: Sulfate Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Time Series

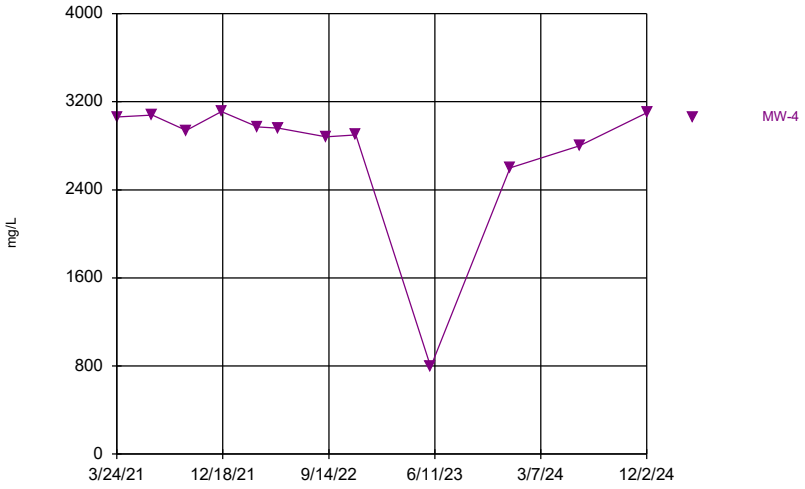


Constituent: Sulfate Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Time Series

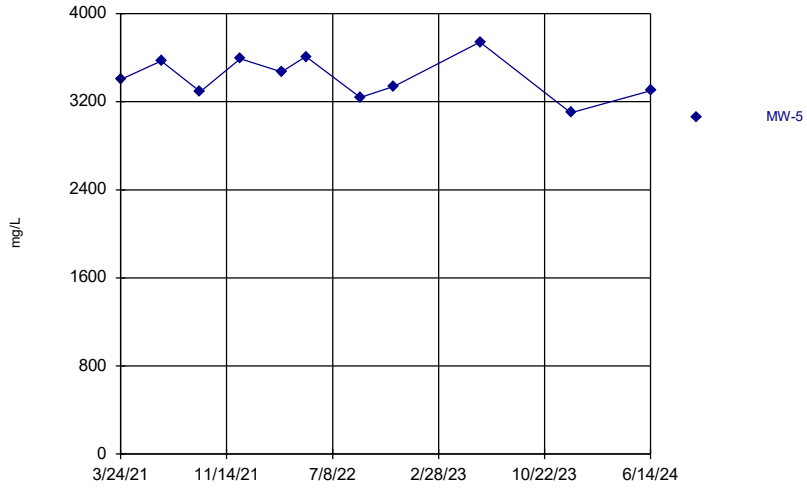


Constituent: Sulfate Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

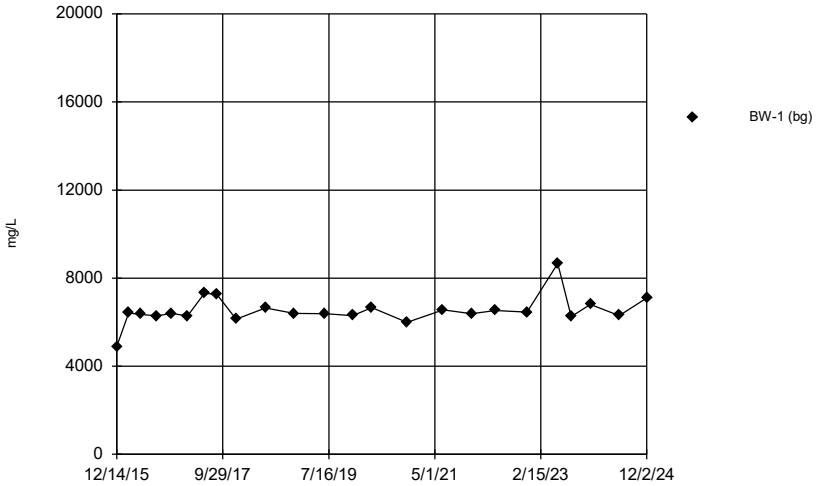
Time Series



Constituent: Sulfate Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

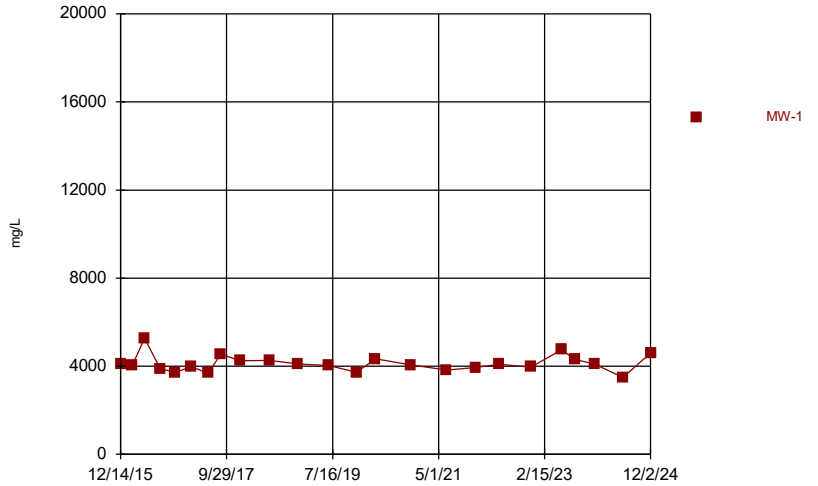
Time Series



Constituent: Total Dissolved Solids Analysis Run 12/26/2024 1:38 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Sanitas™ v.10.0.24 For use in conjunction with official Sanitas Technologies training only. UG

Time Series



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Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

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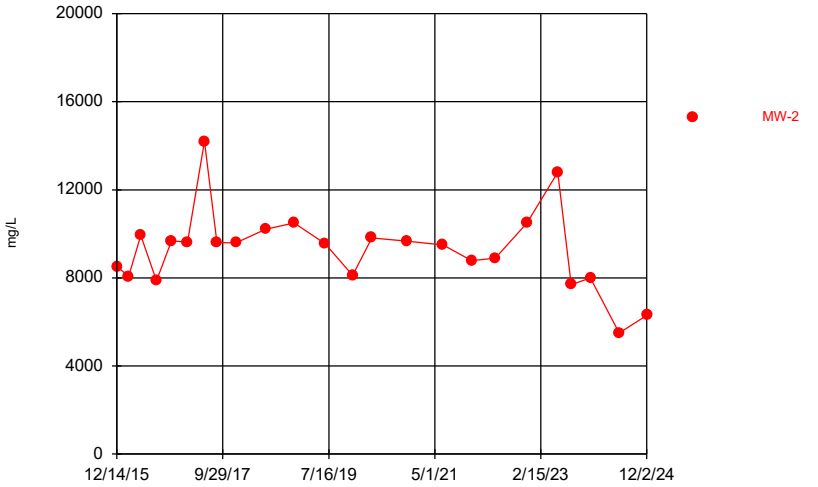
Time Series



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Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

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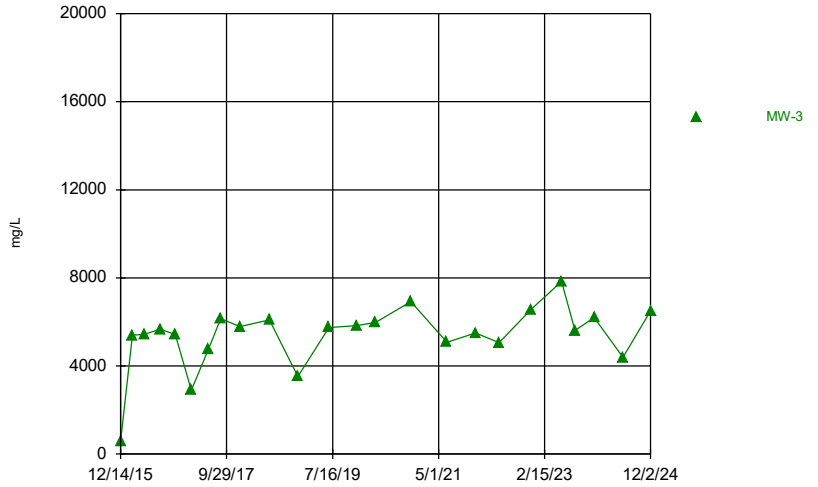
Time Series



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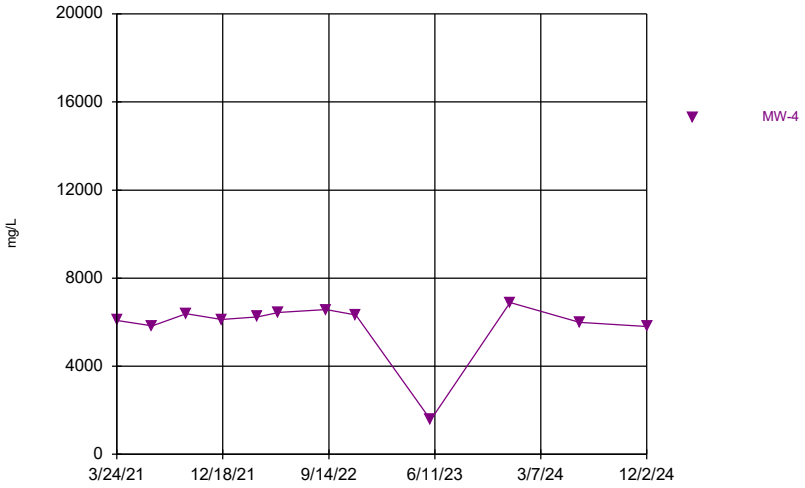
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

Time Series



Constituent: Total Dissolved Solids Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata

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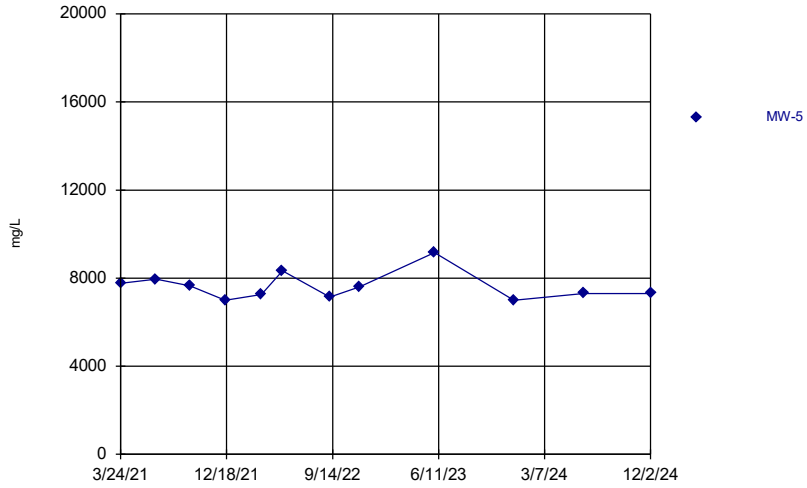
Time Series



Constituent: Total Dissolved Solids Analysis Run 12/26/2024 1:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata