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Gavin Broussard, Interim Director
Office of Conservation - Injection & Mining Division
Louisiana Department of Energy and Natural Resources
617 North Third Street, LaSalle Building
Baton Rouge, Louisiana 70802-5431

DATE
May 16, 2025

SUBJECT
11th Analytical Data Submittal
Sulphur Mines Dome
Calcasieu Parish, Louisiana

REFERENCE
0777906

Dear Mr. Broussard:

On behalf of Westlake US 2, LLC (Westlake), Environmental Resources Management Southwest, Inc. (ERM) is pleased to provide the Louisiana Department of Energy Natural Resources Injection & Mining Division (LDENR IMD) with a summary of field sampling activities, data evaluation, and final laboratory analytical reports for groundwater, surface water, gas, and oil samples collected at the Sulphur Mines Dome in Calcasieu Parish during the 1st Quarter 2025.

Summary tables have been adjusted to only include data collected over the previous 12 months, while the trend graphs and data plots will continue to include all received analytical data. Only final laboratory reports received since the previous data submittal are provided in Attachment 1. Supplemental submittals will be made as additional final laboratory analytical data are received. The field notes recorded during sampling are provided as Attachment 2.

1. WATER SAMPLING RESULTS

From January through March 2025, additional samples of groundwater and surface water were collected on a monthly basis. The sampling locations are shown on Figures 1-2. The water samples were analyzed by ALS Global laboratory in Houston, Texas, a Louisiana Environmental Laboratory Accreditation Program (LELAP)-accredited laboratory. Dissolved gas samples were submitted to and analyzed by Isotech, a Stratum Reservoir Company in Champaign, Illinois. All samples were hand delivered or shipped under proper Chain-of-Custody in laboratory-supplied containers with appropriate preservative and handling requirements.

1.1 WATER WELL SAMPLING AND RESULTS

Monthly groundwater samples continue to be collected from the industrial water wells operated by Westlake. An attempt is made to sample all water wells during the sampling events. However, periodically the water wells are not in operation or not

accessible, and are not able to be sampled during a sampling event. The Cottages Well (019-17636Z) located west of Cavern 7 (see Figure 1) was out of operation this quarter and therefore not sampled. Water well #12 (019-995) was inoperable in January 2025. Well #19 (019-1055) was inoperable in February and March 2025.

At each water well, water was allowed to flow for several minutes prior to sampling. Field parameters, i.e., pH, specific conductivity (SC), oxidation-reduction potential (ORP), and temperature, were recorded with a hand-held meter at the time of sampling. The groundwater analytical data for the last 12 months of sampling are summarized in Table 1.

Reported constituent concentrations have generally been consistent since sampling began in January 2023. Groundwater chloride trend graphs for the Chicot aquifer are provided as Figures 3-4. Concentrations reported in samples from the water wells have consistently been below their respective RECAP screening standards (GWSS) or EPA Secondary Maximum Contaminant Limits (SMCL), except for naturally-occurring iron and manganese. Few minor TPH fraction detections have been periodically and sporadically reported at levels well below RECAP GWSS.

A Piper diagram depicting the water quality of multiple groundwater samples is provided as Figure 5. The Piper diagram illustrates the differences between the Chicot aquifer water and the produced water and brine. The industrial water wells (“500-foot” sand) and the Cottages well (“700-foot” sand) have consistently plotted in tight clusters, with the “500-foot” and “700-foot” sands having slightly different water quality signatures, both distinctly different from the produced water or brine. The data do not indicate mixing between the brine or produced water is occurring at the industrial water wells or Cottages Well.

1.2 MONITORING WELL SAMPLING AND RESULTS

The monitoring wells have been sampled on a monthly schedule beginning in March 2024. The pump intake is set in the middle of the screened interval. During pumping, water quality parameters (pH, specific conductance, oxidation-reduction potential, dissolved oxygen, temperature, and turbidity) were monitored along with the drawdown in the well to ensure a representative sample was collected from the aquifer. Once the water quality parameters stabilize, a sample is collected. The analytical data received from the monitoring well samples over the previous 12 months are summarized in Table 1.

Constituents are generally reported below their respective GWSS or SMCL standards with elevated naturally-occurring iron and manganese, consistent with the onsite water wells. Trend graphs of the chloride concentrations within the monitoring wells are provided as Figures 3-4. At the MW-3 well cluster, chloride and TDS remain above their SMCLs in MW-3-500 and MW-3-700 at concentrations consistent with previous samples. Trend lines of elevated chloride concentrations reported in MW-3-500 and MW-3-700 are shown in Figure 4.

During the 1st Quarter of 2025, arsenic was reported slightly below the GWSS in MW-1-200 during all three sampling events. Arsenic has been reported slightly above the GWSS at this location in samples prior to January 2025. Arsenic is known to be present in alluvial aquifers in South Louisiana, especially where finer-grained sediments are present. The arsenic is believed to be naturally-occurring.

Generally, benzene, ethylbenzene, toluene, and xylenes (BTEX), along with total petroleum hydrocarbons (TPH) fractions are not detected in the samples. However, minor detections are reported periodically in nearly all the wells. Low levels of benzene, toluene, and light hydrocarbons (Aliphatics >C6-C8) have been consistently reported in MW-3-500 below the GWSS. Also, low levels of o-xylene below the GWSS have been observed in MW-2-500 over the last several months. The concentrations of BTEX and TPH fractions are not increasing over time.

As shown on the Piper diagram (Figure 5), the data for MW-1-200, MW-1-500, MW-1-700, MW-3-500, and MW-3-700 plot in a tight clusters and have been consistent over time. However, the water quality of the other monitoring wells (MW-2-200, MW-2-500, MW-2-700, and MW-3-200) has changed over time, most likely the result of sulfate reducing bacteria and equilibration of the aquifer over time. A trend graph of the sulfate data for these wells is provided as Figure 6. The sulfate concentrations appear to have stabilized in all wells except MW-2-200, which is still slightly declining. The sulfate concentrations are expected to stabilize over time.

1.2.1 HYDROGEN SULFIDE

Periodically and sporadically, dissolved hydrogen sulfide (H_2S) has been reported in samples from the monitoring wells. Commonly, sulfate-reducing bacteria within the groundwater or the well can generate hydrogen sulfide in wells through reduction of sulfate in anaerobic conditions. Sulfate concentrations are gradually decreasing over time in all monitoring wells and are expected to eventually stabilize. H_2S levels will likely stabilize once the sulfate concentrations stabilize. H_2S will continue to be monitored.

1.3 SURFACE WATER SAMPLING RESULTS

In January, February, and March 2025, surface water samples were collected from the Central Lake, Salt Lake (LDNR 26), Brine Well 7B vault (PPG 7B BS), and the water body adjacent to Brine Well 4 (LDNR 9, and LDNR 19). The sampling locations are shown in Figures 2. Surface water sample data over the previous 12 months is summarized in Table 2.

1.3.1 CENTRAL LAKE SAMPLE RESULTS

During the 1st Quarter 2025, chloride concentrations in Central Lake were consistent with expected seasonal levels. The site received normal expected rainfall during those months. The concentrations will continue to be monitored over time. The Central Lake

is generally homogeneous, with minor variations in water quality between sampling locations.

Field readings from the Central Lake water column are continuing on a weekly basis. The profile data collected from the monitoring station over the previous 12 months are summarized in Table 3. Trend graphs of the field measured TDS and water depth are shown on Figure 7. Laboratory reported TDS confirms the general trend observed in the field data. The water quality within the Central Lake was generally consistent during the 1st Quarter of 2025. The surface water will continue to be monitored to evaluate changes over time, which appear to be variable with water level changes.

2. GAS SAMPLING RESULTS

The majority of submerged bubbles sites were successfully sampled using a water-displacement technique. At the few submerged bubble sites that do not exhibit visible bubbling, dissolved gas samples are collected. The gas data collected during the previous 12 months are summarized in Table 4 and sampling locations are shown on Figures 1 and 2.

Dissolved gas samples continue to be collected from the water wells and monitoring wells on a monthly basis (Table 4). Over time the methane levels have increased in the "500-foot" sand monitoring wells. The dissolved gas samples collected from the industrial water wells and Cottages well typically have low levels of gas limiting the ability to evaluate the isotopic ratios. The monitoring wells installed on the salt dome have sufficient quantities of dissolved gas and isotopes can be readily evaluated. The sample collected from MW-2-500 during March 2025 developed a leak during transit and was unable to be analyzed at the lab.

Several identified bubbles sites (LDNR-10, 27, 28, and PPG-07A) were dry and are difficult to locate. Gas samples were collected at these locations using a methane detector to identify the likely bubble location. The gas samples were collected via a hand pump and funnel surrounded with modeling clay in order to limit atmospheric contamination. These samples typically have significant atmospheric gas present in the samples.

2.1 METHANE ISOTOPES

The methane isotopic data have been plotted on Figure 8 for comparison with other gas samples collected. In general, the methane isotopic data have been consistent over time with the gas from the caverns, oil wells, and bubble sites plot as thermogenic gas, originating from deep hydrocarbon sources. The gas within the "500-foot" and "700-foot" sands of the Chicot aquifer has a biogenic signature and are trending more toward near-surface microbial gas over time. However, MW-3-500 has a thermogenic signature, more similar to the bubble sites and cavern wells. Gas samples from the "200-foot" sand plot in the thermogenic gas range and appear to be different both compositionally and isotopically than the deeper Chicot gas, but distinctly

different than the bubble sites. The gas in the ”200-foot” sand falls along a line that could potentially indicate mixing of microbial and thermogenic gases.

MW-3-500 is unique in both gas and water quality data. This is the only well with benzene detected consistently and has a much higher chloride concentration than would be expected for the “500-foot” sand. It also has an elevated water temperature. The methane isotopes plot in a distinct cluster that is different from the rest of the gas data. There is reason to believe that the “500-foot” sand at the MW-3 location has been impacted by historical activities on the salt dome.

Three bubble sites (LDNR-07, 08, and 12) plot in a distinctly different cluster than the rest of the gas data collected from bubble sites. Also, LDNR-25 plots much differently than the other bubble sites. These four bubble sites are located near each other and have low gas flux rates. The gas composition at these locations is similar which could indicate that these bubble sites share a similar origin. Based on Figure 8, there is a possibility that these bubble sites have a component of gas found within the “200-foot” Chicot sand.

2.2 GAS COMPOSITION

The composition of the gas varies within the samples collected throughout the salt dome. The gas compositions at the majority of the sample locations have remained consistent and exhibited very little variation over time.

Trend graphs of the methane to ethane ratio over time of the gas samples are provided in Figure 9. Slight variations occur within individual samples, but as a whole, the methane/ethane ratios of the bubble sites have remained consistent with time. Ratio deviations that do occur within samples tend to be toward a “drier”, methane-enriched gas, rather than a “wetter” ethane-enriched gas.

The methane/ethane ratio of the dissolved gas in the monitoring wells is much higher than the bubble sites, water wells, brine wells, and oil wells except for MW-3-500. Some of the monitoring wells exhibit slightly increasing trends which are consistent with higher levels of dry biogenic gas as observed with stable isotopes. With the exception of MW-3-500, the gas in the monitoring wells is distinctly different than the other gas samples collected on site.

There does not appear to be a consistent gas composition that can be attributed to a single source. However, the gas compositions observed in the bubble sites have been stable over the last 2 years.

2.3 HYDROGEN SULFIDE

During the 1st Quarter 2025, gas collected from the bubble sites was evaluated for H_2S. Samples were submitted to SPL for analysis. The H_2S data are summarized in Table 4. H_2S at the majority of the bubble sites was not detected or was reported at very low concentrations. However, a few bubble sites exhibited elevated levels of H_2S, including LDNR-03, 04, 17, 19, and 24. H_2S was not detected in ambient air at the site.

3. OIL SAMPLING RESULTS

Oil samples were collected from Cavern 7 and Cavern 4 in January 2025. The oil sample results collected since January 2023 are summarized in Table 5. Additional volume was sent for environmental forensics evaluation, and those results will be provided by others. The data for the cavern oil has remained consistent over time and is lighter (less dense) than the oil produced on the flanks of the dome.

4. POTENTIOMETRIC SURFACE

Groundwater levels are recorded during each sampling event prior to sampling. Before the water level is recorded, each well is opened and allowed to equilibrate with atmospheric pressure. The survey data and water level measurements collected over the previous 12 months are summarized in Table 6.

Potentiometric surface contour maps for the three Chicot sand intervals from January through March 2025 are provided as Figures 10-18. Because of the elevated TDS in MW-3-500 and MW-3-700 wells, the groundwater elevations have been corrected for density to equivalent freshwater head (EFWH) [Post, et al., 2007]. The groundwater in the "200-foot" sand appears to be flowing toward the southeast with high water levels reported in the MW-1-200 well. In both the "500-foot" sand, and the "700-foot" sand the groundwater flow direction appears to be toward the southwest, toward the industrial water wells. This flow regime for all three sand zones has been consistent since the monitoring wells were installed. Groundwater levels will continue to be recorded on a regular basis.

A hydrograph of the water levels in the monitoring wells is provided as Figure 19. The similarity in water elevation and the response consistency between the "500-foot" and the "700-foot" wells indicates that these units are hydraulically connected. The water level data for MW-2-200 and MW-3-200 generally follow the same trend as the "500-foot" and "700-foot" wells. These wells might be influenced by continuous pumping from the industrial water wells. The MW-1-200 water level follows a different trend than the other "200-foot" monitoring wells, which may be a result of a local recharge boundary or less influence from pumping.

5. SCHEDULE

Per the April 22, 2025 letter from LDENR (Response to Westlake's "Request for Amendment of Compliance Order Tasks for Westlake Sulphur Mines"), the sampling frequency will be reduced. Groundwater sampling will continue on a monthly basis for both the industrial water wells and the monitoring wells. The bubble sites and surface water sampling frequency will be modified to quarterly sampling, with the next event scheduled for July 2025. LDENR will be notified at least five business days prior to the start of sampling. Analytical data will continue to be provided to LDENR within 48 hours of receipt of the final report.

Reporting will continue on a quarterly basis. The next report will be prepared following the 3rd Quarter 2025 sampling events and is expected to be submitted in July or August 2025 after all analytical data are received.

Should you have any questions or need additional information, please contact us at scott.himes@erm.com and david.upthegrove@erm.com.

Sincerely,

Environmental Resources Management Southwest, Inc.

Scott A. Himes, P.G.
Senior Hydrogeologist

David C. Upthegrove, P.G.
Partner

SAH/DCU/pcv

REFERENCES CITED

Post, V., H. Kooi, and C. Simmons, 2007, *Using hydraulic head measurements in variable-density ground water flow analyses*, Groundwater, Vol 45, Iss 6, pp. 664-671.

FIGURES

List of Figures:

M:\US\Projects\V-Z\Westlake\Sulphur Dome\Maps\04_LDNR Submittals\11\01_Groundwater Sampling Locations.mxd, REVISED: 04/10/2025, SCALE: 1:9,000 when printed at 8.5x11 DRAWN BY: SAH

Legend

- Water Well Sample Location
- Monitoring Well Sample Location
- Produced Water Sample Location
- Brine Sample Location
- Westlake Property

Notes:
Nov 2024 areial imagery via Google Earth.

Figure 1
Groundwater Sampling Locations
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Louisiana

ERM

Source: Esri - ArcGIS Online; GCS North American 1983

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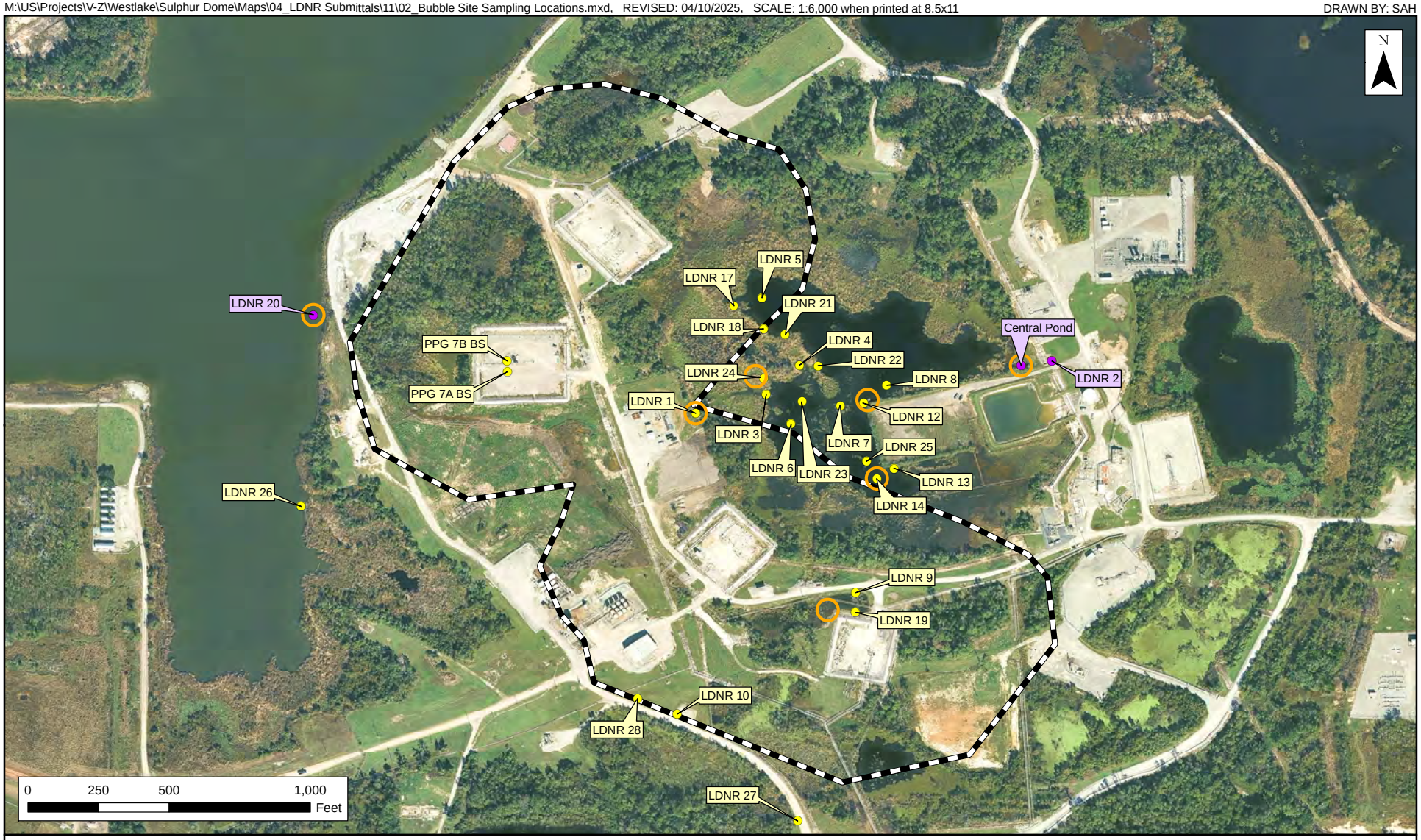


Legend

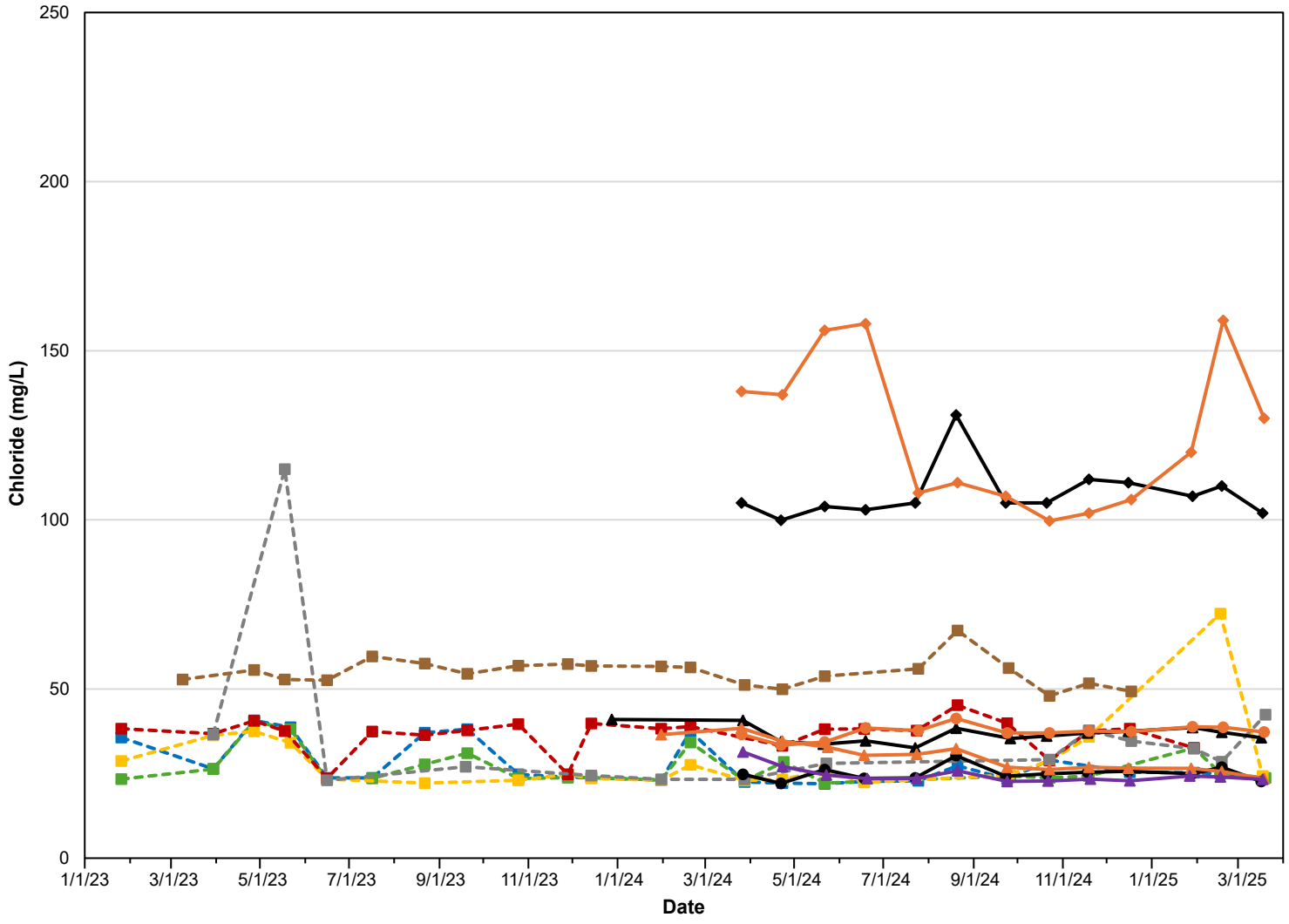
- Surface Water Sample Location (non-bubble site)
- Bubble Site Water/Gas Sample Location
- Sheen Sample Location
- Westlake Property

Notes:
Nov 2024 aerial imagery via Google Earth.

Figure 2
Bubble Site Sampling Locations
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Louisiana

ERM

Source: Esri - ArcGIS Online; GCS North American 1983

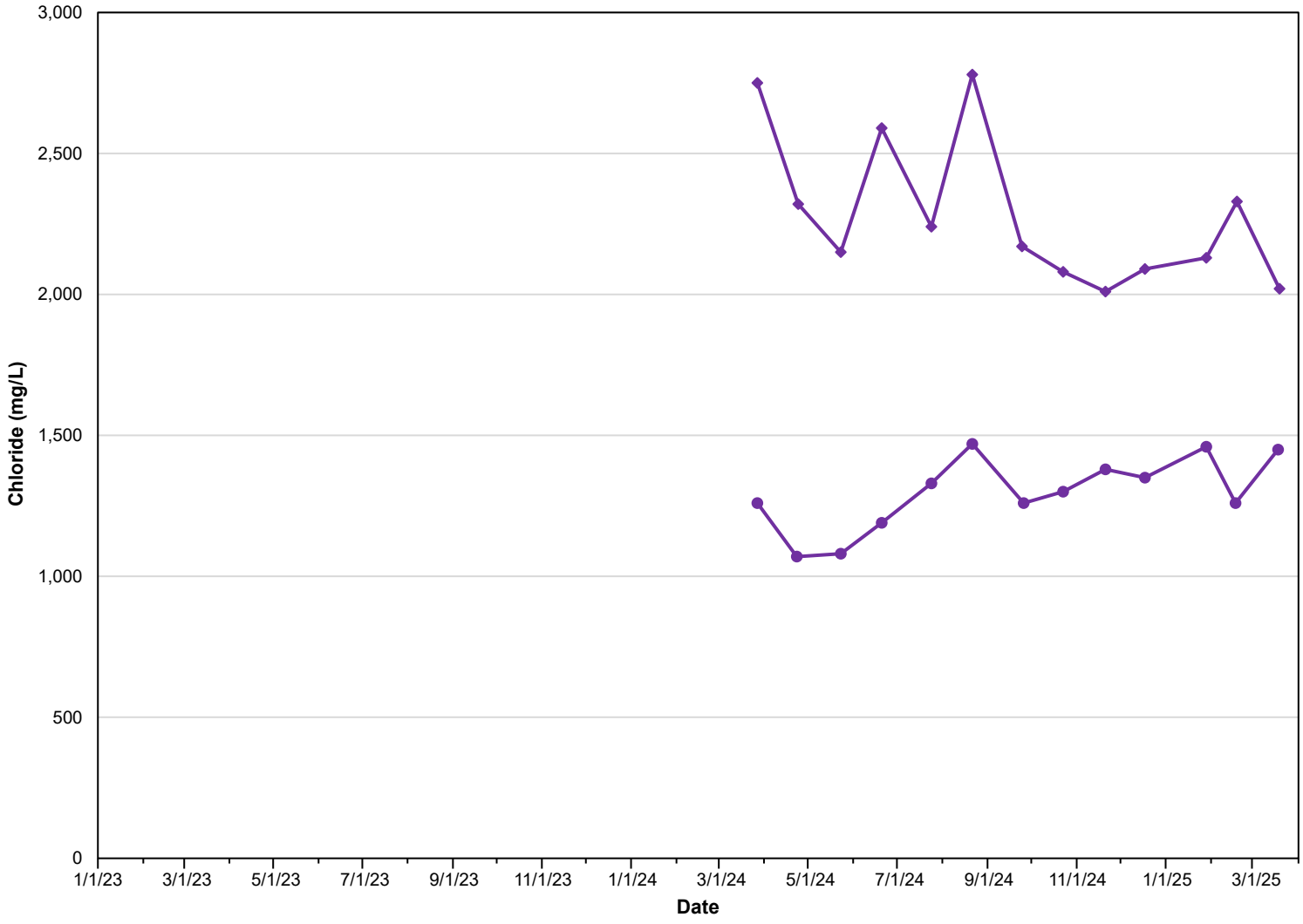


Legend

- 019-580
- 019-582
- 019-995
- 019-1055
- 019-1603
- 019-17636Z (Cottages)
- MW-1-200
- MW-1-500
- MW-1-700
- MW-2-200
- MW-2-500
- MW-2-700
- MW-3-200

Figure 3
Groundwater Chloride Trend
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Lousiana

ERM

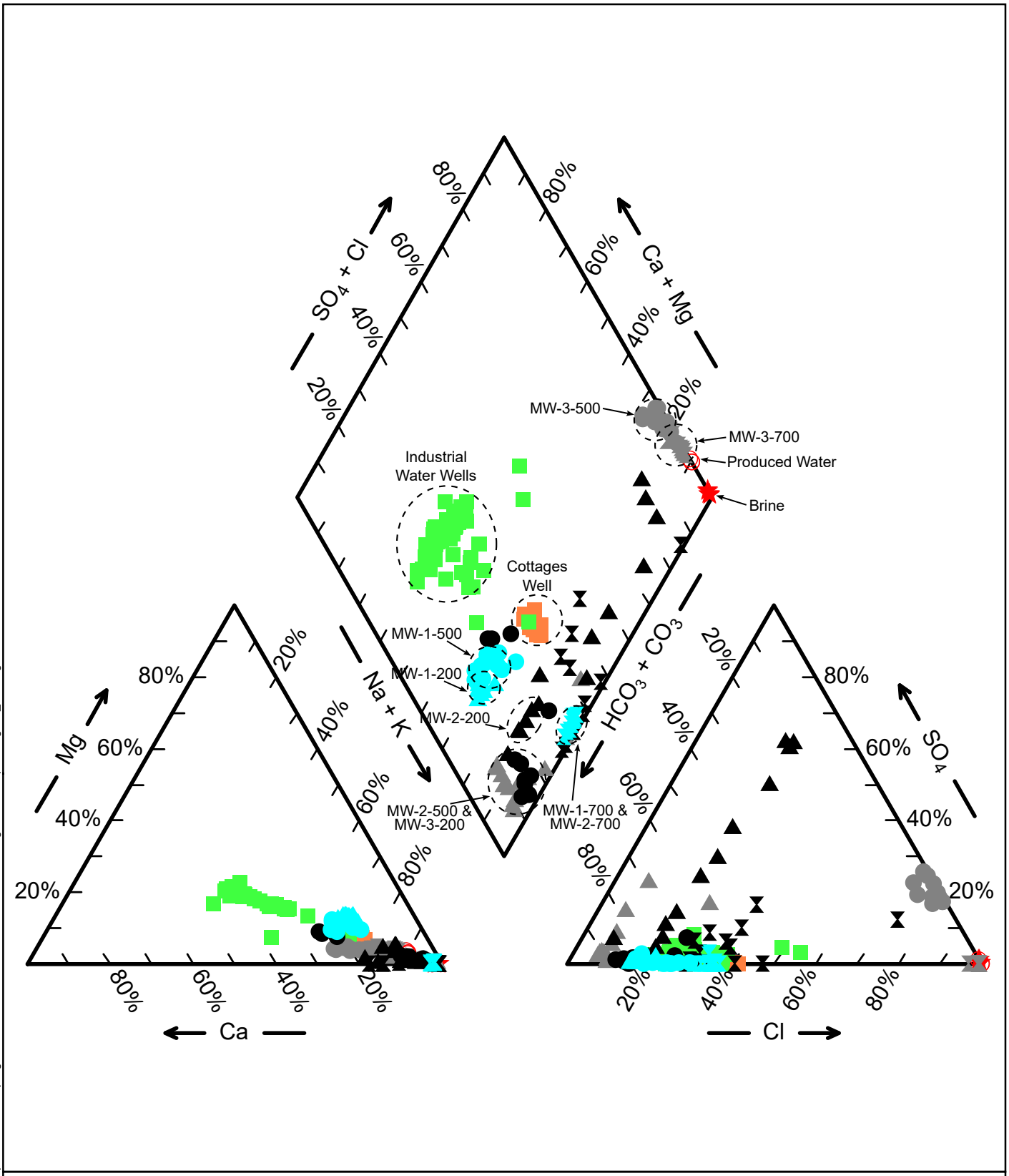


Legend

- MW-3-500
- MW-3-700

Figure 4
Groundwater Chloride Trend
MW-3-500 & MW-3-700
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Lousiana

ERM



Legend

- Industrial Water Well
- Residential Water Well
- Cottages Well
- Produced Water
- Brine
- MW-1-200
- MW-1-500
- MW-1-700
- MW-2-200
- MW-2-500
- MW-2-700
- MW-3-200
- MW-3-500
- MW-3-700

Figure 5
Groundwater Piper Diagram
Sulphur Dome
Westlake US 2, LLC
Calcacieu Parish, Louisiana

ERM

DRAWN BY: SAH

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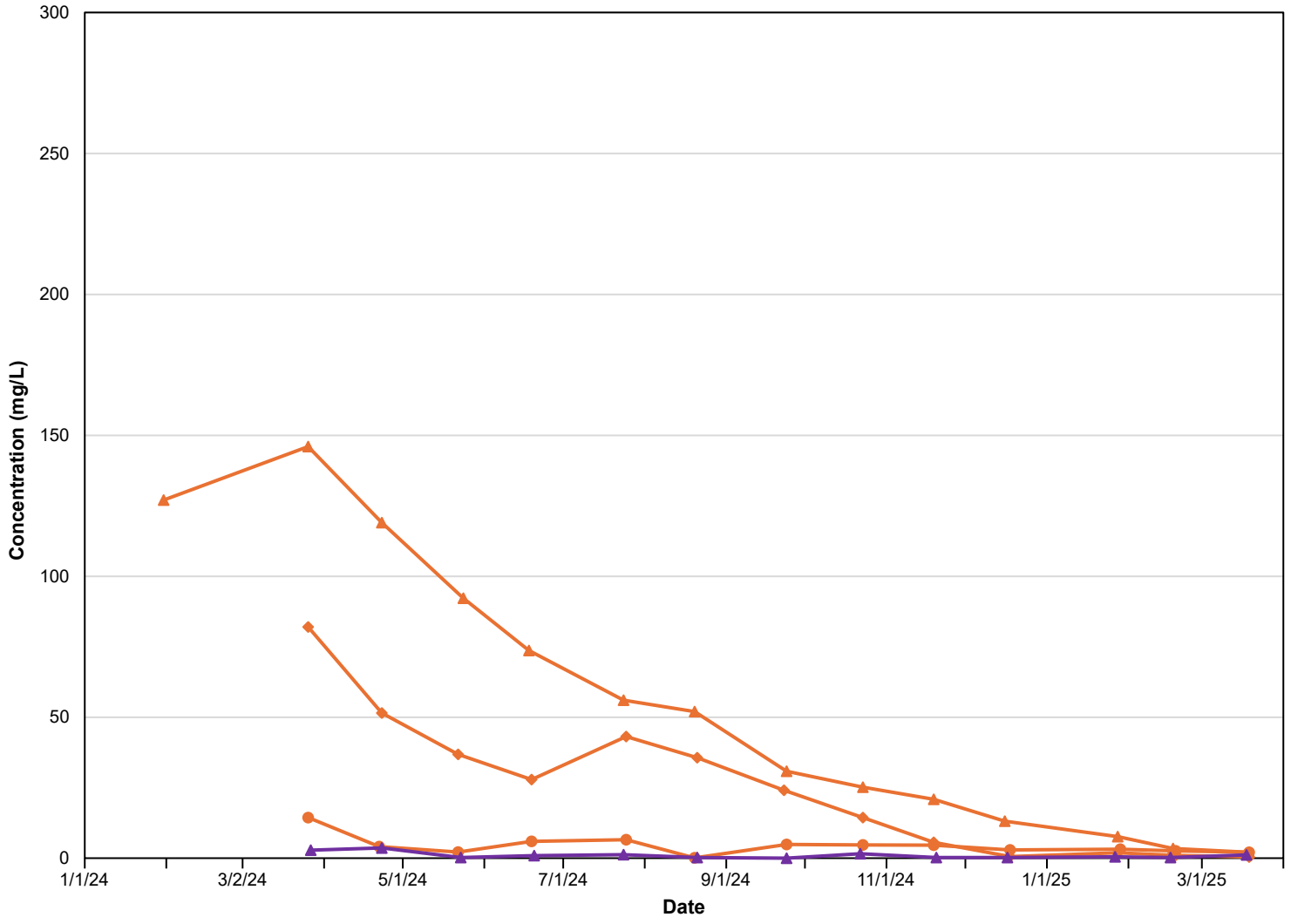

Legend

- MW-2-200
- MW-2-500
- MW-2-700
- MW-3-200

Figure 6
Groundwater Sulfate Trend
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Lousiana

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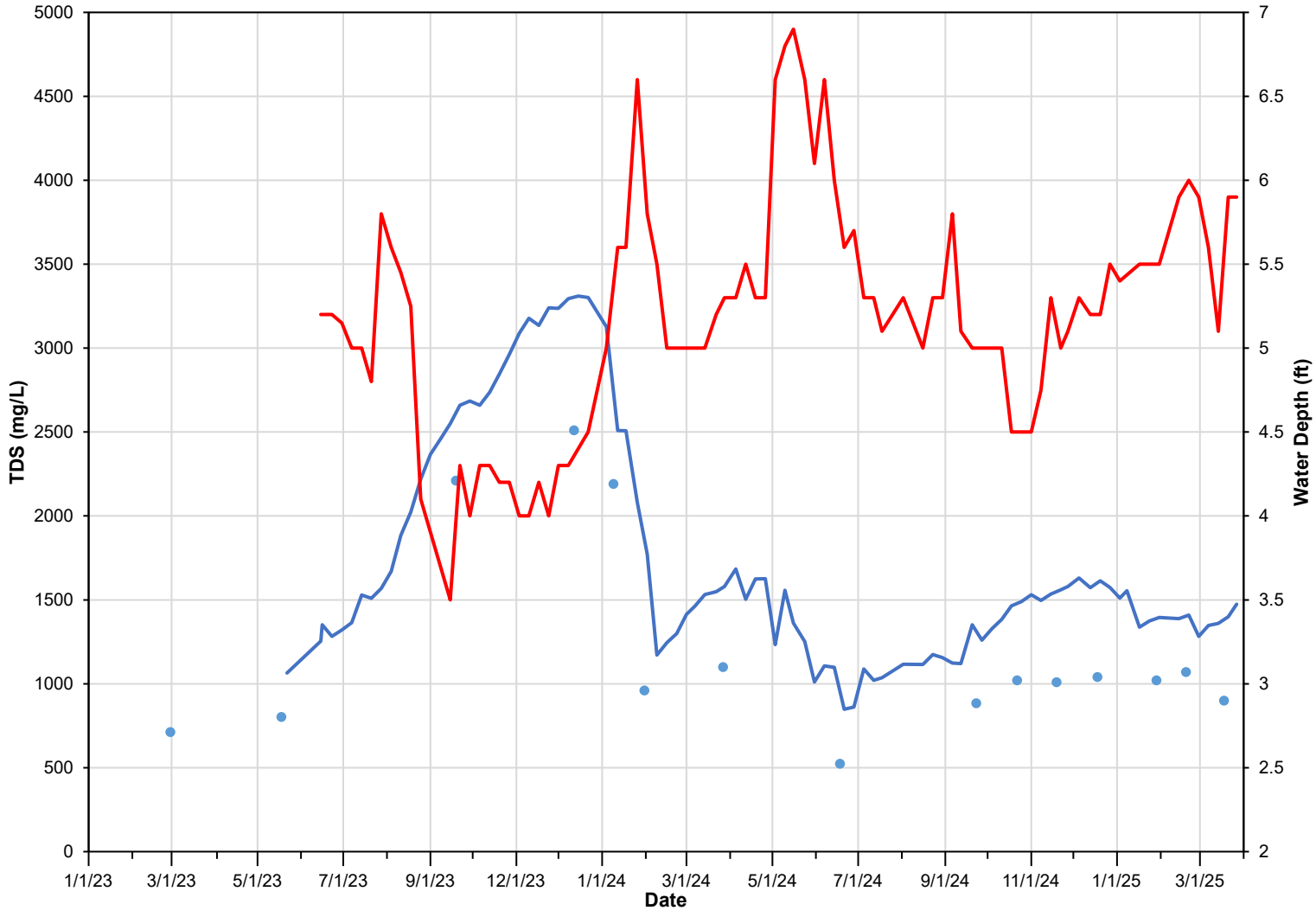


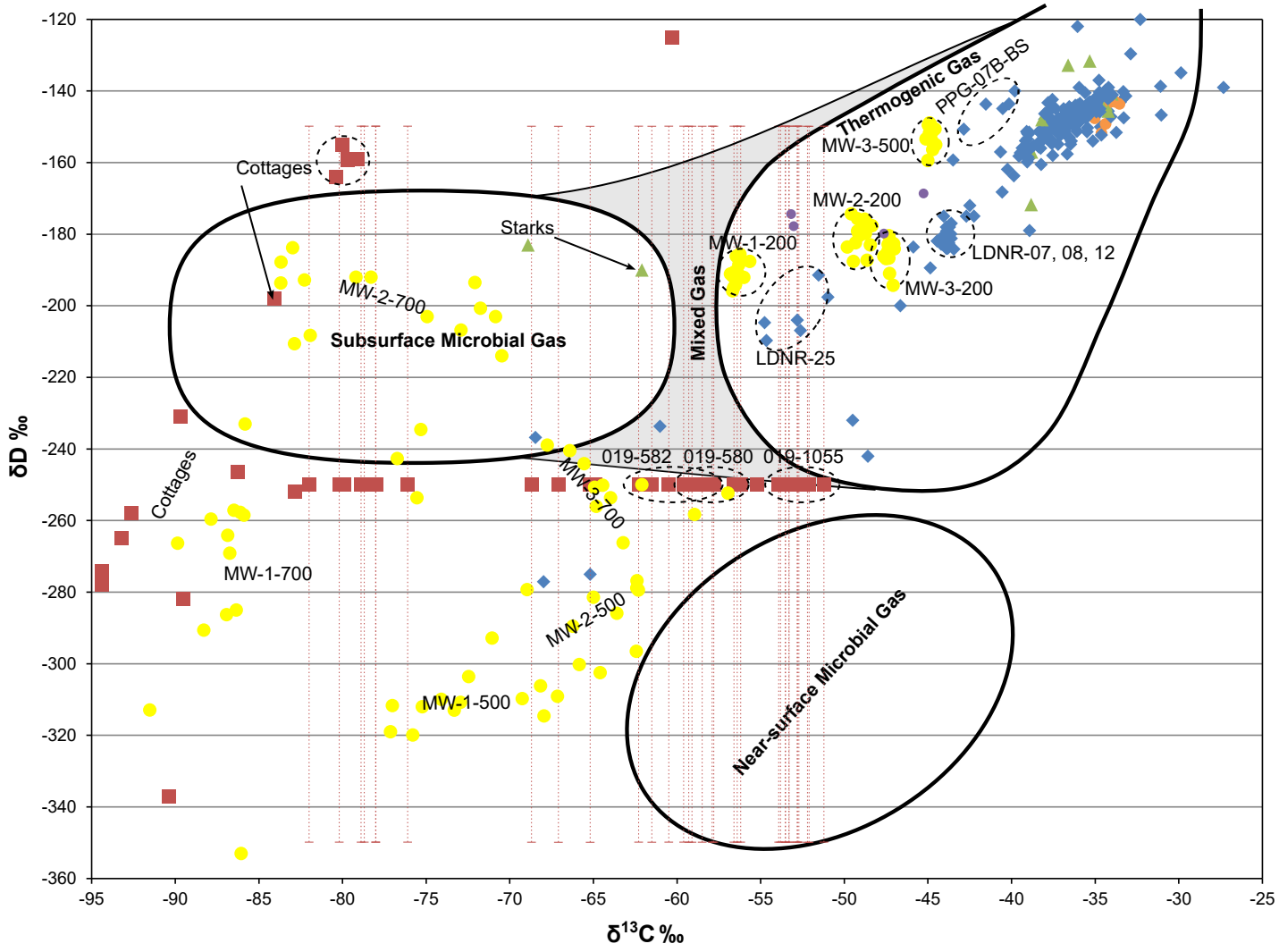
Legend

- Field TDS (mg/L)
- Water Depth (ft)
- Laboratory TDS at LDNR 12 (mg/L)

Notes:
Field TDS measured from approxmiately 5-ft deep with handheld Ultrameter II, which is calculated based on Specific Conductivity.

Figure 7
Central Lake TDS Trend
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Lousiana

ERM



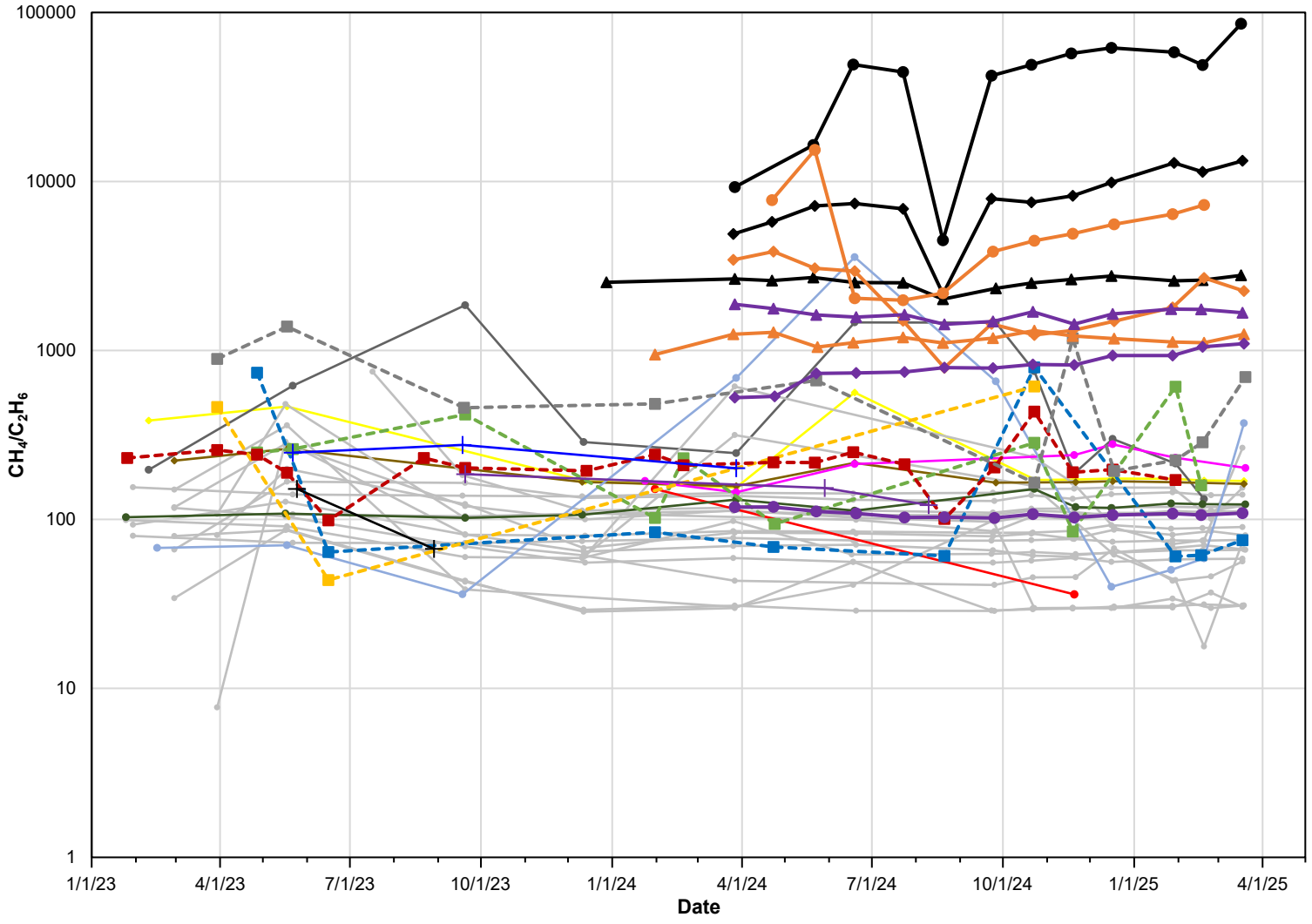
Legend

- Cavern Gas (Lonquist)
- Bubble Site
- Groundwater
- Monitoring Well
- Brine
- Production Gas

Notes:
If δD is not analyzed due to insufficient methane in sample δD is assumed at -250‰ with error bars added.
Coleman, D.D., Liu, C., Hackley, K.C., and Pelphrey, S.R., 1995, Identification of Landfill Methane, Environmental Geosciences, Vol. 2, No. 2, pp. 95-103.

Figure 8
Methane Isotopes
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Lousiana

ERM



Legend

Bubble Sites
- Central Pond Bubble Sites
- LDNR 9
- LDNR 10
- LDNR 19
- LDNR 27
- LDNR 28
- PPG-07A-BS
- PPG-07B-BS

Water Wells
- 019-580
- 019-582
- 019-995
- 019-1055
- 019-1603

Monitoring Wells
- MW-1-200
- MW-1-500
- MW-1-700
- MW-2-200
- MW-2-500
- MW-2-700
- MW-3-200
- MW-3-500
- MW-3-700

Brine Wells
- Brine Well #2
- Brine Well #4

Oil Well
- SN 189416 (Fee 969)

Figure 9
Methane:Ethane Ratio Trend
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Lousiana

ERM

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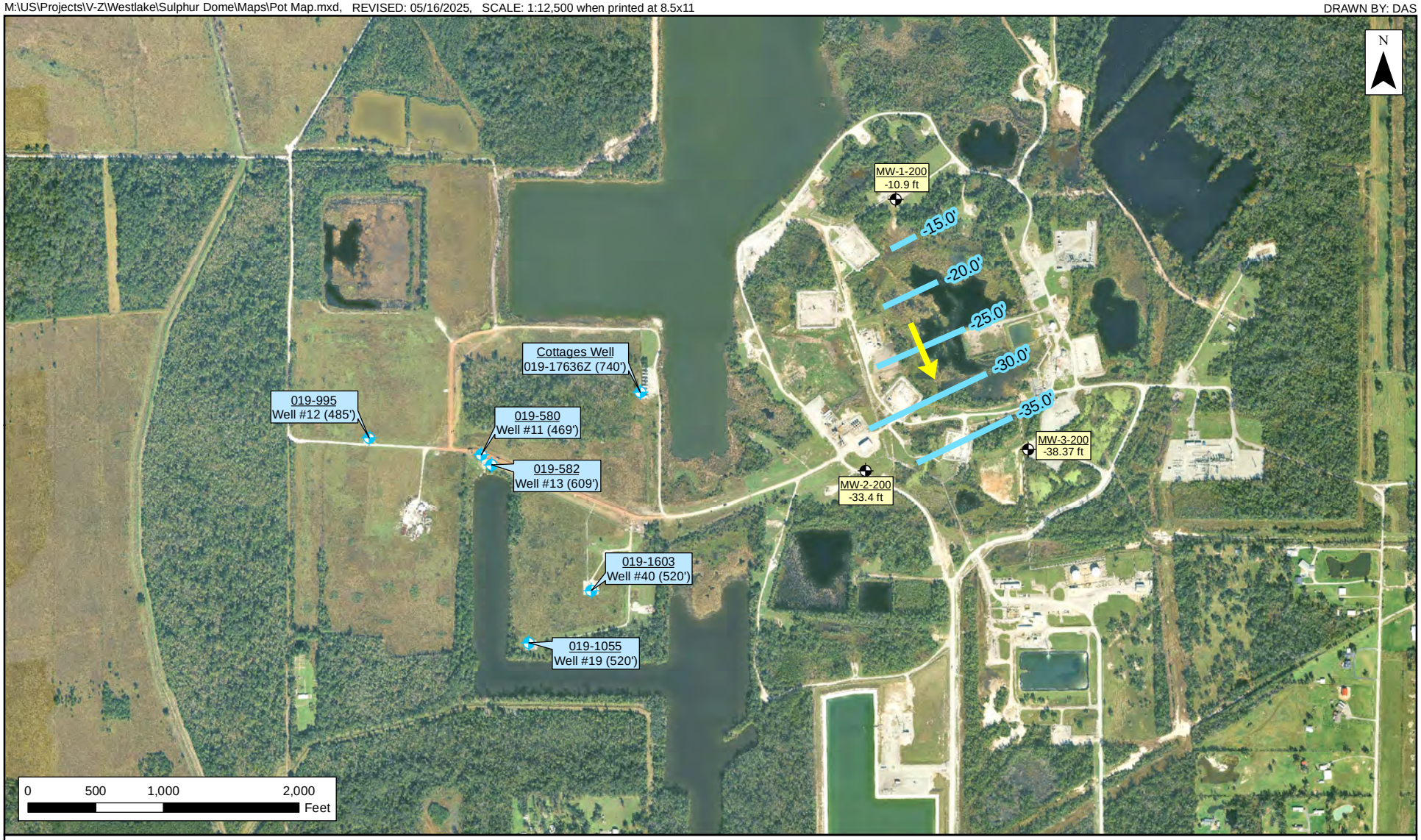

Legend

- Water Well Sample Location
- "200-foot" Sand Monitoring Well
- General Direction of Groundwater Flow
- Potentiometric Surface Contours (5 ft)

Notes:
Groundwater elevations adjusted to equivilent freshwater head (Post, et al., 2007)
Nov 2024 aerial imagery via Google Earth.

Figure 10
Potentiometric Surface Map - January 2025
"200-foot" Sand
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Louisiana

ERM

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

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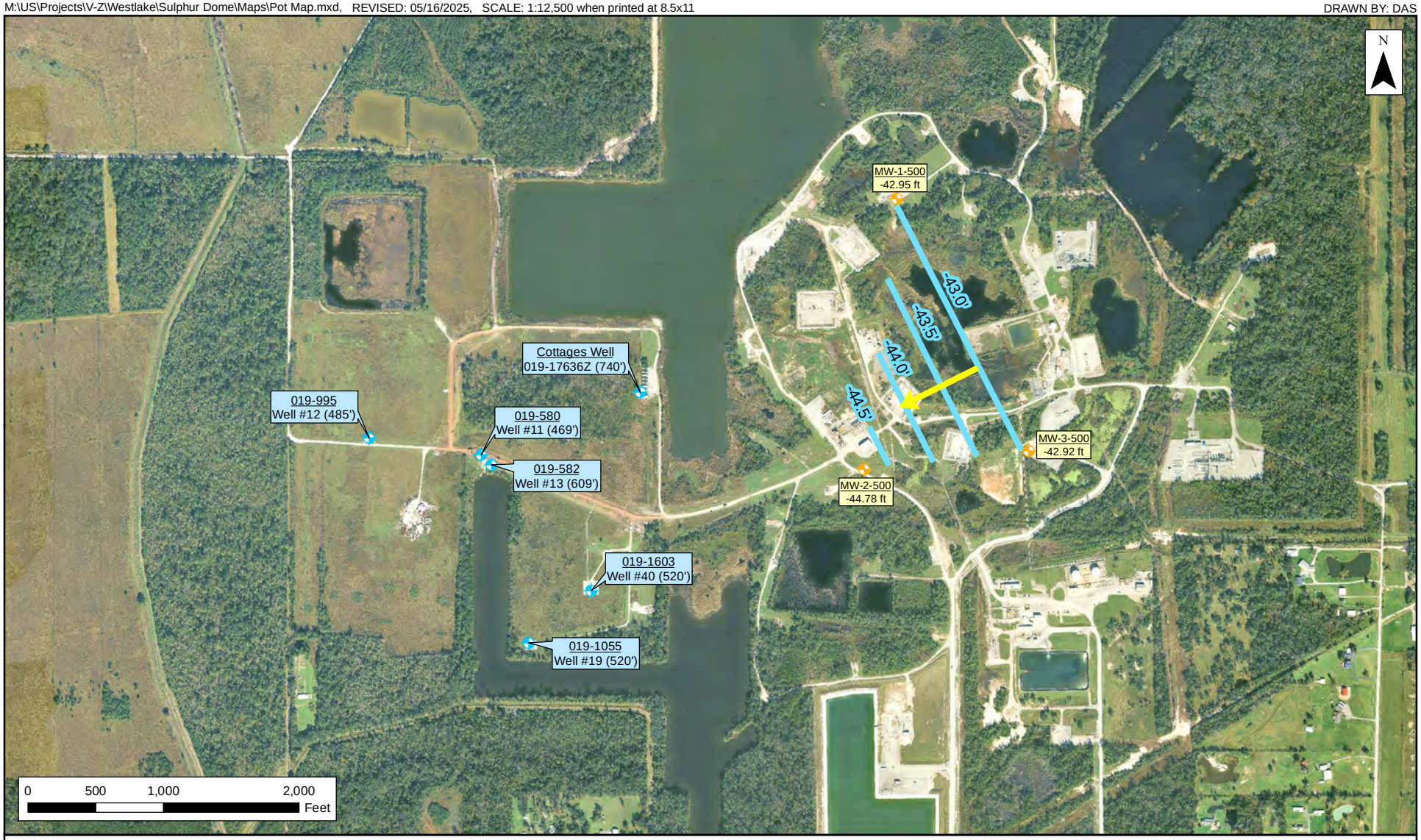

Legend

- Water Well Sample Location
- "500-foot" Sand Monitoring Well
- General Direction of Groundwater Flow
- Potentiometric Surface Contours (0.5 ft)

Notes:
Groundwater elevations adjusted to equivilent freshwater head (Post, et al., 2007)
Nov 2024 aerial imagery via Google Earth.

Figure 11
Potentiometric Surface Map - January 2025
"500-foot" Sand
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Louisiana

ERM

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

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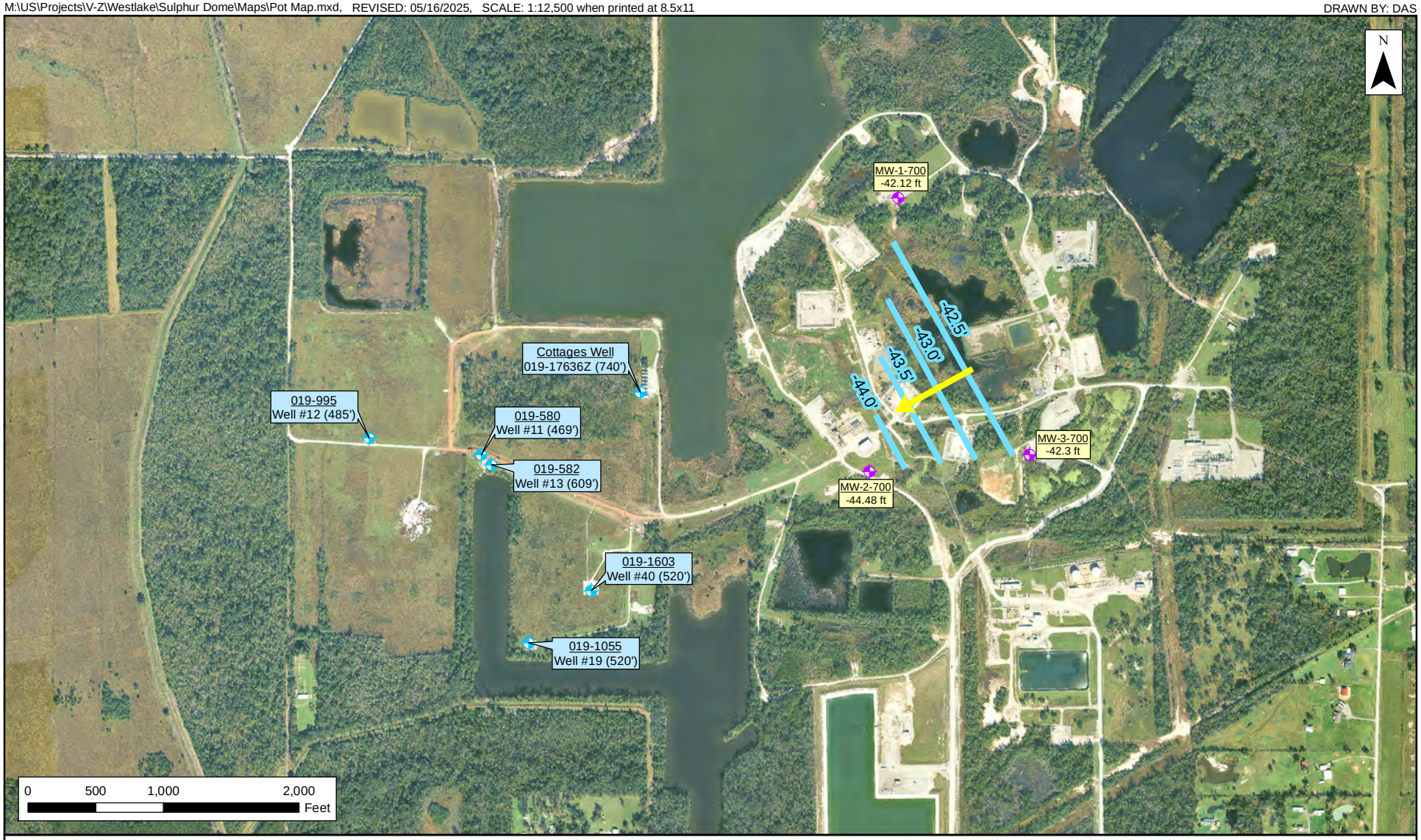

Legend

- Water Well Sample Location
- "700-foot" Sand Monitoring Well
- General Direction of Groundwater Flow
- Potentiometric Surface Contours (0.5 ft)

Notes:
Groundwater elevations adjusted to equivilent freshwater head (Post, et al., 2007)
Nov 2024 aerial imagery via Google Earth.

Figure 12
Potentiometric Surface Map - January 2025
"700-foot" Sand
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Louisiana

ERM

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

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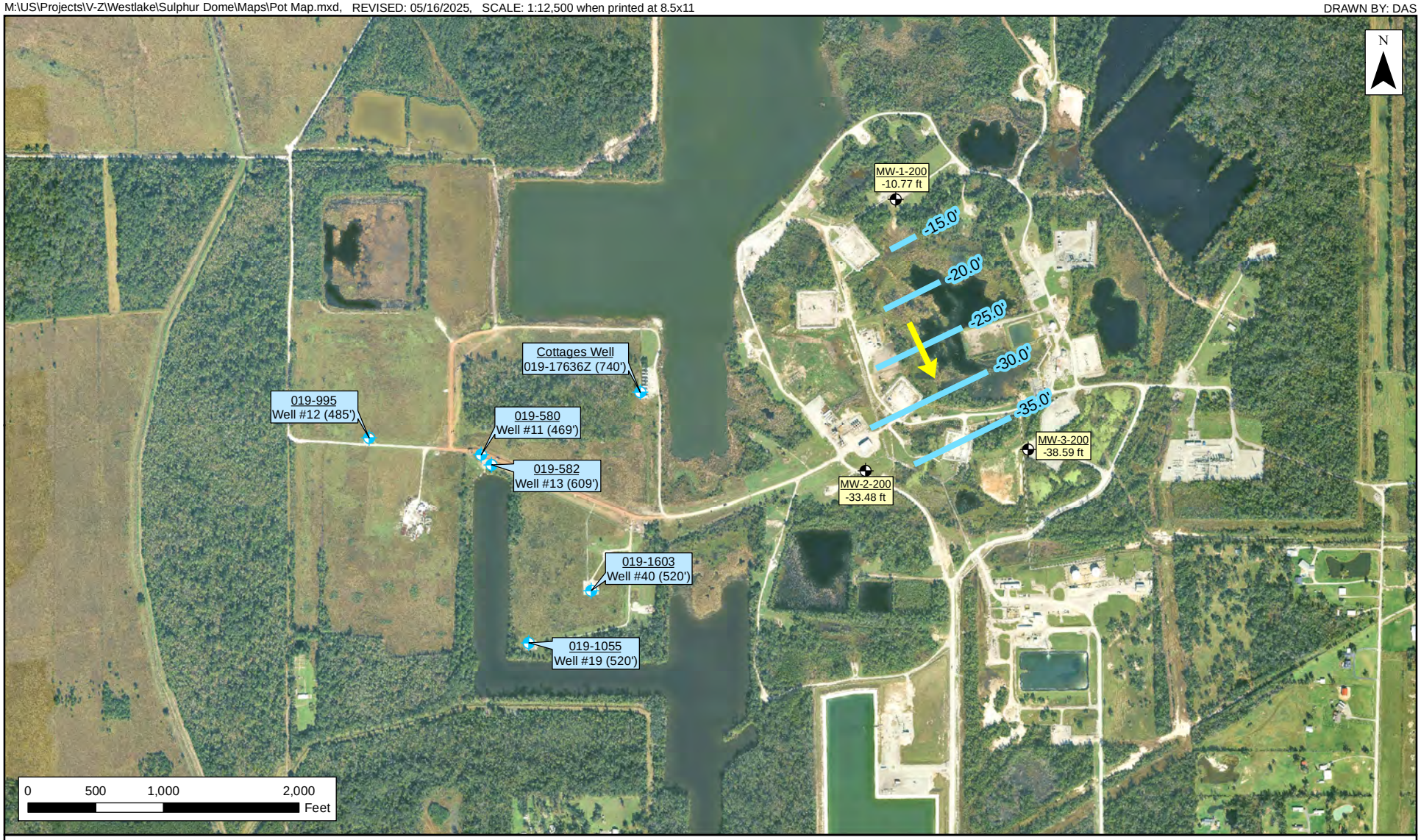

Legend

- Water Well Sample Location
- "200-foot" Sand Monitoring Well
- General Direction of Groundwater Flow
- Potentiometric Surface Contours (5 ft)

Notes:
Groundwater elevations adjusted to equivilent freshwater head (Post, et al., 2007)
Nov 2024 aerial imagery via Google Earth.

Figure 13
Potentiometric Surface Map - February 2025
"200-foot" Sand
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Louisiana

ERM

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

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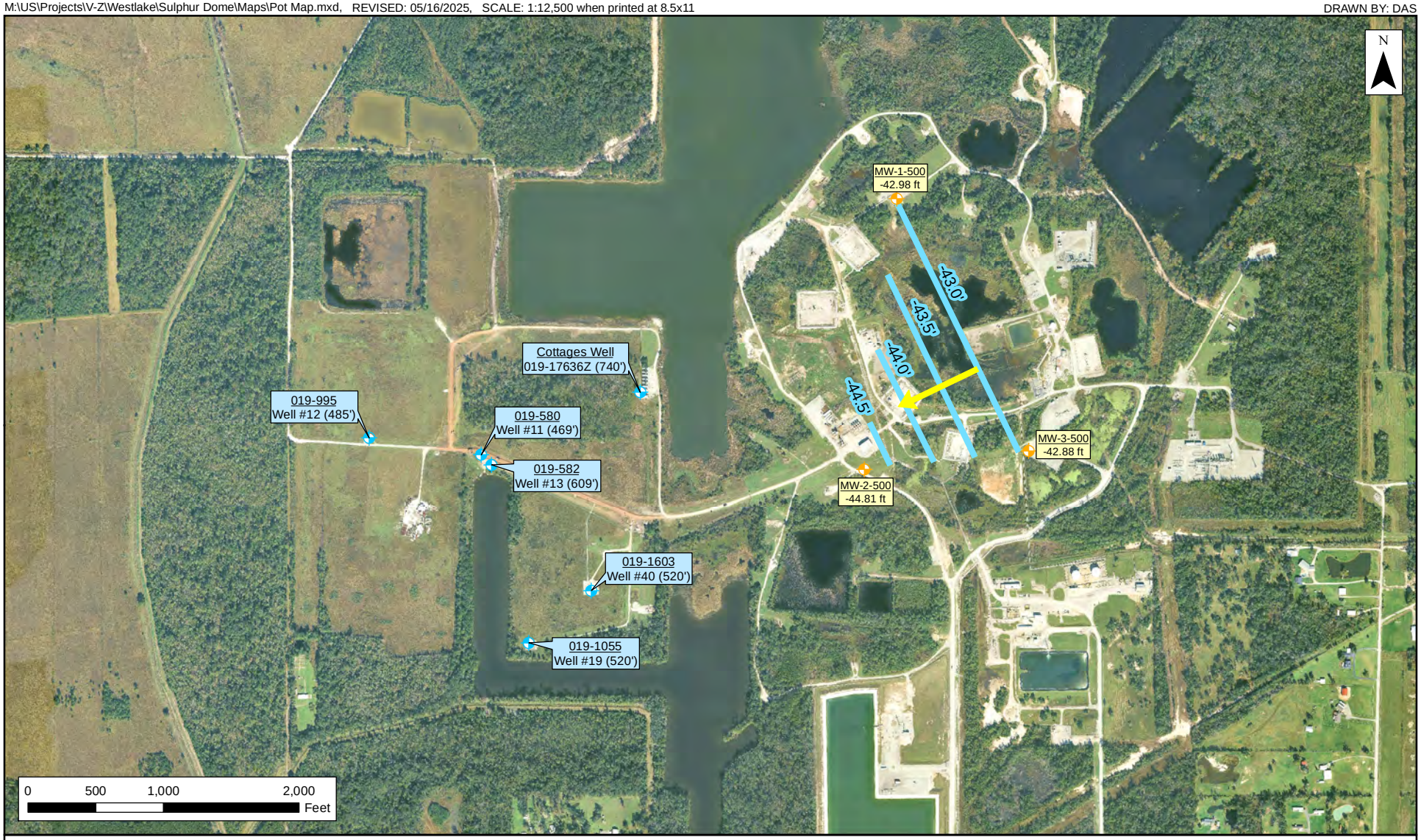


Legend

- Water Well Sample Location
- "500-foot" Sand Monitoring Well
- General Direction of Groundwater Flow
- Potentiometric Surface Contours (0.5 ft)

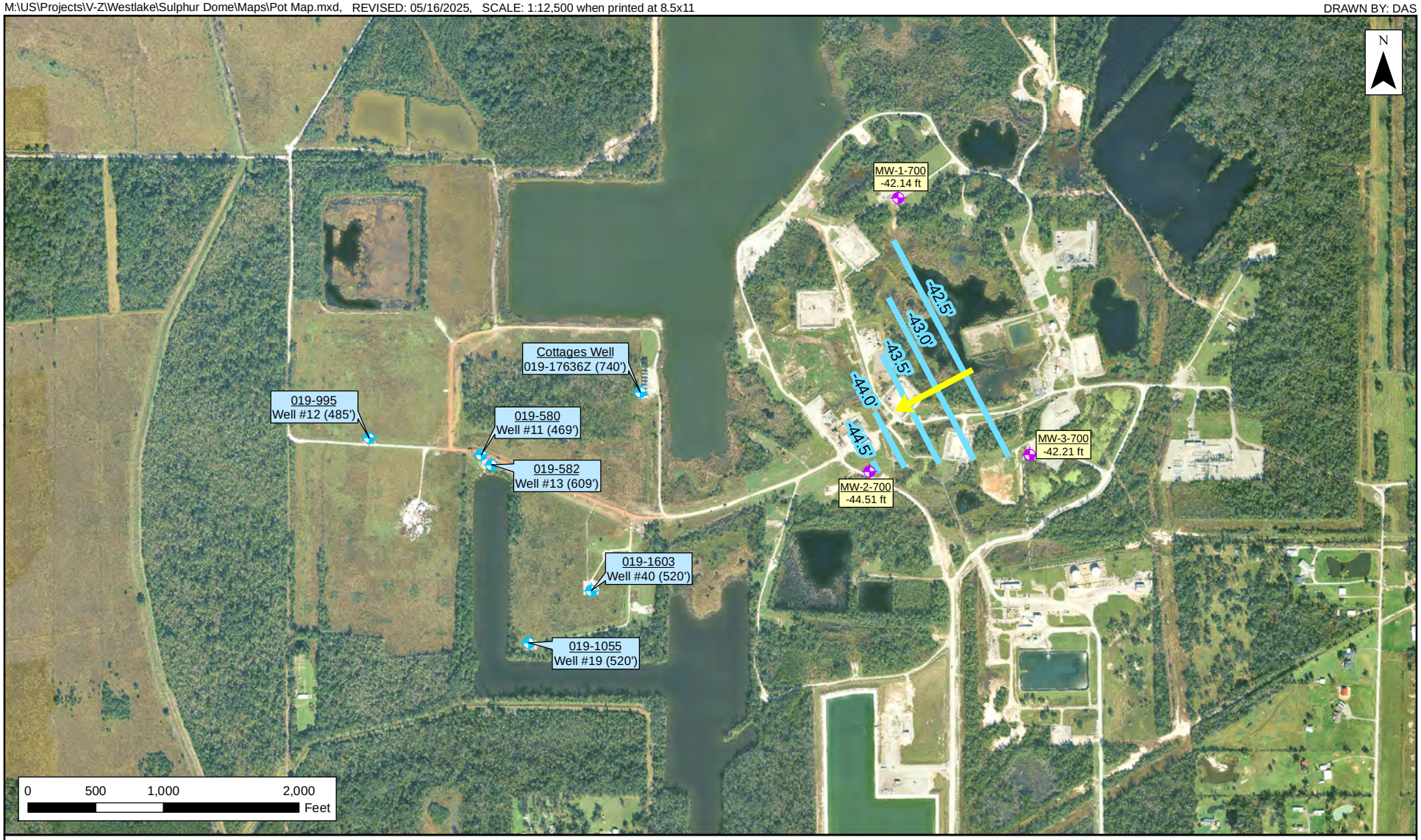
Notes:
Groundwater elevations adjusted to equivilent freshwater head (Post, et al., 2007)
Nov 2024 aerial imagery via Google Earth.

Figure 14
Potentiometric Surface Map - February 2025
"500-foot" Sand
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Louisiana

ERM

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

M:\US\Projects\V-Z\Westlake\Sulphur Dome\Maps\Pot Map.mxd, REVISED: 05/16/2025, SCALE: 1:12,500 when printed at 8.5x11 DRAWN BY: DAS



Legend

- Water Well Sample Location
- "700-foot" Sand Monitoring Well
- General Direction of Groundwater Flow
- Potentiometric Surface Contours (0.5 ft)

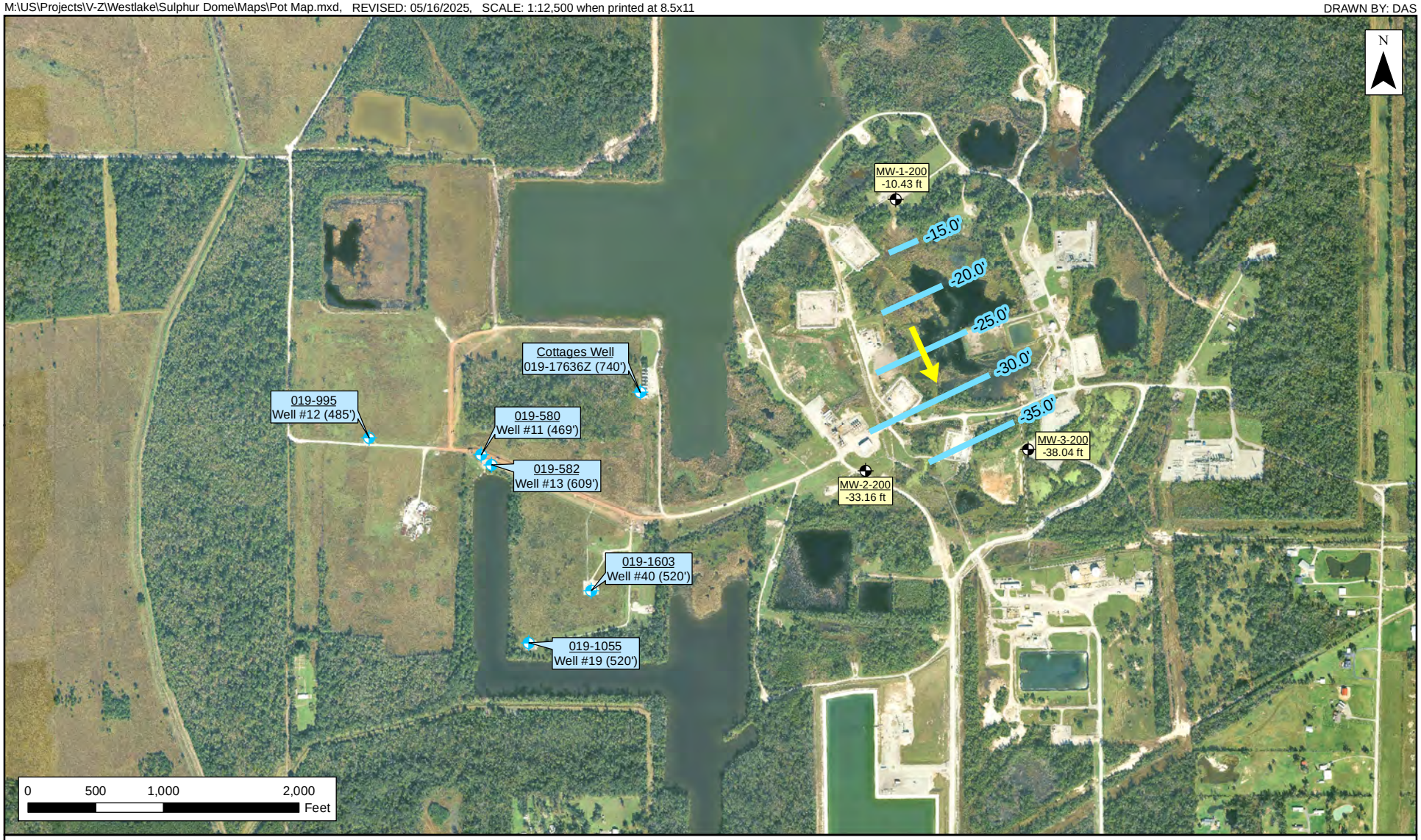
Notes:
Groundwater elevations adjusted to equivilent freshwater head (Post, et al., 2007)
Nov 2024 aerial imagery via Google Earth.

Figure 15
Potentiometric Surface Map - February 2025
"700-foot" Sand
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Louisiana

ERM

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

M:\US\Projects\V-Z\Westlake\Sulphur Dome\Maps\Pot Map.mxd, REVISED: 05/16/2025, SCALE: 1:12,500 when printed at 8.5x11 DRAWN BY: DAS



Legend

- Water Well Sample Location
- "200-foot" Sand Monitoring Well
- General Direction of Groundwater Flow
- Potentiometric Surface Contour (5 ft)

Notes:
Groundwater elevations adjusted to equivilent freshwater head (Post, et al., 2007)
Nov 2024 aerial imagery via Google Earth.

Figure 16
Potentiometric Surface Map - March 2025
"200-foot" Sand
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Louisiana

ERM

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

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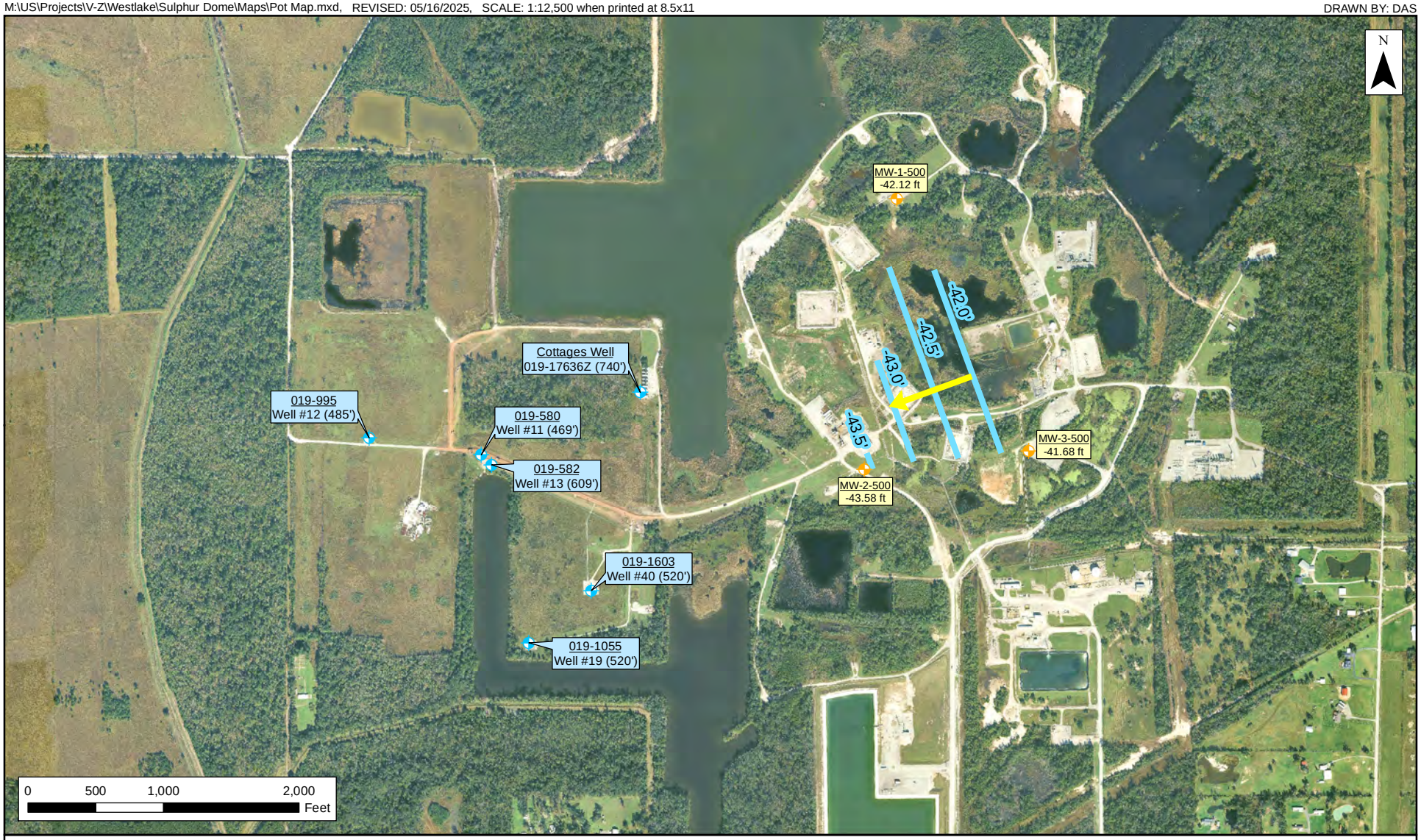


Legend

- Water Well Sample Location
- "500-foot" Sand Monitoring Well
- General Direction of Groundwater Flow
- Potentiometric Surface Contours (0.5 ft)

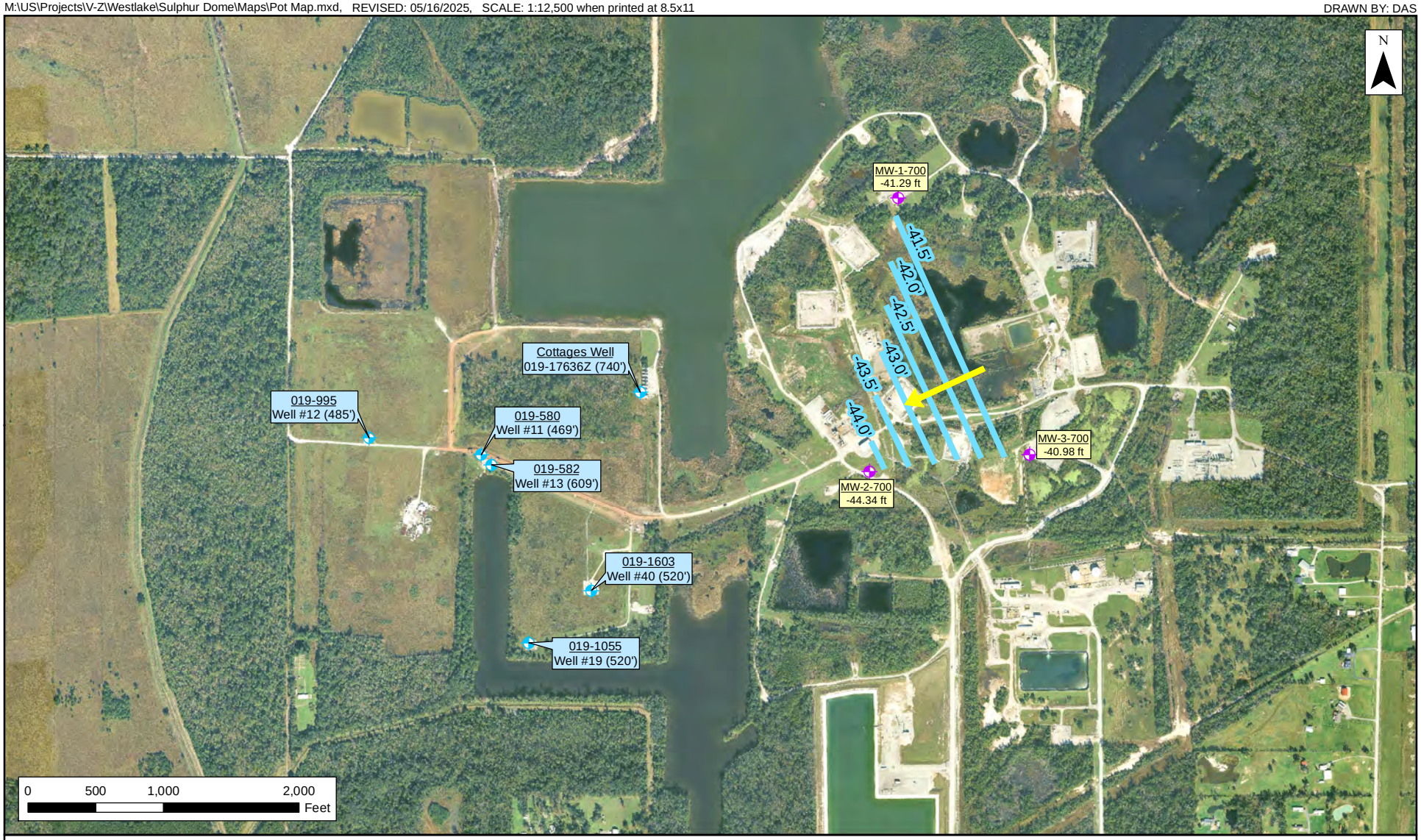
Notes:
Groundwater elevations adjusted to equivilent freshwater head (Post, et al., 2007)
Nov 2024 aerial imagery via Google Earth.

Figure 17
Potentiometric Surface Map - March 2025
"500-foot" Sand
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Louisiana

ERM

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

M:\US\Projects\V-Z\Westlake\Sulphur Dome\Maps\Pot Map.mxd, REVISED: 05/16/2025, SCALE: 1:12,500 when printed at 8.5x11 DRAWN BY: DAS



Legend

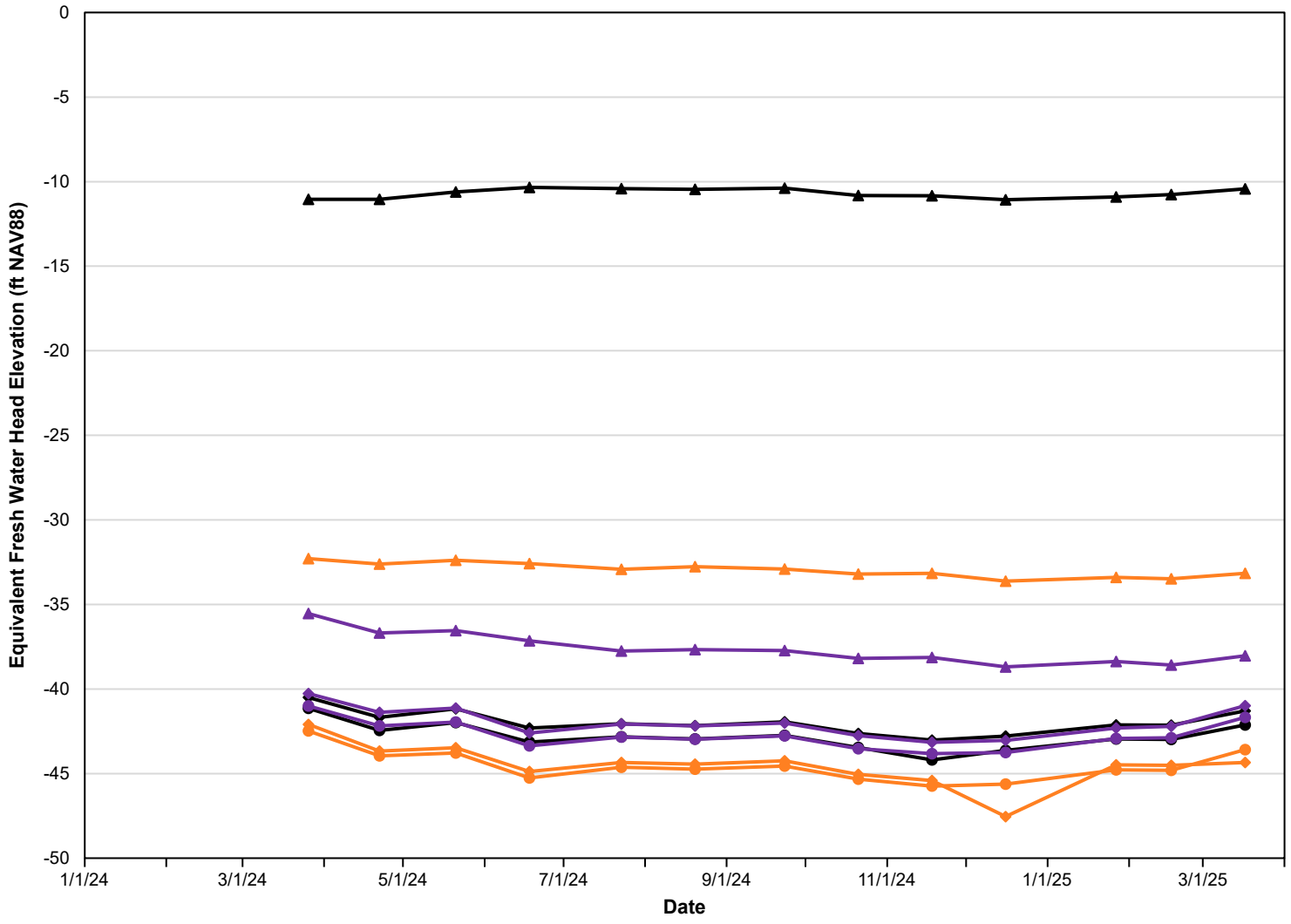
- Water Well Sample Location
- "700-foot" Sand Monitoring Well
- General Direction of Groundwater Flow
- Potentiometric Surface Contours (0.5 ft)

Notes:
Groundwater elevations adjusted to equivilent freshwater head (Post, et al., 2007)
Nov 2024 aerial imagery via Google Earth.

Figure 18
Potentiometric Surface Map - March 2025
"700-foot" Sand
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Louisiana

ERM

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N



Legend

- MW-1-200
- MW-1-500
- MW-1-700
- MW-2-200
- MW-2-500
- MW-2-700
- MW-3-200
- MW-3-500
- MW-3-700

Figure 19
Groundwater Hydrograph
Sulphur Dome
Westlake US 2, LLC
Calcasieu Parish, Lousiana

ERM

TABLES

List of Tables:

Table 1

Groundwater Data Summary

Sulphur Dome

Calcasieu Parish, Louisiana

		Sample ID	**019-580**											
		Sample Location	**WW #11**											
		Sample Interval (ft)	469'											
		Sample Date	3/28/24	4/23/24	5/22/24	6/18/24	7/25/24	8/21/24	9/24/24	10/23/24	12/17/24	1/30/25	2/17/25	3/18/25
		Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**		**Industrial Water Wells**											
Total Metals		**RECAP GWSS**												
Arsenic	mg/L	0.01	0.000743 J	<0.0004	0.000487 J	<0.0004	0.000509 J	<0.0004	0.000430 J	<0.0004	0.000555 J	0.000404 J	<0.0004	<0.0004
Barium	mg/L	2	**0.207**	**0.208**	**0.213**	**0.204**	**0.219**	**0.184**	**0.188**	**0.205**	**0.201**	**0.216**	**0.204**	**0.204**
Calcium	mg/L	NS	**22.9**	**22.5**	**22.1**	**22.4**	**23.8**	**19.4**	**21.2**	**21.7**	**22.4**	**24.4**	**23.0**	**22.1**
Chromium	mg/L	0.1	0.000654 J	0.000926 J	0.000516 J	0.000502 J	0.000456 J	<0.0004	0.000712 J	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Iron[a]	mg/L	0.3	**3.51**	**3.57**	**5.25**	**3.59**	**3.77**	**3.10**	**3.40**	**3.63**	**3.58**	**3.74**	**3.71**	**3.27**
Lead	mg/L	0.015	<0.0006	0.000870 J	**0.00231**	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	NS	**7.24**	**6.97**	**6.80**	**7.07**	**6.69**	**6.02**	**6.59**	**6.77**	**7.32**	**7.51**	**6.95**	**6.84**
Manganese[a]	mg/L	0.05	**0.366**	**0.370**	**0.307**	**0.372**	**0.385**	**0.307**	**0.348**	**0.355**	**0.355**	**0.357**	**0.352**	**0.343**
Mercury	mg/L	0.002	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	0.0000400 J	<0.00003
Nickel	mg/L	0.073	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Potassium	mg/L	NS	**2.5**	**2.44**	**2.38**	**2.40**	**2.22**	**2.17**	**2.38**	**2.96**	**2.57**	**2.65**	**2.52**	**2.46**
Sodium	mg/L	NS	**24.4**	**23.9**	**23.2**	**24.2**	**24.9**	**20.3**	**22.5**	**43.1**	**24.5**	**25.7**	**23.6**	**24.1**
Strontium	mg/L	NS	**0.203**	**0.196**	**0.192**	**0.194**	**0.216**	**0.179**	**0.193**	**0.185**	**0.195**	**0.235**	**0.216**	**0.195**
Vanadium	mg/L	0.026	**0.00523**	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.00245 J	<0.0006	<0.0006	<0.0006	<0.0006
Zinc	mg/L	1.1	**0.0211**	**0.0106**	**0.0128**	**0.00828**	**0.00737**	**0.0111**	**0.0121**	**0.00914**	**0.00622**	0.00296 J	<0.002	0.00354 J
Anions/Water Quality Parameters														
Bicarbonate Alkalinity	mg/L	NS	**113**	**112**	**118**	**124**	**120**	**148**	**155**	**129**	**119**	**124**	**130**	**114**
Bromide	mg/L	NS	<0.03	<0.03	<0.03	<0.03	**0.108**	<0.03	**0.101**	**0.110**	<0.03	0.0353 J	<0.03	<0.03
Carbonate Alkalinity	mg/L	NS	<3.5	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Chloride[a]	mg/L	250	**22.5**	**22.2**	**22.0**	**22.7**	**22.9**	**27.3**	**23.4**	**29.0**	**25.4**	**25.3**	**25.0**	**23.5**
Sulfate[a]	mg/L	250	**4.46**	**4.39**	**4.44**	**4.17**	**3.87**	<0.2	**4.25**	**2.71**	**5.36**	**4.47**	**4.68**	**3.62**
Total Dissolved Solids (TDS)\	mg/L	500	**196**	**182**	**170**	**158**	**166**	**174**	**98.0**	**244**	**330**	**226**	**266**	**248**
pH[a]	SI	6.5 - 8.5	7.53 H	7.45 H	7.02 H	6.88 H	7.13 H	7.83 H	7.45 H	7.62 H	7.20 H	7.59 H	6.87 H	7.44 H
pH (field)	SI	6.5 - 8.5	**6.90**	**6.40**	**7.04**	NA	NA	**6.89**	NA	NA	NA	**6.68**	**6.40**	**7.11**
Sulfides														
Hydrogen Sulfide	mg/L	NS	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sulfide	mg/L	NS	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<0.92	<0.92
Volatile Organic Compounds														
Benzene	mg/L	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	0.7	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	1	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions														
Aliphatics >C6-C8	mg/L	3.2	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0333	<0.0333	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0333	<0.0333	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	0.15	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	7.3	**0.0293**	<0.025	<0.025	<0.025	<0.025	<0.025	0.0402 J	<0.025	<0.025	<0.025	<0.025	0.0636 J
Aromatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0333	<0.0333	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	0.15	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	0.15	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	0.15	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Notes

J - Estimated Value reported below the detection limit.

H - Analyzed outside of hold time.

< - Not Detected at the reporting limit shown.

Bolded values deteted in the sample.

NA - Not Analyzed

NS - No Standard

[a] - EPA Secondary MCL (No RECAP standard)

[b] - Duplicate sample result (discrepancy with original)

Blue shaded values exceed standard

Table 1

Groundwater Data Summary

Sulphur Dome

Calcasieu Parish, Louisiana

Sample ID			**019-582**									**019-995**							
Sample Location			**WW #13**									**WW #12**							
Sample Interval (ft)			609'									485'							
Sample Date			3/28/24	4/24/24	5/22/24	9/26/24	10/23/24	11/19/24	1/30/25	2/17/25	3/20/25	3/28/24	4/23/24	5/22/24	6/18/24	9/25/24	10/23/24	11/19/24	2/17/25	3/18/25
Sampler			ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**		**Industrial Water Wells**																
Total Metals		**RECAP GWSS**																	
Arsenic	mg/L	0.01	0.000870 J	<0.0004	0.000478 J	0.000437 J	0.000580 J	0.00112 J	<0.0004	0.000702 J	0.000808 J	0.000900 J	0.000715 J	0.000506 J	0.000416 J	0.000501 J	0.000405 J	0.00121 J	0.000680 J	0.000661 J
Barium	mg/L	2	**0.221**	**0.189**	**0.202**	**0.213**	**0.220**	**0.224**	**0.184**	**0.216**	**0.255**	**0.195**	**0.224**	**0.219**	**0.196**	**0.212**	**0.181**	**0.237**	**0.197**	**0.214**
Calcium	mg/L	NS	**23.4**	**21.3**	**20.3**	**24.3**	**23.0**	**20.7**	**22.0**	**23.4**	**24.8**	**23.4**	**25.9**	**23.5**	**23.7**	**23.5**	**18.9**	**25.9**	**24.7**	**23.5**
Chromium	mg/L	0.1	0.000540 J	<0.0004	0.000630 J	0.000849 J	0.000420 J	<0.0004	0.000415 J	<0.0004	<0.0004	0.00196 J	0.000420 J	<0.0004	0.000409 J	0.000859 J	0.000435 J	0.000455 J	**0.00875**	<0.0004
Iron[a]	mg/L	0.3	**3.24**	**2.37**	**2.87**	**4.65**	**12.0**	**13.0**	**10.6**	**9.10**	**12.1**	**0.907**	**2.88**	**1.17**	**2.25**	**2.14**	**3.61**	**1.73**	**1.97**	**3.49**
Lead	mg/L	0.015	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000824 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	NS	**7.25**	**6.67**	**6.15**	**7.32**	**7.50**	**6.47**	**6.79**	**6.95**	**7.68**	**7.23**	**8.01**	**7.07**	**7.42**	**7.07**	**5.87**	**7.94**	**7.33**	**7.11**
Manganese[a]	mg/L	0.05	**0.385**	**0.343**	**0.347**	**0.389**	**0.510**	**0.365**	**0.401**	**0.374**	**0.342**	**0.235**	**0.399**	**0.350**	**0.422**	**0.371**	**0.283**	**0.320**	**0.340**	**0.345**
Mercury	mg/L	0.002	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	0.0000390 J	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	0.0000360 J	0.0000400 J
Nickel	mg/L	0.073	<0.0006	<0.0006	<0.0006	<0.0006	0.000762 J	<0.0006	<0.0006	0.000722 J	0.000845 J	0.000682 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	**0.00910**	0.000713 J
Potassium	mg/L	NS	**2.51**	**2.30**	**2.13**	**2.50**	**2.58**	**2.33**	**2.70**	**2.52**	**2.79**	**2.51**	**2.69**	**2.42**	**2.46**	**2.44**	**2.68**	**2.78**	**2.70**	**2.39**
Sodium	mg/L	NS	**25.0**	**22.8**	**21.0**	**24.7**	**25.7**	**22.0**	**30.6**	**23.8**	**26.7**	**26.2**	**26.3**	**25.6**	**25.6**	**24.6**	**37.4**	**31.5**	**39.4**	**23.3**
Strontium	mg/L	NS	**0.217**	**0.187**	**0.186**	**0.214**	**0.213**	**0.194**	**0.198**	**0.227**	**0.229**	**0.203**	**0.224**	**0.208**	**0.202**	**0.223**	**0.162**	**0.238**	**0.225**	**0.212**
Vanadium	mg/L	0.026	0.00475 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.00474 J	<0.0006	<0.0006	<0.0006	<0.0006	0.00412 J	<0.0006	<0.0006	<0.0006
Zinc	mg/L	1.1	**0.0118**	**0.00814**	**0.00914**	**0.00590**	**0.0143**	**0.00680**	0.00394 J	**0.00415**	**0.00526**	**0.00606**	**0.00583**	**0.00532**	0.00374 J	<0.002	<0.002	0.00297 J	0.00342 J	<0.002
Anions/Water Quality Parameters																				
Bicarbonate Alkalinity	mg/L	NS	**109**	**110**	**120**	**121**	**112**	**110**	**134**	**118**	**154**	**110**	**119**	**131**	**130**	**126**	**132**	**128**	**95.8**	**142**
Bromide	mg/L	NS	<0.03	<0.03	<0.03	**0.104**	**0.126**	0.0976 J	0.0999 J	0.0373 J	<0.03	<0.03	<0.03	<0.03	<0.03	**0.103**	**0.103**	**0.108**	<0.03	<0.03
Carbonate Alkalinity	mg/L	NS	<3.5	<3	<3	<3.0	<3	<3	<3	<3	<3	<3.5	<3	<3	<3	<3	<3	<3	<3	<3
Chloride[a]	mg/L	250	**22.9**	**28.4**	**22.2**	**24.3**	**23.7**	**24.3**	**32.6**	**25.1**	**23.7**	**23.0**	**23.2**	**26.0**	**22.4**	**24.6**	**28.8**	**35.9**	**72.3**	**24.3**
Sulfate[a]	mg/L	250	**4.55**	**4.17**	**4.51**	**4.05**	**0.572**	**3.06**	<0.2	**3.44**	**3.12**	**4.25**	**4.26**	**4.04**	**3.61**	**3.96**	**3.61**	**3.07**	**5.83**	**3.55**
Total Dissolved Solids (TDS)\	mg/L	500	**330**	**180**	**172**	**188**	**194**	**188**	**244**	**2640**	**172**	**164**	**192**	**180**	**164**	**160**	**226**	**224**	**198**	**286**
pH[a]	SI	6.5 - 8.5	7.47 H	7.45 H	6.95 H	7.78 H	7.28 H	7.30 H	7.49 H	7.58 H	7.03 H	7.57 H	7.51 H	6.91 H	7.07 H	7.77 H	7.37 H	7.27 H	6.38 H	7.15 H
pH (field)	SI	6.5 - 8.5	**7.01**	**6.62**	**7.07**	**7.33**	NA	NA	**6.21**	**6.03**	**6.27**	**7.36**	**6.14**	**7.17**	NA	NA	NA	NA	**6.02**	**6.83**
Sulfides																				
Hydrogen Sulfide	mg/L	NS	<0.5	<0.5	<0.5	NA	<0.5	**1.44**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sulfide	mg/L	NS	<1.2	<1.2	<1.2	<1.2	<1.2	1.36 J	<1.2	<0.92	<0.92	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<0.92	<0.92
Volatile Organic Compounds																				
Benzene	mg/L	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	0.7	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	1	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions																				
Aliphatics >C6-C8	mg/L	3.2	<0.01	<0.01	<0.01	<0.0333	<0.0333	<0.0333	<0.0018	<0.0018	<0.0018	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.0333	<0.0333	<0.0333	<0.0004	<0.0004	<0.0004	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	0.0338 J	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	0.15	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	7.3	**0.0365**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.008	0.0535 J	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.0333	<0.0333	<0.0333	<0.0006	<0.0006	<0.0006	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	0.15	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	0.15	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	0.15	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - Analyzed outside of hold time.
< - Not Detected at the reporting limit shown.
Bolded values deteted in the sample.
NA - Not Analyzed
NS - No Standard
[a] - EPA Secondary MCL (No RECAP standard)
[b] - Duplicate sample result (discrepancy with original)
Blue shaded values exceed standard

Table 1

Groundwater Data Summary

Sulphur Dome

Calcasieu Parish, Louisiana

		Sample ID	**019-1055**									**019-1603**							
		Sample Location	**WW #19**									**WW #40**							
		Sample Interval (ft)	520'									520'							
		Sample Date	4/23/24	5/22/24	6/18/24	7/24/24	8/21/24	9/24/24	10/23/24	11/19/24	12/17/24	1/30/25	3/28/24	5/23/24	10/23/24	11/19/24	12/18/24	1/30/25	2/18/25	3/20/25
		Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**		**Industrial Water Wells**																	
Total Metals		**RECAP GWSS**																		
Arsenic	mg/L	0.01	0.000483 J	<0.0004	<0.0004	0.000412 J	<0.0004	<0.0004	0.000811 J	0.000936 J	0.000479 J	<0.0004	0.00194 J	<0.0004	<0.0004	0.000905 J	<0.0004	<0.0004	0.000574 J	<0.0004
Barium	mg/L	2	**0.236**	**0.253**	**0.246**	**0.239**	**0.243**	**0.258**	**0.207**	**0.256**	**0.240**	**0.256**	**0.391**	**0.191**	**0.201**	**0.199**	**0.205**	**0.170**	**0.196**	**0.193**
Calcium	mg/L	NS	**26.2**	**26.4**	**25.1**	**26.7**	**24**	**26.2**	**22.6**	**25.5**	**25.7**	**27.0**	**27.2**	**24.4**	**20.9**	**22.8**	**22.9**	**19.2**	**20.7**	**25.8**
Chromium	mg/L	0.1	0.000408 J	0.000440 J	0.000429 J	0.000613 J	0.000432 J	0.000671 J	0.00111 J	0.000728 J	<0.0004	<0.0004	0.00134 J	<0.0004	<0.0004	0.000568 J	0.000446 J	<0.0004	0.00237 J	<0.0004
Iron[a]	mg/L	0.3	**2.81**	**3.46**	**3.57**	**3.4**	**3.22**	**3.68**	**1.33**	**3.60**	**3.63**	**3.69**	**44.8**	**1.38**	**3.15**	**3.82**	**3.43**	**2.84**	**2.76**	**9.92**
Lead	mg/L	0.015	<0.0006	<0.0006	<0.0006	0.000831 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	NS	**8.06**	**7.94**	**7.87**	**7.92**	**7.26**	**7.78**	**7.12**	**7.98**	**7.94**	**8.05**	**8.35**	**7.41**	**6.52**	**7.31**	**7.16**	**5.76**	**5.92**	**7.99**
Manganese[a]	mg/L	0.05	**0.390**	**0.382**	**0.383**	**0.370**	**0.334**	**0.375**	**0.338**	**0.372**	**0.371**	**0.353**	**0.492**	**0.465**	**0.302**	**0.324**	**0.314**	**0.250**	**0.297**	**0.619**
Mercury	mg/L	0.002	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	0.0000310 J
Nickel	mg/L	0.073	0.000639 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.00128 J	<0.0006	<0.0006	<0.0006	**0.0032**	0.000718 J	<0.0006	0.000642 J	<0.0006	**0.00497**	<0.0006	<0.0006
Potassium	mg/L	NS	**2.79**	**2.65**	**2.60**	**2.80**	**2.47**	**2.74**	**3.12**	**2.78**	**2.74**	**2.67**	**2.60**	**2.45**	**2.97**	**3.13**	**3.05**	**2.52**	**2.68**	**3.22**
Sodium	mg/L	NS	**31.8**	**30.6**	**30.9**	**32.3**	**28.5**	**30.5**	**40.8**	**31.2**	**30.0**	**31.0**	**26.8**	**26.6**	**41.2**	**48.2**	**39.0**	**32.7**	**33.7**	**43.9**
Strontium	mg/L	NS	**0.238**	**0.232**	**0.224**	**0.235**	**0.224**	**0.235**	**0.208**	**0.239**	**0.225**	**0.262**	**0.247**	**0.210**	**0.179**	**0.205**	**0.198**	**0.178**	**0.184**	**0.225**
Vanadium	mg/L	0.026	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.00224 J	<0.0006	0.00390 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Zinc	mg/L	1.1	**0.0120**	**0.00717**	**0.00800**	**0.01230**	**0.0078**	**0.0043**	**0.0102**	**0.00524**	**0.0117**	**0.0152**	**0.0720**	**0.0633**	**0.00878**	**0.0202**	**0.0358**	**0.00770**	**0.0222**	**0.0102**
Anions/Water Quality Parameters																				
Bicarbonate Alkalinity	mg/L	NS	**119**	**116**	**134**	**126**	**149**	**109**	**124**	**127**	**121**	**131**	**118**	**121**	**136**	**158**	**127**	**129**	**133**	**122**
Bromide	mg/L	NS	<0.03	<0.03	**0.118**	**0.12**	<0.03	**0.116**	**0.106**	**0.101**	<0.03	0.0560 J	<0.0300	**0.115**	**0.106**	<0.03	0.0601 J	0.0301 J	<0.03	0.0938 J
Carbonate Alkalinity	mg/L	NS	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3.5	<3	<3	<3	<3	<3	<3	<3
Chloride[a]	mg/L	250	**33.2**	**38.1**	**38.2**	**37.7**	**45.2**	**39.9**	**28.9**	**37.6**	**38.3**	**41.5**	**23.3**	**28.0**	**29.1**	**37.8**	**34.6**	**32.4**	**28.5**	**42.4**
Sulfate[a]	mg/L	250	**3.97**	**3.66**	**3.69**	**3.43**	<0.2	**3.93**	**3.32**	**4.13**	**4.42**	**3.94**	**6.82**	**3.96**	**3.82**	**15.4**	**3.77**	**5.32**	**4.37**	0.315 J
Total Dissolved Solids (TDS)[\]	mg/L	500	**208**	**204**	**192**	**206**	**218**	**208**	**240**	**578**	**324**	**254**	**202**	**204**	**236**	**248**	**214 H**	**260**	**242**	**230**
pH[a]	SI	6.5 - 8.5	7.54 H	7.10 H	7.15 H	7.25 H	7.44 H	7.74 H	7.35 H	6.98 H	6.87 H	7.57 H	7.59 H	7.41 H	7.67 H	7.15 H	6.79 H	7.83 H	8.13 H	7.41 H
pH (field)	SI	6.5 - 8.5	**5.97**	**7.06**	NA	NA	**6.72**	NA	NA	NA	NA	**7.26**	**7.30**	**7.28**	NA	NA	NA	**6.46**	**6.29**	**7.2**
Sulfides																				
Hydrogen Sulfide	mg/L	NS	<0.5	<0.5	**1.44**	<0.5	<0.5	**1.44**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 H	<0.5	<0.5	<0.5
Sulfide	mg/L	NS	<1.2	<1.2	1.36 J	<1.2	<1.2	1.36 J	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2 H	<1.2	<0.92	<0.92
Volatile Organic Compounds																				
Benzene	mg/L	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	0.7	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	1	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions																				
Aliphatics >C6-C8	mg/L	3.2	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0333	<0.0333	<0.0333	<0.0018	<0.01	<0.01	<0.0333	<0.0333	<0.0333	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0333	0.0352 J	<0.0333	<0.0004	<0.01	<0.01	<0.0333	<0.0333	<0.0333	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	0.15	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	0.15	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.002	0.0670 J	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	7.3	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.008	**0.441**	<0.025	0.0644 J	<0.025	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0333	<0.0333	<0.0333	<0.0006	<0.01	<0.01	<0.0333	<0.0333	<0.0333	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	0.15	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	0.15	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	0.15	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	0.0447 J	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	0.15	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	**0.175**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - Analyzed outside of hold time.
< - Not Detected at the reporting limit shown.
Bolded values deteted in the sample.
NA - Not Analyzed
NS - No Standard
[a] - EPA Secondary MCL (No RECAP standard)
[b] - Duplicate sample result (discrepancy with original)
Blue shaded values exceed standard

Table 1

Groundwater Data Summary

Sulphur Dome

Calcasieu Parish, Louisiana

		Sample ID	019-17636Z								
		Sample Location	Cottages Well								
		Sample Interval (ft)	740'								
		Sample Date	3/28/24	4/23/24	5/22/24	7/25/24	8/21/24	9/25/24	10/23/24	11/19/24	12/18/24
		Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**		**Industrial Water Wells**								
Total Metals		**RECAP GWSS**									
Arsenic	mg/L	0.01	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.00100 J	0.00162 J	**0.00228**
Barium	mg/L	2	**0.181**	**0.211**	**0.179**	**0.183**	**0.166**	**0.166**	**0.216**	**0.217**	**0.201**
Calcium	mg/L	NS	**14**	**16.2**	**13.2**	**13.7**	**12.4**	**11.6**	**15.9**	**15.3**	**15.6**
Chromium	mg/L	0.1	0.000849 J	<0.0004	**0.00489**	**0.00635**	0.000415 J	0.00116 J	0.00214 J	**0.00401**	**0.0113**
Iron[a]	mg/L	0.3	**5.99**	**9.13**	**2.52**	**2.38**	**1.48**	**5.96**	**12.8**	**10.2**	**14.3**
Lead	mg/L	0.015	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.00124 J
Magnesium	mg/L	NS	**3.84**	**4.53**	**3.59**	**3.33**	**3.32**	**2.98**	**4.29**	**4.22**	**4.20**
Manganese[a]	mg/L	0.05	**0.220**	**0.259**	**0.179**	**0.182**	**0.152**	**0.211**	**0.358**	**0.263**	**0.279**
Mercury	mg/L	0.002	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	0.073	0.00135 J	0.00185 J	**0.00437**	0.000634 J	<0.0006	**0.00306**	**0.00704**	**0.00979**	**0.0198**
Potassium	mg/L	NS	**2.15**	**2.54**	**2.04**	**1.87**	**1.92**	**1.70**	**2.30**	**2.40**	**2.38**
Sodium	mg/L	NS	**67.3**	**76.8**	**68.8**	**73.3**	**69.1**	**57.0**	**65.6**	**66.9**	**63.0**
Strontium	mg/L	NS	**0.162**	**0.193**	**0.153**	**0.165**	**0.148**	**0.150**	**0.178**	**0.184**	**0.172**
Vanadium	mg/L	0.026	**0.00562**	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Zinc	mg/L	1.1	**0.202**	**0.276**	**0.421**	**0.066**	**0.0385**	**0.0670**	**0.134**	**0.264**	**0.786**
Anions/Water Quality Parameters											
Bicarbonate Alkalinity	mg/L	NS	**144**	**138**	**145**	**153**	**172**	**155**	**136**	**133**	**134**
Bromide	mg/L	NS	0.0891 J	0.0807 J	**0.160**	**0.150**	<0.03	**0.140**	**0.144**	**0.146**	**0.106**
Carbonate Alkalinity	mg/L	NS	<3.5	<3	<3	<3	<3	<3	<3	<3	<3
Chloride[a]	mg/L	250	**51.2**	**49.9**	**53.8**	**56.0**	**67.3**	**56.2**	**48.0**	**51.7**	**49.3**
Sulfate[a]	mg/L	250	0.306 J	0.212 J	**0.536**	0.414 J	<0.2	<0.2	0.272 J	0.288 J	<0.2
Total Dissolved Solids (TDS)[\]	mg/L	500	**268**	**234**	**228**	**242**	**230**	**224**	**512**	**286**	**240 H**
pH[a]	SI	6.5 - 8.5	7.77 H	7.50 H	7.07 H	7.86 H	7.61 H	7.92 H	7.88 H	7.38 H	6.99 H
pH (field)	SI	6.5 - 8.5	**7.06**	**6.14**	**7.06**	NA	**7.35**	NA	NA	NA	NA
Sulfides											
Hydrogen Sulfide	mg/L	NS	<0.5	<0.5	<0.5	<0.5	**1.28**	<0.5	<0.5	<0.5	<0.5 H
Sulfide	mg/L	NS	<1.2	<1.2	<1.2	<1.2	1.20 J	<1.2	<1.2	<1.2	<1.2 H
Volatile Organic Compounds											
Benzene	mg/L	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	0.7	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	1	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions											
Aliphatics >C6-C8	mg/L	3.2	<0.01	<0.01	<0.01	<0.0333	<0.0333	<0.0333	<0.0333	<0.0333	<0.0333
Aliphatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.0333	<0.0333	<0.0333	<0.0333	0.0362 J	<0.0333
Aliphatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	0.15	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	7.3	<0.008	0.0433 J	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.0333	<0.0333	<0.0333	<0.0333	<0.0333	<0.0333
Aromatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	0.15	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	0.15	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	0.15	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - Analyzed outside of hold time.
< - Not Detected at the reporting limit shown.
Bolded values deteted in the sample.
NA - Not Analyzed
NS - No Standard
[a] - EPA Secondary MCL (No RECAP standard)
[b] - Duplicate sample result (discrepancy with original)
Blue shaded values exceed standard

Table 1

Groundwater Data Summary

Sulphur Dome

Calcasieu Parish, Louisiana

		Sample ID	MW-1												
		Sample Location	MW-1-200												
		Sample Interval (ft)	162-172'												
		Sample Date	3/27/24	4/22/24	5/21/24	6/19/24	7/23/24	8/20/24	9/26/24	10/21/24	11/18/24	12/16/24	1/29/25	2/18/25	3/17/25
		Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**		**Monitoring Wells**												
Total Metals		**RECAP GWSS**													
Arsenic	mg/L	0.01	**0.0137**	**0.0146**	**0.0123**	**0.0145**	**0.012**	**0.0102**	**0.0125**	**0.0119**	**0.0109**	**0.0108**	**0.0100**	**0.00837**	**0.00828**
Barium	mg/L	2	**0.187**	**0.245**	**0.214**	**0.267**	**0.229**	**0.223**	**0.276**	**0.259**	**0.248**	**0.279**	**0.269**	**0.238**	**0.251**
Calcium	mg/L	NS	**16.9**	**21.4**	**18.0**	**22.3**	**18.4**	**15.6**	**21.7**	**20.6**	**18.5**	**20.2**	**20.6**	**17.5**	**16.3**
Chromium	mg/L	0.1	<0.0004	0.000540 J	<0.0004	0.000457 J	0.000684 J	<0.0004	0.000925 J	0.000503 J	<0.0004	<0.0004	<0.0004	<0.0004	0.00197 J
Iron[a]	mg/L	0.3	0.179 J	**0.360**	**0.248**	**0.221**	**0.373**	**0.243**	**0.242**	**0.374**	**0.292**	0.184 J	0.188 J	**0.225**	**0.253**
Lead	mg/L	0.015	<0.0006	0.00193 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	NS	**7.74**	**9.54**	**8.46**	**10.00**	**8.79**	**7.98**	**9.91**	**9.61**	**8.88**	**9.76**	**9.72**	**8.71**	**9.01**
Manganese[a]	mg/L	0.05	**0.0321**	**0.0526**	**0.0477**	**0.0735**	**0.0575**	**0.0494**	**0.0685**	**0.0668**	**0.0574**	**0.0606**	**0.0608**	**0.0466**	**0.0342**
Mercury	mg/L	0.002	**0.000293**	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	0.000169 J
Nickel	mg/L	0.073	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Potassium	mg/L	NS	**2.81**	**2.93**	**2.30**	**2.31**	**2.21**	**1.86**	**2.21**	**2.18**	**2.01**	**2.23**	**2.14**	**1.98**	**2.00**
Sodium	mg/L	NS	**95.4**	**109**	**90.2**	**103**	**89.7**	**82.9**	**98.1**	**97.6**	**89.5**	**101**	**97.6**	**89.7**	**91.3**
Strontium	mg/L	NS	**0.224**	**0.274**	**0.221**	**0.259**	**0.241**	**0.225**	**0.273**	**0.255**	**0.241**	**0.254**	**0.280**	**0.251**	**0.246**
Vanadium	mg/L	0.026	0.00163 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Zinc	mg/L	1.1	0.00272 J	**0.00675**	**0.00688**	**0.00422**	**0.0131**	<0.002	<0.002	0.00240 J	<0.002	<0.002	**0.0143**	<0.002	0.00202 J
Anions/Water Quality Parameters															
Bicarbonate Alkalinity	mg/L	NS	**250**	**249**	**250**	**273**	**251**	**301**	**280**	**261**	**255**	**273**	**276**	**279**	**308**
Bromide	mg/L	NS	<0.03	<0.03	**0.125**	**0.126**	**0.124**	<0.03	**0.112**	**0.122**	**0.119**	0.0843 J	0.0820 J	0.0704 J	<0.03
Carbonate Alkalinity	mg/L	NS	**6.20**	**13.6**	**12.2**	**5.80**	**12.4**	**16.0**	<3	**10.4**	**13.0**	**8.60**	**8.80**	**17.60**	**16.2**
Chloride[a]	mg/L	250	**40.7**	**34.4**	**33.7**	**34.7**	**32.6**	**38.4**	**35.4**	**36.1**	**37.0**	**37.5**	**38.6**	**37.2**	**35.6**
Sulfate[a]	mg/L	250	**0.871**	0.487 J	**0.710**	**0.766**	0.458 J	<0.2	0.364 J	0.434 J	0.318 J	<0.2	<0.2	<0.2	<0.2
Total Dissolved Solids (TDS)[\]	mg/L	500	**328**	**310**	**286**	**286**	**256**	**272**	**352**	**370**	**348**	**336**	**312**	**358**	**276**
pH[a]	SI	6.5 - 8.5	8.40 H	8.53 H	8.32 H	8.15 H	8.40 H	8.27 H	8.38 H	8.35 H	8.17 H	8.08 H	8.39 H	8.85 H	8.33 H
pH (field)	SI	6.5 - 8.5	**8.07**	**8.95**	**8.47**	**8.17**	**8.42**	**8.54**	**7.46**	**6.43**	**8.34**	**8.23**	**8.33**	**8.59**	**8.44**
Sulfides															
Hydrogen Sulfide	mg/L	NS	<0.5	<0.5	<0.5	<0.5	<0.5	**2.34**	NA	<0.5	<0.5	<0.5	**1.28**	<0.5	<0.5
Sulfide	mg/L	NS	<1.2	<1.2	<1.2	<1.2	<1.2	**2.20**	<1.2	<1.2	<1.2	<1.2	1.20 J	<0.92	<0.92
Volatile Organic Compounds															
Benzene	mg/L	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	0.7	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	1	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions															
Aliphatics >C6-C8	mg/L	3.2	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0333	<0.0333	<0.0333	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0333	0.0336 J	<0.0333	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.0333	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	0.15	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	**0.0214**	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	7.3	<0.008	<0.025	<0.025	<0.025	0.0377 J	<0.025	<0.025	**0.0255**	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0333	<0.0333	<0.0333	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	**0.0138**	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	0.15	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	**0.0130**	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	0.15	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	0.15	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - Analyzed outside of hold time.
< - Not Detected at the reporting limit shown.
Bolded values deteted in the sample.
NA - Not Analyzed
NS - No Standard
[a] - EPA Secondary MCL (No RECAP standard)
[b] - Duplicate sample result (discrepancy with original)
Blue shaded values exceed standard

Table 1

Groundwater Data Summary

Sulphur Dome

Calcasieu Parish, Louisiana

		Sample ID	**MW-1**											
		Sample Location	**MW-1-500**											
		Sample Interval (ft)	503-513'											
		Sample Date	3/27/24	4/22/24	5/22/24	6/18/24	7/23/24	8/20/24	9/23/24	10/21/24	11/18/24	12/16/24	1/29/25	2/18/25	3/17/25
		Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**		**Monitoring Wells**												
Total Metals		**RECAP GWSS**													
Arsenic	mg/L	0.01	**0.00493**	**0.00431**	<0.0004	0.00174 J	0.00106 J	0.000455 J	0.000655 J	0.000559 J	<0.0004	<0.0004	0.000459 J	0.00102 J	0.000653 J
Barium	mg/L	2	**0.108**	**0.128**	**0.327**	**0.246**	**0.223**	**0.260**	**0.246**	**0.257**	**0.274**	**0.229**	**0.221**	**0.227**	**0.227**
Calcium	mg/L	NS	**18.0**	**20.2**	**8.08**	**14.4**	**12.9**	**8.65**	**11.4**	**10.6**	**9.97**	**9.07**	**12.3**	**12.4**	**12.9**
Chromium	mg/L	0.1	0.00257 J	<0.0004	0.00106 J	0.000503 J	0.000955 J	0.000710 J	0.000826 J	0.000610 J	0.000606 J	<0.0004	<0.0004	0.00281 J	0.000788 J
Iron[a]	mg/L	0.3	**1.89**	**1.91**	**2.41**	**0.733**	**2.33**	**1.33**	**1.27**	**1.84**	**0.833**	**0.807**	**0.939**	**0.381**	**0.268**
Lead	mg/L	0.015	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	NS	**4.65**	**5.28**	**3.11**	**4.52**	**4.27**	**3.26**	**3.85**	**4.04**	**4.07**	**3.89**	**4.58**	**4.29**	**4.74**
Manganese[a]	mg/L	0.05	**0.0774**	**0.0725**	**0.0368**	**0.0506**	**0.0467**	**0.0304**	**0.0296**	**0.0317**	**0.0238**	**0.0220**	**0.0364**	**0.0370**	**0.0330**
Mercury	mg/L	0.002	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	0.073	0.00153 J	<0.0006	0.000676 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000852 J	<0.0006	0.000862 J	0.00109 J
Potassium	mg/L	NS	**2.93**	**3.28**	**3.76**	**3.65**	**3.59**	**3.78**	**4.36**	**4.52**	**4.68**	**4.80**	**5.35**	**5.19**	**5.68**
Sodium	mg/L	NS	**67.0**	**69.9**	**44.6**	**51.5**	**46.1**	**42.3**	**44.4**	**45.0**	**45.5**	**43.5**	**47.2**	**44.1**	**45.8**
Strontium	mg/L	NS	**0.218**	**0.259**	**0.248**	**0.263**	**0.249**	**0.232**	**0.243**	**0.234**	**0.236**	**0.213**	**0.254**	**0.245**	**0.248**
Vanadium	mg/L	0.026	0.00206 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Zinc	mg/L	1.1	**0.00577**	**0.00489**	**0.00402**	**0.00613**	**0.00478**	**0.0117**	0.00379 J	0.00245 J	0.00216 J	0.00204 J	<0.002	0.00326 J	0.00235 J
Anions/Water Quality Parameters															
Bicarbonate Alkalinity	mg/L	NS	**208**	**197**	**98.2**	**139**	**134**	**145**	**118**	**116**	**112**	**123**	**127**	**132**	**170**
Bromide	mg/L	NS	<0.03	<0.03	**0.131**	**0.118**	**0.121**	<0.03	**0.106**	**0.117**	**0.114**	0.0759 J	0.0736 J	0.0414 J	<0.03
Carbonate Alkalinity	mg/L	NS	<3.5	<3	4.80 J	**6.20**	**12.00**	5 J	**7.40**	<3.5	**9.60**	4.40 J	**7.40**	8.20 J	<3
Chloride[a]	mg/L	250	**24.8**	**22.1**	**26.2**	**23.6**	**23.7**	**30.3**	**24.2**	**24.9**	**25.4**	**25.7**	**25.0**	**26.9**	**22.7**
Sulfate[a]	mg/L	250	**5.65**	**2.73**	0.425 J	**1.01**	0.457 J	<0.2	0.387 J	0.347 J	<0.2	<0.2	<0.2	0.238 J	0.286 J
Total Dissolved Solids (TDS)[\]	mg/L	500	**296**	**264**	**152**	**230**	**158**	**166**	**148**	**214**	**160**	**170**	**170**	**206**	**160**
pH[a]	SI	6.5 - 8.5	8.17 H	8.21 H	8.68 H	8.42 H	8.72 H	**8.61**	8.59 H	8.59 H	8.55 H	8.31 H	8.72 H	9.39 H	8.59 H
pH (field)	SI	6.5 - 8.5	**7.72**	**8.47**	**8.25**	**8.38**	**8.61**	**8.60**	**7.93**	**8.44**	**9.06**	**8.49**	**8.74**	**8.68**	**8.56**
Sulfides															
Hydrogen Sulfide	mg/L	NS	<0.5	<0.5	<0.5	<0.5	<0.5	**1.49**	**1.10**	<0.5	<0.5	<0.5	**3.40**	0.638 J	**1.28**
Sulfide	mg/L	NS	<1.2	<1.2	<1.2	<1.2	<1.2	**1.40**	<1.2	<1.2	<1.2	<1.2	**3.20**	<0.92	1.20 J
Volatile Organic Compounds															
Benzene	mg/L	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	0.7	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	1	<0.0002	<0.0002	**0.0011**	<0.0002	**0.007**	<0.0002	0.00034 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions															
Aliphatics >C6-C8	mg/L	3.2	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	0.0109 J	<0.0333	<0.0333	<0.0333	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	0.00769 J	<0.0333	0.0350 J	<0.0333	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	0.15	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	**0.0205**	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	7.3	<0.008	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	**0.0241**	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.018	<0.0333	<0.0333	<0.0333	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	0.15	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	0.15	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	0.15	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - Analyzed outside of hold time.
< - Not Detected at the reporting limit shown.
Bolded values deteted in the sample.
NA - Not Analyzed
NS - No Standard
[a] - EPA Secondary MCL (No RECAP standard)
[b] - Duplicate sample result (discrepancy with original)
Blue shaded values exceed standard

Table 1

Groundwater Data Summary

Sulphur Dome

Calcasieu Parish, Louisiana

		Sample ID	MW-1											
		Sample Location	MW-1-700											
		Sample Interval (ft)	694-704'											
		Sample Date	3/26/24	4/22/24	5/22/24	6/19/24	7/23/24	8/20/24	9/23/24	10/21/24	11/19/24	12/16/24	1/29/25	2/18/25	3/18/25
		Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**		**Monitoring Wells**												
Total Metals		**RECAP GWSS**													
Arsenic	mg/L	0.01	0.00134 J	0.00118 J	0.000469 J	0.000955 J	0.00117 J	0.000525 J	0.000627 J	0.000731 J	0.000607 J	0.000651 J	0.000939 J	0.00134 J	0.00105 J
Barium	mg/L	2	**0.0616**	**0.0716**	**0.0973**	**0.111**	**0.0768**	**0.104**	**0.0950**	**0.0799**	**0.0892**	**0.0832**	**0.0732**	**0.0737**	**0.0718**
Calcium	mg/L	NS	**4.60**	**4.84**	**2.60**	**3.41**	**3.49**	**2.62**	**2.59**	**2.14**	**2.34**	**2.31**	**2.56**	**2.66**	**2.69**
Chromium	mg/L	0.1	**0.015**	0.000471 J	0.000437 J	<0.0004	0.000656 J	0.000443 J	0.00105 J	0.000687 J	0.000641 J	<0.0004	0.000906 J	<0.0004	<0.0004
Iron[a]	mg/L	0.3	**0.530**	**0.574**	**1.58**	**1.92**	**0.885**	**1.33**	**1.00**	**1.12**	**0.809**	**1.40**	**0.964**	**0.96**	**1.83**
Lead	mg/L	0.015	<0.0006	0.00150 J	<0.0006	**0.00728**	**0.00614**	**0.00517**	0.000660 J	**0.00320**	0.00108 J	**0.00299**	0.000967 J	<0.0006	0.000961 J
Magnesium	mg/L	NS	**0.215**	**0.387**	**0.644**	**0.629**	**0.526**	**0.645**	**0.572**	**0.423**	**0.510**	**0.451**	**0.428**	**0.387**	**0.418**
Manganese[a]	mg/L	0.05	**0.00804**	**0.00788**	**0.01720**	**0.01720**	**0.01370**	**0.01330**	**0.01190**	**0.0117**	**0.00912**	**0.0124**	**0.00852**	**0.00931**	**0.0155**
Mercury	mg/L	0.002	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	0.073	**0.00838**	<0.0006	<0.0006	<0.0006	0.000776 J	<0.0006	<0.0006	<0.0006	<0.0006	0.000753 J	0.000627 J	0.000661 J	0.00164 J
Potassium	mg/L	NS	**2.79**	**2.98**	**1.95**	**2.18**	**2.38**	**1.98**	**2.26**	**1.87**	**2.51**	**2.51**	**2.60**	**2.35**	**2.16**
Sodium	mg/L	NS	**175**	**194**	**165**	**195**	**187**	**173**	**179**	**149**	**190**	**197**	**206**	**179**	**171**
Strontium	mg/L	NS	**0.0652**	**0.0770**	**0.102**	**0.111**	**0.093**	**0.0989**	**0.0919**	**0.0726**	**0.0804**	**0.0769**	**0.0748**	**0.0754**	**0.0705**
Vanadium	mg/L	0.026	0.00368 J	0.00306 J	<0.0006	0.000855 J	0.000834 J	<0.0006	<0.0006	<0.0006	<0.0006	0.000649 J	0.000610 J	0.00100 J	<0.0006
Zinc	mg/L	1.1	0.00292 J	**0.00653**	**0.00418**	0.00399 J	**0.00907**	**0.00394**	0.00310 J	0.00209 J	0.00274 J	**0.00406**	0.00222 J	0.00245 J	0.00323 J
Anions/Water Quality Parameters															
Bicarbonate Alkalinity	mg/L	NS	**238**	**239**	**256**	**243**	**226**	**268**	**245**	**220**	**222**	**244**	**220**	**223**	**296**
Bromide	mg/L	NS	<0.03	<0.03	**0.199**	**0.168**	**0.164**	<0.03	**0.154**	**0.172**	**0.178**	**0.144**	**0.132**	**0.107**	<0.03
Carbonate Alkalinity	mg/L	NS	**56.0**	**48.6**	**37.4**	**38.2**	**61.8**	**58.0**	**50.2**	**51.6**	**60.2**	**56.4**	**72.8**	**84.6**	**48.6**
Chloride[a]	mg/L	250	**105**	**99.9**	**104**	**103**	**105**	**131**	**105**	**105**	**112**	**111**	**107**	**110**	**102**
Sulfate[a]	mg/L	250	**13.9**	**11.2**	**0.538**	**2.67**	**1.87**	<0.2	0.395 J	0.436 J	0.357 J	<0.2	**0.512**	**0.926**	**0.829**
Total Dissolved Solids (TDS)[\]	mg/L	500	**494**	**444**	**468**	**432 H**	**396**	**464**	**442**	**478**	**472**	**456**	**440**	**490**	**518**
pH[a]	SI	6.5 - 8.5	9.12 H	8.98 H	9.04 H	8.91 H	9.27 H	**9.03**	9.14 H	9.43 H	9.00 H	9.35 H	9.48 H	9.24 H	9.11 H
pH (field)	SI	6.5 - 8.5	**9.29**	**9.36**	**9.00**	**8.93**	**8.88**	**9.13**	**8.28**	**7.11**	**11.04**	**9.15**	**9.34**	**9.38**	**9.67**
Sulfides															
Hydrogen Sulfide	mg/L	NS	<0.5	<0.5	<0.5	<0.5	<0.5	**1.28**	<0.5	**1.28**	<0.5	<0.5	**1.28**	<0.5	<0.5
Sulfide	mg/L	NS	<1.2	<1.2	<1.2	<1.2	<1.2	1.20 J	<1.2	1.20 J	<1.2	<1.2	1.20 J	<0.92	<0.92
Volatile Organic Compounds															
Benzene	mg/L	0.005	<0.0002	<0.0002	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	0.7	<0.0003	<0.0003	<0.0003	<0.005	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	1	<0.0002	<0.0002	**0.0010**	<0.005	**0.0026**	<0.0002	0.00039 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	10	<0.0005	<0.0005	<0.0005	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	10	<0.0003	<0.0003	<0.0003	<0.005	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	10	<0.0003	<0.0003	<0.0003	NA	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions															
Aliphatics >C6-C8	mg/L	3.2	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	0.0102 J	<0.0333	<0.0333	<0.0333	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.00599	<0.0333	0.0357 J	<0.0333	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.1	<0.025	<0.025	<0.025	**0.0105**	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	0.15	**0.00282**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	**0.0283**	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	7.3	**0.0138**	<0.025	<0.025	0.0345 J	0.0355 J	<0.025	<0.025	**0.0240**	<0.025	0.0308 J	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.018	<0.0333	<0.0333	<0.0333	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	0.15	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	0.15	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	0.15	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - Analyzed outside of hold time.
< - Not Detected at the reporting limit shown.
Bolded values deteted in the sample.
NA - Not Analyzed
NS - No Standard
[a] - EPA Secondary MCL (No RECAP standard)
[b] - Duplicate sample result (discrepancy with original)
Blue shaded values exceed standard

Table 1

Groundwater Data Summary

Sulphur Dome

Calcasieu Parish, Louisiana

		Sample ID	**MW-2**												
		Sample Location	**MW-2-200**												
		Sample Interval (ft)	230-240'												
		Sample Date	3/26/24	4/23/24	5/24/24	6/18/24	7/24/24	8/20/24	9/24/24	10/23/24	11/19/24	12/16/24	1/28/25	2/19/25	3/19/25
		Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**		**Monitoring Wells**												
Total Metals		**RECAP GWSS**													
Arsenic	mg/L	0.01	0.000644 J	0.000420 J	0.000524 J	0.00186 J	0.00125 J	0.000485 J	0.00141 J	**0.00248**	0.000671 J	0.000474 J	0.000616 J	0.000667 J	0.00186 J
Barium	mg/L	2	**0.0571**	**0.0490**	**0.0400**	**0.0593**	**0.0512**	**0.0316**	**0.0703**	**0.1030**	**0.0787**	**0.0885**	**0.0794**	**0.0863**	**0.115**
Calcium	mg/L	NS	**10.7**	**6.73**	**4.39**	**5.48**	**5.14**	**2.74**	**6.38**	**9.86**	**6.38**	**6.66**	**6.51**	**6.45**	**7.10**
Chromium	mg/L	0.1	<0.0004	0.000561 J	0.000406 J	0.000554 J	<0.0004	0.000560 J	0.000654 J	0.000645 J	<0.0004	<0.0004	0.000849 J	0.00114 J	<0.0004
Iron[a]	mg/L	0.3	**2.04**	0.175 J	0.0774 J	**0.236**	0.0168 J	0.0361 J	0.0277 J	**1.76**	0.0351 J	0.0288 J	**1.64**	**0.470**	**1.07**
Lead	mg/L	0.015	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	NS	**0.102**	0.140 J	0.0667 J	**0.400**	**0.575**	**0.034**	**1.19**	**2.1**	**1.70**	**2.14**	**2.15**	**2.26**	**2.42**
Manganese[a]	mg/L	0.05	**0.0134**	0.00112 J	0.00106 J	0.00494 J	0.00197 J	0.00139 J	**0.00531**	**0.0208**	0.00450 J	**0.00576**	**0.00808**	0.00488 J	**0.0121**
Mercury	mg/L	0.002	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	0.073	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000673 J	<0.0006	<0.0006	0.000624 J	0.000606 J	0.000939 J
Potassium	mg/L	NS	**6.55**	**5.95**	**5.49**	**4.97**	**4.86**	**4.28**	**3.99**	**4.43**	**4.58**	**4.40**	**4.29**	**4.12**	**4.03**
Sodium	mg/L	NS	**63.8**	**66.8**	**70.8**	**71.0**	**65.2**	**60.9**	**61.4**	**76.1**	**72.3**	**73.1**	**72.7**	**73.1**	**78.6**
Strontium	mg/L	NS	**0.328**	**0.319**	**0.224**	**0.209**	**0.184**	**0.159**	**0.206**	**0.258**	**0.254**	**0.247**	**0.224**	**0.245**	**0.236**
Vanadium	mg/L	0.026	0.000810 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.00140 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Zinc	mg/L	1.1	0.00260 J	<0.002	0.00310 J	**0.0118**	**0.0046**	**0.00460**	0.00326 J	**0.00437**	0.00247 J	0.00251 J	0.00301 J	0.00203 J	0.00283 J
Anions/Water Quality Parameters															
Bicarbonate Alkalinity	mg/L	NS	**14.8**	**18.0**	**21.7**	**63.3**	**65.6**	**74.3**	<3.0	**132**	**138**	**141**	**147**	**151**	**162**
Bromide	mg/L	NS	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Carbonate Alkalinity	mg/L	NS	**17.0**	**11.6**	**19.8**	**19.4**	**26.2**	**38.8**	**243**	**10.2**	**18.0**	**14.0**	**14.8**	**15.8**	<3
Chloride[a]	mg/L	250	**38.4**	**34.6**	**32.8**	**30.4**	**30.7**	**32.4**	**26.9**	**26.2**	**26.9**	**26.6**	**26.5**	**25.6**	**23.5**
Sulfate[a]	mg/L	250	**146**	**119**	**92.2**	**73.7**	**56**	**52.0**	**30.8**	**25.2**	**20.9**	**13.1**	**7.63**	**3.42**	**2.08**
Total Dissolved Solids (TDS)\	mg/L	500	**260**	**216**	**198**	**190**	**184**	**170**	**186**	**242**	**296**	**340**	**200**	**216**	**190**
pH[a]	SI	6.5 - 8.5	9.68 H	9.28 H	10.0 H	9.49 H	9.46 H	9.35 H	8.05 H	8.80 H	8.95 H	8.99 H	8.94 H	8.88 H	8.66 H
pH (field)	SI	6.5 - 8.5	**9.91**	**10.32**	**9.95**	**9.34**	**9.27**	**9.32**	**8.08**	**8.49**	**10.60**	**8.73**	**8.92**	**7.37**	**8.74**
Sulfides															
Hydrogen Sulfide	mg/L	NS	<0.5	<0.5	<0.5	**1.44**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sulfide	mg/L	NS	<1.2	<1.2	<1.2	1.36 J	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<0.92	<0.92
Volatile Organic Compounds															
Benzene	mg/L	0.005	<0.0002	<0.0002	<0.0002	<0.0002	**0.0092**	0.00079 J	0.00036 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	0.7	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	1	**0.00086**	<0.0002	**0.0011**	<0.0002	**0.0045**	0.00084 J	0.00061 J	0.00062 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions															
Aliphatics >C6-C8	mg/L	3.2	<0.01	<0.01	<0.01	<0.1	0.0394 J	<0.00688	<0.00688	<0.0333	<0.0333	<0.167	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.00599	<0.00599	<0.0333	0.0359 J	<0.167	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	0.15	<0.002	<0.025	0.0396 J	<0.025	0.0433 J	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.0251 J
Aliphatics >C16-C35	mg/L	7.3	<0.008	0.0709 J	**0.197**	0.0368 J	**0.134**	<0.025	<0.025	<0.025	0.0488 J	<0.025	<0.025	0.0454 J	**0.114**
Aromatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.018	<0.018	<0.0333	<0.0333	<0.167	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	0.15	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	0.15	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	0.15	**0.00939**	0.0302 J	0.0554 J	<0.025	0.0424 J	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - Analyzed outside of hold time.
< - Not Detected at the reporting limit shown.
Bolded values deteted in the sample.
NA - Not Analyzed
NS - No Standard
[a] - EPA Secondary MCL (No RECAP standard)
[b] - Duplicate sample result (discrepancy with original)
Blue shaded values exceed standard

Table 1

Groundwater Data Summary

Sulphur Dome

Calcasieu Parish, Louisiana

	Sample ID		**MW-2**											
	Sample Location		**MW-2-500**											
	Sample Interval (ft)		502-512'											
	Sample Date		3/26/24	4/22/24	5/22/24	6/19/24	7/25/24	8/20/24	9/24/24	10/23/24	11/19/24	12/18/24	1/29/25	2/19/25	3/19/25
	Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**		**Monitoring Wells**												
Total Metals		**RECAP GWSS**													
Arsenic	mg/L	0.01	**0.00396**	**0.00351**	**0.00388**	0.00174 J	0.000854 J	0.000601 J	0.000731 J	0.000915 J	0.00128 J	0.000698 J	0.000708 J	0.00102 J	0.00103 J
Barium	mg/L	2	**0.143**	**0.138**	**0.164**	**0.126**	**0.0813**	**0.0835**	**0.0718**	**0.0777**	**0.077**	**0.0696**	**0.0743**	**0.106**	**0.104**
Calcium	mg/L	NS	**19.3**	**20.0**	**24.2**	**8.57**	**2.64**	**3.75**	**3.05**	**3.93**	**2.84**	**2.35**	**4.02**	**7.86**	**7.23**
Chromium	mg/L	0.1	**0.00454**	0.000545 J	0.000791 J	0.000483 J	0.000604 J	**0.000678**	0.00119 J	0.000543 J	0.000490 J	0.000558 J	0.000619 J	0.000746 J	<0.0004
Iron[a]	mg/L	0.3	**3.65**	**0.530**	**0.332**	0.0986 J	**0.747**	**0.0426**	**0.998**	**0.993**	**0.619**	0.0480 J	**0.619**	**6.53**	**2.96**
Lead	mg/L	0.015	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	NS	**4.06**	**4.12**	**5.18**	**1.62**	**0.308**	**0.822**	**0.603**	**0.652**	**0.428**	**0.283**	**0.647**	**1.35**	**1.21**
Manganese[a]	mg/L	0.05	**0.0912**	**0.0802**	**0.0944**	**0.0174**	**0.0109**	**0.0023**	**0.0113**	**0.0157**	**0.00988**	0.00139 J	**0.00966**	**0.0696**	**0.0527**
Mercury	mg/L	0.002	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	0.073	**0.00294**	<0.0006	<0.0006	0.000681 J	0.00122 J	<0.0006	0.000923 J	0.000754 J	0.000898 J	<0.0006	<0.0006	**0.00202**	0.00113 J
Potassium	mg/L	NS	**3.21**	**3.14**	**3.50**	**65.50**	**74.20**	**56.1**	**57.9**	**64.8**	**63.7**	**61.1**	**54.1**	**45.2**	**50.3**
Sodium	mg/L	NS	**70.0**	**59.9**	**70.0**	**89.6**	**80.8**	**71.0**	**70.6**	**78.2**	**77.9**	**73.2**	**69.9**	**68.4**	**72.2**
Strontium	mg/L	NS	**0.230**	**0.242**	**0.286**	**0.239**	**0.204**	**0.245**	**0.245**	**0.312**	**0.355**	**0.381**	**0.388**	**0.446**	**0.452**
Vanadium	mg/L	0.026	0.00106 J	<0.0006	<0.0006	<0.0006	0.000717 J	<0.0006	0.000980 J	<0.0006	0.000622 J	<0.0006	<0.0006	0.00137 J	0.000679 J
Zinc	mg/L	1.1	**0.00813**	<0.002	**0.00479**	**0.00659**	**0.00659**	0.00327 J	**0.00438**	0.00277 J	0.00237 J	0.00261 J	<0.002	**0.00646**	**0.00533**
Anions/Water Quality Parameters															
Bicarbonate Alkalinity	mg/L	NS	**169**	**168**	**168**	**82.7**	**53**	<30	<3	**102**	**7.50**	**18.9**	**17.6**	**18.0**	<3
Bromide	mg/L	NS	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	**0.628**	<0.03	<0.03	<0.03	<0.03	<0.03
Carbonate Alkalinity	mg/L	NS	<3.5	<3	3.40 J	**141**	**188**	**200**	**243**	**110**	**210**	**189**	**177**	**171**	**73.0**
Chloride[a]	mg/L	250	**36.6**	**33.4**	**34.3**	**38.5**	**37.7**	**41.3**	**37.0**	**37.0**	**37.6**	**37.4**	**38.8**	**38.7**	**37.3**
Sulfate[a]	mg/L	250	**14.4**	**4.10**	**2.17**	**5.94**	**6.54**	<0.2	**4.86**	**4.66**	**4.60**	**2.96**	**3.21**	**2.62**	**2.07**
Total Dissolved Solids (TDS)\	mg/L	500	**296**	**240**	**234**	**298**	**306**	**276**	**286**	**350**	**242**	**298**	**334**	**316**	**268**
pH[a]	SI	6.5 - 8.5	8.09 H	8.09 H	8.16 H	10.2 H	10.6 H	10.4 H	10.4 H	10.9 H	10.9 H	11.0 H	11.0 H	10.5 H	10.5 H
pH (field)	SI	6.5 - 8.5	**7.95**	**8.14**	**8.06**	**10.12**	**10.61**	**10.2**	**9.44**	**10.15**	**10.91**	**10.86**	**10.75**	**10.63**	**10.51**
Sulfides															
Hydrogen Sulfide	mg/L	NS	<0.5	0.552 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.552 J	<0.5
Sulfide	mg/L	NS	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<0.92	<0.92
Volatile Organic Compounds															
Benzene	mg/L	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	0.7	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00033 J	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	1	<0.0002	<0.0002	**0.0012**	<0.0002	**0.0028**	<0.0002	0.00056 J	0.00085 J	<0.0002	0.00076 J	0.00064 J	0.00069 J	0.00068 J
m,p-Xylene	mg/L	10	<0.0005	<0.0005	<0.0005	0.0011 J	0.0012 J	<0.0005	0.0012 J	0.0013 J	0.0016 J	0.0014 J	0.00095 J	0.0013 J	0.0011 J
o-Xylene	mg/L	10	<0.0003	<0.0003	<0.0003	**0.0012**	**0.0012**	<0.0003	**0.0013**	**0.0015**	**0.0016**	**0.0015**	**0.0010**	**0.0013**	**0.0012**
Xylenes, Total	mg/L	10	<0.0003	<0.0003	<0.0003	0.0023 J	0.0024 J	<0.0003	0.0025 J	0.0028 J	**0.0032**	0.0029 J	0.0020 J	0.0025 J	0.0023 J
TPH Fractions															
Aliphatics >C6-C8	mg/L	3.2	<0.01	<0.01	<0.01	<0.1	0.0371 J	0.0115 J	0.0125 J	<0.0333	<0.0333	<0.167	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	0.0335 J	0.0114 J	0.0109 J	0.0417 J	0.0397 J	<0.167	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	0.15	<0.002	<0.025	0.0319 J	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	7.3	**0.0289**	0.0567 J	0.0982 J	0.0535 J	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	**0.109**	0.0281 J
Aromatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.018	<0.0333	<0.0333	<0.167	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	0.15	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	0.15	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	0.15	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - Analyzed outside of hold time.
< - Not Detected at the reporting limit shown.
Bolded values deteted in the sample.
NA - Not Analyzed
NS - No Standard
[a] - EPA Secondary MCL (No RECAP standard)
[b] - Duplicate sample result (discrepancy with original)
Blue shaded values exceed standard

Table 1

Groundwater Data Summary

Sulphur Dome

Calcasieu Parish, Louisiana

Sample ID			**MW-2**											
Sample Location			**MW-2-700**											
Sample Interval (ft)			680-690'											
Sample Date			3/26/24	4/23/24	5/22/24	6/19/24	7/25/24	8/21/24	9/23/24	10/23/24	11/19/24	12/18/24	1/28/25	2/19/25	3/19/25
Sampler			ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**		**Monitoring Wells**												
Total Metals		**RECAP GWSS**													
Arsenic	mg/L	0.01	0.00145 J	**0.00229**	**0.00209**	**0.00233**	0.00149 J	0.00569 J	0.000996 J	0.000907 J	0.00153 J	0.00106 J	0.000774 J	0.00104 J	0.00101 J
Barium	mg/L	2	**0.0507**	**0.0346**	**0.0477**	**0.0527**	**0.00643**	**0.00925**	**0.00889**	**0.00821**	**0.00873**	**0.00940**	**0.01330**	**0.0233**	**0.0158**
Calcium	mg/L	NS	**32.4**	**22.4**	**24.1**	**21.7**	**1.31**	**0.80**	**1.68**	**1.02**	**0.993**	**1.10**	**1.38**	**3.10**	**1.71**
Chromium	mg/L	0.1	0.00399 J	0.000594 J	0.00324 J	0.000609 J	0.00134 J	0.0007 J	0.00149 J	<0.0004	0.000787 J	0.000781 J	0.000705 J	0.000799 J	<0.0004
Iron[a]	mg/L	0.3	**0.272**	0.0258 J	**0.290**	**0.315**	**0.877**	**0.530**	**0.560**	**0.717**	**0.583**	**0.766**	**0.324**	**0.382**	**0.424**
Lead	mg/L	0.015	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	NS	0.104 J	0.199 J	**0.245**	**0.385**	0.0747 J	0.0342 J	0.0608 J	0.0354 J	0.0323 J	0.0336 J	**0.0527**	0.104 J	0.0649 J
Manganese[a]	mg/L	0.05	0.00404 J	<0.0007	**0.0298**	**0.00912**	**0.00935**	0.00355 J	0.00404 J	0.00372 J	0.00330 J	0.00356 J	0.00162 J	0.00284 J	0.00240 J
Mercury	mg/L	0.002	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	0.073	**0.00274**	<0.0006	**0.00248**	0.00154 J	**0.00467**	**0.00339**	**0.00348**	**0.00238**	**0.00226**	**0.00217**	0.00131 J	0.00132 J	0.00170 J
Potassium	mg/L	NS	**7.38**	**6.34**	**5.20**	**4.54**	**4.46**	**4.38**	**5.82**	**4.68**	**4.89**	**5.06**	**4.82**	**3.98**	**4.56**
Sodium	mg/L	NS	**168**	**148**	**166**	**214**	**177**	**152**	**232**	**166**	**172**	**177**	**173**	**221**	**221**
Strontium	mg/L	NS	**0.231**	**0.171**	**0.166**	**0.142**	**0.0206**	**0.0184**	**0.0246**	**0.0191**	**0.0190**	**0.0194**	**0.0296**	**0.0424**	**0.0304**
Vanadium	mg/L	0.026	**0.0304**	**0.0257**	**0.0176**	**0.013**	0.00126 J	<0.0006	0.000785 J	0.000763 J	<0.0006	<0.0006	<0.0006	0.00114 J	<0.0006
Zinc	mg/L	1.1	0.00286 J	<0.002	**0.00573**	0.00350 J	**0.0292**	0.00208 J	0.00294 J	0.00389 J	0.00327 J	0.00220 J	<0.002	<0.002	0.00231 J
Anions/Water Quality Parameters															
Bicarbonate Alkalinity	mg/L	NS	<3.5	<3	**33.3**	**82.1**	**84.0**	35.0 J	**14.9**	**93.2**	**51.4**	**83.9**	**67.1**	**63.5**	<3
Bromide	mg/L	NS	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	**3.32**	**3.44**	<0.03	<0.03	**0.141**	**0.192**	**0.158**
Carbonate Alkalinity	mg/L	NS	**144**	**166**	**204**	**169**	**146**	**208**	**10.2**	**136**	**180**	**180**	**166**	**166**	**122**
Chloride[a]	mg/L	250	**138**	**137**	**156**	**158**	**108**	**111**	**107**	**99.7**	**102**	**106**	**120**	**159**	**130**
Sulfate[a]	mg/L	250	**82.0**	**51.5**	**36.8**	**27.9**	**43.1**	**35.6**	**24.1**	**14.4**	**5.6**	**0.531**	**1.95**	**0.976**	0.423 J
Total Dissolved Solids (TDS)\	mg/L	500	**594**	**484**	**514**	**822**	**392**	**410**	**386**	**476**	**416**	**388**	**490**	**524**	**426**
pH[a]	SI	6.5 - 8.5	11.1 H	10.5 H	10.3 H	10.0 H	10.4 H	10.4 H	10.2 H	10.5 H	10.4 H	10.6 H	10.4 H	8.95 H	10.2 H
pH (field)	SI	6.5 - 8.5	**10.85**	**10.89**	**10.31**	**9.80**	**10.37**	**10.6**	**9.16**	**9.92**	**12.04**	**10.23**	**10.23**	**6.86**	**10.26**
Sulfides															
Hydrogen Sulfide	mg/L	NS	<0.5	<0.5	<0.5	<0.5	<0.5	**1.49**	<0.5	**3.57**	**3.57**	**1.62**	**3.40**	<0.5	<0.5
Sulfide	mg/L	NS	<1.2	<1.2	<1.2	<1.2	<1.2	1.4 J	<1.2	**3.36**	**3.36**	1.52 J	**3.20**	<0.92	<0.92
Volatile Organic Compounds															
Benzene	mg/L	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	0.7	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	1	<0.0002	<0.0002	**0.0010**	<0.0002	**0.0021**	0.00052 J	0.00041 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00036 J	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00036 J	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions															
Aliphatics >C6-C8	mg/L	3.2	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	0.0159 J	<0.0333	<0.0333	<0.167	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	0.00726 J	<0.0333	0.0394 J	<0.167	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	0.15	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	7.3	<0.008	0.0484 J	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.018	<0.0333	<0.0333	<0.167	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	0.15	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	0.15	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	0.15	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - Analyzed outside of hold time.
< - Not Detected at the reporting limit shown.
Bolded values deteted in the sample.
NA - Not Analyzed
NS - No Standard
[a] - EPA Secondary MCL (No RECAP standard)
[b] - Duplicate sample result (discrepancy with original)
Blue shaded values exceed standard

Table 1

Groundwater Data Summary

Sulphur Dome

Calcasieu Parish, Louisiana

	Sample ID		**MW-3**											
	Sample Location		**MW-3-200**											
	Sample Interval (ft)		228-238'											
	Sample Date		3/27/24	4/23/24	5/23/24	6/20/24	7/24/24	8/21/24	9/24/24	10/22/24	11/20/24	12/17/24	1/27/25	2/17/25	3/18/25
	Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**		**Monitoring Wells**												
Total Metals		**RECAP GWSS**													
Arsenic	mg/L	0.01	**0.00364**	**0.00334**	**0.00351**	**0.00384**	**0.00283**	**0.00272**	**0.00300**	**0.00304**	**0.00264**	**0.00289**	**0.00234**	**0.00286**	**0.00217**
Barium	mg/L	2	**0.0225**	**0.0320**	**0.0628**	**0.0807**	**0.0614**	**0.0567**	**0.0714**	**0.0971**	**0.124**	**0.0725**	**0.141**	**0.141**	**0.141**
Calcium	mg/L	NS	**2.02**	**2.99**	**6.76**	**9.11**	**7.10**	**5.30**	**6.31**	**9.32**	**11.2**	**6.14**	**14.6**	**11.2**	**12.2**
Chromium	mg/L	0.1	0.00249 J	0.000974 J	0.000989 J	0.000827 J	0.000556 J	0.000832 J	0.00148 J	0.00111 J	<0.0004	0.000961 J	0.000776 J	0.00238 J	<0.0004
Iron[a]	mg/L	0.3	**0.506**	**1.11**	**2.67**	0.136 J	**0.447**	**0.238**	**2.90**	**1.39**	**0.643**	**1.67**	**0.588**	**0.333**	**0.765**
Lead	mg/L	0.015	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	NS	**0.227**	0.0811 J	**0.426**	**0.590**	**0.638**	**0.431**	**0.616**	**1.20**	**1.66**	**0.782**	**2.34**	**1.83**	**2.13**
Manganese[a]	mg/L	0.05	0.00270 J	**0.00657**	**0.0198**	0.00186 J	0.00301 J	0.00170 J	**0.0177**	**0.0122**	**0.00688**	**0.0109**	**0.00860**	**0.00553**	**0.0123**
Mercury	mg/L	0.002	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	0.073	**0.00203**	0.00117 J	0.00181 J	0.000666 J	0.000765 J	0.000633 J	0.00113 J	0.000846 J	0.000910 J	0.00121 J	<0.0006	<0.0006	0.00191 J
Potassium	mg/L	NS	**62.3**	**53.1**	**48.5**	**45.7**	**53.8**	**69.1**	**68.4**	**55.9**	**56.8**	**85.6**	**30.4**	**36.0**	**23.8**
Sodium	mg/L	NS	**139**	**120**	**129**	**138**	**112**	**124**	**116**	**118**	**117**	**123**	**110**	**106**	**96.5**
Strontium	mg/L	NS	**0.0947**	**0.108**	**0.173**	**0.203**	**0.176**	**0.173**	**0.205**	**0.224**	**0.270**	**0.221**	**0.255**	**0.248**	**0.222**
Vanadium	mg/L	0.026	**0.01**	0.00171 J	0.00320 J	0.000836 J	<0.0006	<0.0006	0.00110 J	<0.0006	<0.0006	<0.0006	<0.0006	0.000763 J	<0.0006
Zinc	mg/L	1.1	**0.00474**	0.00294 J	**0.00675**	0.00337 J	0.00287 J	0.00264 J	**0.00696**	**0.00404**	0.00237 J	0.00328 J	0.00339 J	<0.002	0.00309 J
Anions/Water Quality Parameters															
Bicarbonate Alkalinity	mg/L	NS	<3.5	**16.9**	**133**	**207**	**47.8**	**246**	**265**	**197**	**192**	**187**	**276**	**254**	**312**
Bromide	mg/L	NS	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Carbonate Alkalinity	mg/L	NS	**221**	**250**	**158**	**105**	**20.2**	**190**	**122**	**128**	**175**	**165**	**52.8**	**67.6**	**32.4**
Chloride[a]	mg/L	250	**31.4**	**27.1**	**24.6**	**23.5**	**23.6**	**25.8**	**22.7**	**22.8**	**23.4**	**22.9**	**24.3**	**24.0**	**23.3**
Sulfate[a]	mg/L	250	**116**	**76.4**	**35.8**	**19.2**	**20.0**	**11.1**	**14.8**	**11.3**	**14.1**	**9.40**	**3.45**	**3.96**	**1.57**
Total Dissolved Solids (TDS)\	mg/L	500	**552**	**488**	**420**	**382**	**338**	**420**	**438**	**430**	**456**	**628**	**338**	**186**	**392**
pH[a]	SI	6.5 - 8.5	11.1 H	10.4 H	9.89 H	9.42 H	9.68 H	9.88 H	9.66 H	9.76 H	9.91 H	8.25 H	9.09 H	8.47 H	8.44 H
pH (field)	SI	6.5 - 8.5	**10.88**	**11.08**	**10.06**	**9.29**	**9.01**	**9.41**	**8.63**	**8.98**	**9.81**	**9.43**	**9.17**	**9.28**	**8.79**
Sulfides															
Hydrogen Sulfide	mg/L	NS	<0.5	<0.5	<0.5	**1.10**	<0.5	<0.5	<0.5	<0.5	**1.62**	<0.5	<0.5	**1.06**	<0.5
Sulfide	mg/L	NS	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	1.52 J	<1.2	<1.2	1.00 J	<0.92
Volatile Organic Compounds															
Benzene	mg/L	0.005	<0.0002	<0.0002	<0.0002	0.00041 J	<0.0002	<0.0002	0.00026 J	0.00050 J	<0.0002	<0.0002	**0.0012**	<0.0002	<0.0002
Ethylbenzene	mg/L	0.7	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	1	**0.0062**	<0.0002	**0.0011**	<0.0002	**0.0069**	<0.0002	0.00034 J	<0.0002	<0.0002	0.00083 J	0.00061 J	<0.0002	<0.0002
m,p-Xylene	mg/L	10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions															
Aliphatics >C6-C8	mg/L	3.2	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.00688	<0.0333	<0.0333	<0.167	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.00599	<0.0333	<0.0333	<0.167	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	0.15	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	7.3	<0.008	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.008	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.018	<0.0333	<0.0333	<0.167	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	**0.0154**	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	0.15	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	**0.0143**	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	0.15	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	0.15	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - Analyzed outside of hold time.
< - Not Detected at the reporting limit shown.
Bolded values deteted in the sample.
NA - Not Analyzed
NS - No Standard
[a] - EPA Secondary MCL (No RECAP standard)
[b] - Duplicate sample result (discrepancy with original)
Blue shaded values exceed standard

Table 1

Groundwater Data Summary

Sulphur Dome

Calcasieu Parish, Louisiana

Sample ID			MW-3												
Sample Location			MW-3-500												
Sample Interval (ft)			464-474'												
Sample Date			3/27/24	4/23/24	5/23/24	6/20/24	7/24/24	8/21/24	9/25/24	10/22/24	11/20/24	12/17/24	1/28/25	2/17/25	3/18/25
Sampler			ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**		**Monitoring Wells**												
Total Metals		**RECAP GWSS**													
Arsenic	mg/L	0.01	0.000750 J	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.00100 J	0.000437 J	<0.0004	<0.0004	<0.0004
Barium	mg/L	2	**0.215**	**0.230**	**0.215**	**0.195**	**0.149**	**0.157**	**0.173**	**0.159**	**0.159**	**0.158**	**0.141**	**0.151**	**0.170**
Calcium	mg/L	NS	**170**	**165**	**165**	**233**	**212**	**149**	**194**	**163**	**147**	**145**	**119**	**103**	**178**
Chromium	mg/L	0.1	0.00154 J	0.000775 J	0.00190 J	0.00103 J	0.00101 J	0.000918 J	0.00187 J	0.000975 J	0.00132 J	0.000807 J	0.00158 J	0.00361 J	<0.0004
Iron[a]	mg/L	0.3	**1.15**	**6.25**	**2.72**	**6.92**	**2.52**	**4.06**	**1.47**	**1.34**	**1.91**	**0.897**	**0.569**	**0.613**	**0.814**
Lead	mg/L	0.015	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	NS	**22.0**	**23.4**	**20.4**	**24.6**	**21.5**	**19.5**	**22.1**	**21.9**	**21.2**	**21.3**	**17.6**	**14.9**	**23.3**
Manganese[a]	mg/L	0.05	**0.0823**	**0.0586**	**0.0479**	**0.311**	**0.291**	**0.0729**	**0.1450**	**0.0649**	**0.0371**	**0.0163**	**0.0107**	**0.0111**	**0.282**
Mercury	mg/L	0.002	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	0.073	0.000670 J	<0.0006	0.000881 J	0.000740 J	0.000815 J	0.000639 J	<0.0006	0.000616 J	0.000709 J	<0.0006	<0.0006	0.000809 J	0.00179 J
Potassium	mg/L	NS	**15.1**	**20.7**	**22.5**	**15.3**	**12.0**	**19.4**	**26.8**	**28.3**	**26.8**	**29.1**	**32.0**	**35.7**	**28.0**
Sodium	mg/L	NS	**666**	**671**	**831**	**793**	**739**	**760**	**812**	**802**[D]	**803**	**784**	**711**	**760**	**766**
Strontium	mg/L	NS	**4.52**	**4.41**	**5.21**	**5.29**	**4.97**	**4.95**	**5.32**	**4.94**[D]	**5.02**	**4.60**	**4.56**	**4.88**	**5.41**
Vanadium	mg/L	0.026	0.00421 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.00144 J	<0.0006
Zinc	mg/L	1.1	0.00327 J	**0.0160**	**0.0172**	**0.0251**	**0.0080**	**0.013**	**0.005**	**0.00456**	**0.00483**	0.00291 J	0.00304 J	0.00276 J	0.00339 J
Anions/Water Quality Parameters															
Bicarbonate Alkalinity	mg/L	NS	**36.3**	**18.6**	**14.6**	**151**	**139**	**81.1**	**68.7**	**25.3**	**14.0**	**9.60**	**9.90**	3.70 J	**101.00**
Bromide	mg/L	NS	<0.03	<0.03	<0.03	<0.03	<0.03	**0.255**	<0.3	<0.06	<0.06	<0.03	<0.06	<0.06	<0.03
Carbonate Alkalinity	mg/L	NS	<3.5	<3	<3	<3	**19.6**	<3	<3.0	<3.5	<3	4.20 J	**6.60**	**10.0**	<3
Chloride[a]	mg/L	250	**1,260**	**1,070**	**1,080**	**1,190**	**1,330**	**1,470**	**1,260**	**1,300**	**1,380**	**1350**	**1460**	**1260**	**1450**
Sulfate[a]	mg/L	250	**603**	**480**	**424**	**505**	**462**	**469**	**409**	**406**	**467**	**383**	**415**	**391**	**412**
Total Dissolved Solids (TDS)\	mg/L	500	**2,220**	**2,280**	**2,140**	**2,080**	**1,990**	**2,380**	**1,670**	**1,680**	**2,640**	**3,130**	**2,440**	**2,500**	**3,080**
pH[a]	SI	6.5 - 8.5	7.75 H	7.83 H	8.57 H	7.69 H	8.54 H	7.4 H	7.81 H	7.66 H	8.94 H	9.13 H	9.58 H	9.76 H	7.87 H
pH (field)	SI	6.5 - 8.5	**8.08**	**8.92**	**9.00**	**6.79**	**8.34**	**8.85**	**7.20**	**9.41**	**9.65**	**9.38**	**9.69**	**9.63**	**6.89**
Sulfides															
Hydrogen Sulfide	mg/L	NS	<0.5	<0.5	<0.5	**2.17**	**4.12**	**1.91**	<0.5	**2.12**	**4.25**	<0.5	<0.5	<0.5	<0.5
Sulfide	mg/L	NS	<1.2	<1.2	<1.2	**2.04**	**3.88**	1.80 J	<1.2	**2.00**	**4.00**	<1.2	<1.2	<0.92	<0.92
Volatile Organic Compounds															
Benzene	mg/L	0.005	**0.0017**	**0.0016**	**0.0015**	**0.0015**	**0.0010**	<0.01	**0.0012**	<0.005	**0.0015**	**0.0011**	0.00078 J	0.00081 J	**0.0017**
Ethylbenzene	mg/L	0.7	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.015	<0.0003	<0.0075	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	1	**0.010**	**0.0031**	**0.0039**	<0.0002	**0.0085**	<0.010	**0.0046**	<0.005	**0.0065**	**0.0052**	**0.0038**	**0.0051**	**0.0055**
m,p-Xylene	mg/L	10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.025	<0.0005	<0.012	<0.0005	<0.0005	<0.0005	0.00055 J	<0.0005
o-Xylene	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.015	<0.0003	<0.0075	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.015	<0.0003	<0.0075	<0.0003	<0.0003	<0.0003	0.00055 J	<0.0003
TPH Fractions															
Aliphatics >C6-C8	mg/L	3.2	**0.419**	**0.164**	<0.01	**1.17**	**1.16**	**1.45**	**1.61**	**1.52**	1.61 J	**0.795**	**0.533**	**0.582**	**0.680**
Aliphatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	0.0144 J	0.0170 J	<0.0333	<0.0333	<0.167	0.000684 J	0.000910 J	0.000791 J
Aliphatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	0.15	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	7.3	<0.008	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.008	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.018	<0.018	<0.0333	<0.0333	<0.167	0.00500 J	0.00477 J	0.00474 J
Aromatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	0.0337 J	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	0.15	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	0.15	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	0.15	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - Analyzed outside of hold time.
< - Not Detected at the reporting limit shown.
Bolded values deteted in the sample.
NA - Not Analyzed
NS - No Standard
[a] - EPA Secondary MCL (No RECAP standard)
[b] - Duplicate sample result (discrepancy with original)
Blue shaded values exceed standard

Table 1

Groundwater Data Summary

Sulphur Dome

Calcasieu Parish, Louisiana

		Sample ID	MW-3												
		Sample Location	MW-3-700												
		Sample Interval (ft)	680-690'												
		Sample Date	3/27/24	4/24/24	5/23/24	6/20/24	7/24/24	8/21/24	9/24/24	10/22/24	11/20/24	12/17/24	1/28/25	2/18/25	3/19/25
		Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**		**Monitoring Wells**												
Total Metals		**RECAP GWSS**													
Arsenic	mg/L	0.01	0.000760 J	<0.0008	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.000462 J	<0.0004
Barium	mg/L	2	**2.46**	**2.31**	**2.50**	**2.50**	**2.10**	**1.77**	**2.18**	**2.15**	**1.74**	**1.78**	**1.84**	**1.69**	**2.31**
Calcium	mg/L	NS	**207**	**181**	**107**	**129**	**122**	**96.8**	**111**	**126**	**112**	**108**	**125**	**111**	**146**
Chromium	mg/L	0.1	0.00175 J	0.00387 J	0.00232 J	0.00164 J	0.00235 J	0.00122 J	0.00217 J	0.00131 J	0.00126 J	0.00123 J	0.00191 J	**0.00509**	<0.0004
Iron[a]	mg/L	0.3	**2.21**	0.274 J	**1.54**	**0.679**	**2.65**	**0.442**	**0.815**	**0.515**	**0.759**	**0.627**	**0.655**	**0.337**	**0.316**
Lead	mg/L	0.015	<0.0006	<0.001	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	NS	**36.6**	**31.7**	**28.7**	**34.1**	**23.6**	**24.9**	**24.8**	**26.6**	**25.0**	**23.2**	**19.2**	**18.7**	**20.6**
Manganese[a]	mg/L	0.05	**0.613**	**0.112**	**0.072**	**0.0642**	**0.0597**	**0.0428**	**0.0444**	**0.0466**	**0.0493**	**0.0453**	**0.0434**	**0.0449**	**0.0399**
Mercury	mg/L	0.002	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	0.073	0.00164 J	**0.00421**	0.00116 J	0.000624 J	0.00144 J	<0.0006	0.000623 J	0.000749 J	0.00183 J	<0.0006	0.00109 J	0.00114 J	<0.0006
Potassium	mg/L	NS	**18.7**	**26.2**	**15.2**	**18.2**	**18.3**	**14.6**	**16.0**	**18.1**	**17.6**	**18.1**	**19.7**	**18.5**	**23.4**
Sodium	mg/L	NS	**1,320**	**1,100**	**1,250**	**1,320**	**1,190**	**1,040**	**1,130**	**1,160**	**785**	**929**	**1,130**	**1,010**	**1,360**
Strontium	mg/L	NS	**4.31**	**3.63**	**3.16**	**3.28**	**3.14**	**2.8**	**2.96**	**3.23**	**2.42**	**2.56**	**3.01**	**2.86**	**3.82**
Vanadium	mg/L	0.026	0.00141 J	<0.0012	<0.0006	<0.0006	0.00114 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000663 J	0.00164 J	<0.0006
Zinc	mg/L	1.1	**0.0581**	<0.004	0.00366 J	**0.00711**	**0.00553**	**0.00454**	0.00279 J	0.00299 J	0.00254 J	0.00251 J	0.00301 J	0.00214 J	0.00274 J
Anions/Water Quality Parameters															
Bicarbonate Alkalinity	mg/L	NS	**163**	**29.7**	**26.0**	**24.2**	**16.8**	**24.2**	**17.8**	**25.0**	**19.8**	**25.0**	**25.4**	**25.0**	**28.6**
Bromide	mg/L	NS	**3.41**	**1.36**	**4.12**	**4.00**	**2.58**	**1.76**	**2.10**	**2.33**	**2.46**	**2.44**	**2.33**	**2.63**	**2.18**
Carbonate Alkalinity	mg/L	NS	<3.5	<3	<3	<3	**3.2**	<3	4.00 J	<3.0	<3.0	<3	<3	<3	<3
Chloride[a]	mg/L	250	**2,750**	**2,320**	**2,150**	**2,590**	**2,240**	**2,780**	**2,170**	**2,080**	**2,010**	**2,090**	**2,130**	**2,330**	**2,020**
Sulfate[a]	mg/L	250	**2.81**	**3.63**	<0.400	0.873 J	**1.25**	<0.400	<0.4	**1.53**	<0.4	<0.4	<1	<0.4	1.14 J
Total Dissolved Solids (TDS)[\]	mg/L	500	**4,320**	**4,800**	**3,160**	**2,560**	**2,500**	**3,320**	**1,840**	**2,180**	**3,060**	**3,160**	**3,420**	**3,860**	**3,260**
pH[a]	SI	6.5 - 8.5	7.89 H	7.62 H	8.59 H	8.76 H	8.54 H	8.48 H	8.89 H	9.08 H	8.87 H	8.35 H	8.48 H	8.97 H	8.50 H
pH (field)	SI	6.5 - 8.5	**8.25**	**11.23**	**8.49**	**8.44**	**8.63**	**8.95**	**8.00**	**9.50**	**8.90**	**8.65**	**9.70**	**8.79**	**8.62**
Sulfides															
Hydrogen Sulfide	mg/L	NS	<0.5	<0.5	<0.5	**1.10**	<0.5	<0.5	0.680 J	<0.5	**1.19**	0.552 J	**1.28**	<0.5	<0.5
Sulfide	mg/L	NS	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	1.20 J	<0.92	<0.92
Volatile Organic Compounds															
Benzene	mg/L	0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	0.7	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00031 J	<0.0003
Toluene	mg/L	1	<0.0002	<0.0002	**0.0016**	<0.0002	**0.0053**	**0.0013**	0.00076 J	**0.0011**	0.00098 J	0.00098 J	0.00083 J	0.00077 J	0.00096 J
m,p-Xylene	mg/L	10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.00062 J	<0.0005
o-Xylene	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	10	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00062 J	<0.0003
TPH Fractions															
Aliphatics >C6-C8	mg/L	3.2	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	0.0104 J	<0.0333	<0.0333	<0.167	0.00321 J	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	0.00770 J	0.0448 J	0.0547 J	<0.167	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	0.15	<0.002	<0.025	<0.025	<0.025	0.0275 J	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	7.3	<0.008	**0.275**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.0360 J	<0.025	<0.025
Aromatics >C8-C10	mg/L	0.15	<0.01	<0.01	<0.01	<0.1	<0.0333	<0.0333	<0.018	<0.0333	<0.0333	<0.167	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	0.15	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	0.15	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	0.15	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	0.15	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - Analyzed outside of hold time.
< - Not Detected at the reporting limit shown.
Bolded values deteted in the sample.
NA - Not Analyzed
NS - No Standard
[a] - EPA Secondary MCL (No RECAP standard)
[b] - Duplicate sample result (discrepancy with original)
Blue shaded values exceed standard

Table 2
Surface Water Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

LDNR Sample No.		LDNR 1									LDNR 3								
Sample Date		3/26/24	6/17/24	9/23/24	10/22/24	11/21/24	12/16/24	1/29/25	2/18/25	3/20/25	3/26/24	6/18/24	9/24/24	10/21/24	11/20/24	12/18/24	1/29/25	2/24/25	3/18/25
Sample Interval (ft)		Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**	**Bubble Site (Surface Water)**																	
Total Metals																			
Arsenic	mg/L	**0.00261**	**0.00249**	**0.00880**	**0.00544**	0.00193 J	**0.00253**	0.00114 J	0.00102 J	0.00177 J	0.000986 J	0.00117 J	0.00135 J	0.00174 J	0.00148 J	0.00132 J	0.000933 J	0.000742 J	0.000896 J
Barium	mg/L	**0.172**	**0.103**	**0.430**	**0.610**	**0.233**	**0.182**	**0.166**	**0.133**	**0.120**	**0.127**	**0.133**	**0.353**	**0.293**	**0.321**	**0.278**	**0.147**	**0.119**	**0.0916**
Calcium	mg/L	**183**	**51.5**	**166**	**254**	**241**	**247**	**206**	**108**	**143**	**108**	**57.4**	**96.0**	**88.7**	**92.5**	**103.0**	**102.0**	**89.7**	**91.5**
Chromium	mg/L	<0.0004	0.000988 J	0.00160 J	0.00221 J	0.000670 J	<0.0004	<0.0004	0.000588 J	<0.0004	<0.0004	0.000493 J	0.00152 J	0.00106 J	0.000542 J	0.000723 J	<0.0004	<0.0004	<0.0004
Iron	mg/L	**2.30**	**1.10**	**6.11**	**1.98**	**0.793**	0.156 J	**2.31**	**0.935**	**1.43**	**0.628**	**0.247**	**0.218**	0.0199 J	0.151 J	0.0218 J	0.0282 J	**0.215**	0.101 J
Lead	mg/L	0.000678 J	0.00174 J	0.000756 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	**48.7**	**9.71**	**44.7**	**76.4**	**58.6**	**65.2**	**55.9**	**23.2**	**30.8**	**21.2**	**9.8**	**20.0**	**21.5**	**22.2**	**25.4**	**22.4**	**19.1**	**21.0**
Manganese	mg/L	**2.76**	**0.502**	**2.37**	**3.28**	**2.45**	**3.38**	**4.04**	**0.104**	**0.735**	**0.195**	**1.15**	**2.01**	**0.505**	**0.423**	**0.389**	**0.183**	**0.0888**	**0.182**
Mercury	mg/L	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	**0.00733**	**0.00394**	**0.00393**	**0.00578**	**0.00462**	**0.00430**	**0.00341**	**0.00217**	0.00193 J	0.00120 J	0.000878 J	0.00173 J	0.00145 J	0.00172 J	0.00182 J	0.00163 J	0.0116 J	**0.00206**
Potassium	mg/L	**3.79**	**2.59**	**4.18**	**17.4**	**7.73**	**9.99**	**3.54**	**3.17**	**3.35**	**2.61**	**2.52**	**4.30**	**3.01**	**2.86**	**3.15**	**2.93**	**2.64**	**2.45**
Sodium	mg/L	**288**	**76.8**	**268**	**352**	**290**	**273**	**239**	**280**	**286**	**288**	**100**	**250**	**274**	**305**	**317**	**299**	**217**	**220**
Strontium	mg/L	**1.22**	**0.339**	**1.16**	**1.90**	**1.53**	**1.55**	**1.38**	**0.817**	**0.894**	**0.709**	**0.398**	**0.664**	**0.711**	**0.788**	**0.790**	**0.770**	**0.688**	**0.714**
Vanadium		0.00222 J	0.00300 J	0.00377 J	0.00171 J	<0.0006	0.00267 J	0.000682 J	0.00155 J	0.000831 J	0.00275 J	0.00177 J	0.00476 J	0.00347 J	**0.00556**	0.00275 J	0.00252 J	0.00261 J	0.00114 J
Zinc	mg/L	**0.0386**	**0.0177**	**0.246**	**0.0464**	**0.0127**	**0.00465**	**0.0202**	**0.00953**	**2.49**	0.00319 J	**0.00599**	**0.0125**	0.00291 J	**0.00924**	**0.00466**	0.00327 J	0.00226 J	<0.002
Anions/Water Quality Parameters																			
Bicarbonate Alkalinity	mg/L	**249**	**135**	**343**	**392**	**222**	**307**	**340**	**172**	**231**	**110**	**141**	**218**	**192**	**155**	**175**	**149**	**147**	**215**
Bromide	mg/L	<0.03	<0.03	**0.313**	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Carbonate Alkalinity	mg/L	<3.5	<3	<3	<3.5	<3	<3	<3	<3	<3	<3.5	<3	<3	<3.5	<3	<3	<3	<3	<3
Chloride	mg/L	**592**	**111**	**585**	**770**	**809**	**712**	**599**	**442**	**448**	**472**	**181**	**383**	**486**	**545**	**543**	**441**	**380**	**420**
Sulfate	mg/L	**327**	**60.3**	**42.1**	**126**	**449**	**396**	**245**	**209**	**136**	**324**	**85.5**	**73.4**	**90.2**	**148**	**170**	**196**	**191**	**193**
Total Dissolved Solids (TDS)	mg/L	**1,680**	**390**	**900**	**1,970**	**2,390**	**2,000**	**1,750**	**1,430**	**1,180**	**1,200**	**488**	**912**	**984**	**984**	**1,000**	**1,120**	**1,110**	**1,010**
pH	SI	7.41 H	7.16 H	7.98 H	7.60 H	7.15 H	7.23 H	7.60 H	7.34 H	7.40 H	7.50 H	7.02 H	7.74 H	7.52 H	7.69 H	7.69 H	7.83 H	7.72 H	7.88 H
Sulfides																			
Hydrogen Sulfide	mg/L	<0.5	**1.44**	**3.57**	<0.5	<0.5	<0.5	**3.40**	<0.5	NA	<0.5	**2.68**	**5.70**	**3.40**	0.552 J	<0.5	<0.5	<0.5	<0.5
Sulfide	mg/L	<1.2	1.36 J	**3.36**	<1.2	<1.2	<1.2	**3.20**	<0.92	NA	<1.2	**2.52**	**5.36**	**3.20**	<1.2	<1.2	<1.2	<0.92	<0.92
Volatile Organic Compounds																			
Benzene	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	0.00055 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000460	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000385	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000475	0.00041 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00124	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000502	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00124	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions																			
Aliphatics >C6-C8	mg/L	<0.01	<0.1	<0.833	0.0607 J	0.0351 J	<0.833	<0.0018	<0.0018	<0.0018	<0.01	<0.1	<0.167	0.0381 J	<0.0333	<0.167	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	<0.01	<0.1	<0.833	<0.0333	<0.0333	<0.833	<0.0004	<0.0004	<0.0004	<0.01	<0.1	<0.167	<0.0333	<0.0333	<0.167	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	<0.01	<0.025	0.0293 J	**0.0117**	<0.025	0.0372 J	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	**0.0354**	<0.025	**0.313**	**0.0483**	<0.025	**0.153**	<0.025	0.0754 J	<0.025	<0.002	<0.025	<0.025	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	**0.117**	<0.025	**2.30**	**0.203**	**0.127**	**0.508**	<0.025	**0.334**	0.0599 J	<0.008	<0.025	<0.025	<0.008	<0.025	0.0289 J	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	<0.01	<0.1	<0.833	<0.0333	<0.0333	<0.833	<0.0006	<0.0006	<0.0006	<0.01	<0.1	<0.167	<0.0333	<0.0333	<0.167	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	<0.001	<0.025	<0.025	**0.00646**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	**0.00476**	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	**0.0153**	<0.025	0.0471 J	**0.0327**	<0.025	0.0323 J	<0.025	<0.025	<0.025	<0.004	<0.025	<0.025	**0.0102**	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	**0.0281**	<0.025	**0.343**	**0.0627**	<0.025	**0.101**	<0.025	0.0605 J	<0.025	<0.003	<0.025	<0.025	**0.00705**	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	**0.0470**	<0.025	**0.894**	**0.124**	<0.025	**0.176**	<0.025	**0.124**	<0.025	<0.009	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - pH is received at the lab outside of hold time (15 min from sampling).
< - Not Detected at the reporting limit shown.
Bolded values detected in the sample.

Table 2
Surface Water Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

		LDNR 4								LDNR 5								
LDNR Sample No.																		
Sample Date		3/26/24	6/17/24	9/23/24	11/20/24	12/17/24	1/28/25	2/18/25	3/17/25	3/26/24	6/17/24	9/24/24	10/22/24	11/21/24	12/18/24	1/29/25	2/18/25	3/18/25
Sample Interval (ft)		Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**	**Bubble Site (Surface Water)**																
Total Metals																		
Arsenic	mg/L	0.00125 J	0.00122 J	0.00186 J	0.00116 J	0.00158 J	0.000799 J	0.000808 J	0.000840 J	0.00105 J	0.00116 J	0.00112 J	0.00147 J	0.00101 J	0.00101 J	0.000636 J	0.000903 J	0.000898 J
Barium	mg/L	**0.139**	**0.199**	**0.747**	**0.401**	**0.362**	**0.290**	**0.203**	**0.0860**	**0.134**	**0.144**	**0.279**	**0.290**	**0.293**	**0.251**	**0.129**	**0.15**	**0.0996**
Calcium	mg/L	**111**	**65.0**	**95.1**	**86.1**	**101**	**93.7**	**102**	**90.3**	**114**	**66.5**	**77.3**	**96.6**	**91.3**	**102**	**102**	**99.7**	**95.6**
Chromium	mg/L	<0.0004	0.000751 J	0.00131 J	<0.0004	0.00105 J	0.000720 J	0.000523 J	<0.0004	0.000460 J	0.000714 J	0.000664 J	0.000736 J	<0.0004	0.000678 J	<0.0004	0.000779 J	<0.0004
Iron	mg/L	**0.904**	0.144 J	0.159 J	0.0422 J	**0.229**	0.0685 J	0.0513 J	0.0225 J	**0.217**	0.130 J	0.0335 J	0.0428 J	0.0272 J	0.0271 J	0.0482 J	0.0471 J	0.158 J
Lead	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	0.00105 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	**22.1**	**13.0**	**19.9**	**20.7**	**21.5**	**20.8**	**20.0**	**21.8**	**23.5**	**13.4**	**16.3**	**23.4**	**21.7**	**24.4**	**22.1**	**23.0**	**21.8**
Manganese	mg/L	**0.477**	**1.60**	**2.07**	**0.155**	**0.852**	**0.109**	**0.153**	**0.101**	**0.206**	**1.50**	**0.900**	**0.251**	**0.269**	**0.228**	**0.0912**	**0.171**	**0.192**
Mercury	mg/L	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	0.00132 J	0.00146 J	0.00145 J	0.000866 J	0.00121 J	0.00178 J	0.00120 J	0.000984 J	0.00160 J	0.00143 J	0.00101 J	0.00142 J	0.00107 J	0.00169 J	0.00136 J	0.00130 J	**0.00213**
Potassium	mg/L	**2.77**	**3.03**	**4.51**	**2.73**	**2.98**	**2.81**	**2.78**	**2.45**	**2.66**	**3.14**	**2.89**	**3.22**	**2.77**	**3.03**	**2.94**	**3.08**	**2.47**
Sodium	mg/L	**288**	**134**	**289**	**283**	**268**	**217**	**264**	**228**	**275**	**136**	**214**	**330**	**297**	**298**	**289**	**322**	**250**
Strontium	mg/L	**0.72**	**0.469**	**0.720**	**0.742**	**0.775**	**0.736**	**0.712**	**0.703**	**0.761**	**0.491**	**0.599**	**0.781**	**0.781**	**0.760**	**0.762**	**0.775**	**0.738**
Vanadium		0.00316 J	0.00193 J	0.00356 J	0.00264 J	0.00293 J	0.00201 J	0.00142 J	0.00202 J	0.00274 J	0.00100 J	0.00170 J	0.00401 J	0.00167 J	0.00175 J	0.00153 J	0.00130 J	0.00119 J
Zinc	mg/L	**0.015**	**0.0247**	**0.00451**	<0.002	**0.00769**	0.00352 J	**0.0515**	**0.00588**	**0.0176**	**0.0057**	**0.0614**	**0.00408**	<0.002	**0.0362**	**0.0105**	**0.00483**	<0.002
Anions/Water Quality Parameters																		
Bicarbonate Alkalinity	mg/L	**113**	**141**	**202**	**157**	**170**	**150**	**153**	**164**	**107**	**147**	**205**	**189**	**158**	**162**	**140**	**162**	**174**
Bromide	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Carbonate Alkalinity	mg/L	<3.5	<3	<3	<3	<3	<3	<3	<3	<3.5	<3	<3	<3	<3	<3	<3	<3	<3
Chloride	mg/L	**462**	**203**	**401**	**510**	**488**	**430**	**434**	**412**	**507**	**211**	**389**	**477**	**525**	**537**	**428**	**427**	**419**
Sulfate	mg/L	**311**	**95.7**	**73**	**137**	**177**	**189**	**204**	**191**	**356**	**98.9**	**81.9**	**91.6**	**146**	**164**	**203**	**207**	**197**
Total Dissolved Solids (TDS)	mg/L	**1,230**	**508**	**912**	**980**	**1,070**	**944**	1100 H	**884**	**1,160**	**520**	**948**	**1,070**	**992**	888 H	**1,100**	**2,380**	**1,100**
pH	SI	7.45 H	7.12 H	7.84 H	7.43 H	6.27 H	7.90 H	7.22 H	8.40 H	7.81 H	7.26 H	7.30 H	8.05 H	7.61 H	7.55 H	7.92 H	7.87 H	7.91 H
Sulfides																		
Hydrogen Sulfide	mg/L	<0.5	<0.5	**3.23**	<0.5	<0.5	<0.5	0.638 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 H	<0.5	<0.5	<0.5
Sulfide	mg/L	<1.2	<1.2	**3.04**	<1.2	<1.2	<1.2	<0.92	<0.92	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2 H	<1.2	<0.92	<0.92
Volatile Organic Compounds																		
Benzene	mg/L	<0.0002	<0.0002	<0.0002	0.00025 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	<0.0002	<0.0002	0.00044 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions																		
Aliphatics >C6-C8	mg/L	<0.01	<0.1	0.0193 J	<0.167	<0.167	**0.00592**	<0.0018	<0.0018	<0.01	<0.1	<0.167	<0.0333	<0.0333	<0.0333	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	<0.01	<0.1	<0.00599	0.178 J	<0.167	<0.0004	<0.0004	<0.0004	<0.01	<0.1	<0.167	<0.0333	<0.0333	<0.0333	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	**0.0083**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	**0.0177**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	<0.008	<0.025	<0.025	<0.025	0.0325 J	0.0558 J	<0.025	<0.025	**0.0341**	<0.025	0.0311 J	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	<0.01	<0.1	<0.018	<0.167	<0.167	<0.0006	<0.0006	<0.0006	<0.01	<0.1	<0.167	<0.0333	<0.0333	<0.0333	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	**0.0167**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - pH is received at the lab outside of hold time (15 min from sampling).
< - Not Detected at the reporting limit shown.
Bolded values detected in the sample.

Table 2
Surface Water Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

LDNR Sample No.		LDNR 6									LDNR 7								
Sample Date		3/26/24	6/18/24	9/25/24	10/23/24	11/21/24	12/18/24	1/29/25	2/24/25	3/18/25	3/27/24	6/18/24	9/25/24	10/23/24	11/19/24	12/18/24	1/29/25	2/24/25	3/18/25
Sample Interval (ft)		Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**	**Bubble Site (Surface Water)**																	
Total Metals																			
Arsenic	mg/L	0.00106 J	0.000982 J	0.00141 J	0.00133 J	0.00110 J	0.00106 J	0.000757 J	0.000746 J	0.000898 J	0.00108 J	0.00112 J	0.00131 J	0.00145 J	0.00169 J	0.00105 J	0.000680 J	0.000657 J	0.000879 J
Barium	mg/L	**0.129**	**0.138**	**0.289**	**0.289**	**0.305**	**0.237**	**0.134**	**0.13**	**0.0882**	**0.136**	**0.161**	**0.274**	**0.306**	**0.299**	**0.242**	**0.128**	**0.126**	**0.0912**
Calcium	mg/L	**113**	**59.2**	**75.8**	**86.8**	**95.8**	**96.2**	**103**	**98.1**	**89.6**	**116**	**66.3**	**79.6**	**96.7**	**92.5**	**98.7**	**97.1**	**98.0**	**92.1**
Chromium	mg/L	0.000500 J	0.000400 J	0.000751 J	<0.0004	0.000462 J	0.000801 J	<0.0004	<0.0004	<0.0004	0.000719 J	0.000631 J	0.000749 J	0.000591 J	0.00110 J	0.000682 J	0.00162 J	<0.0004	<0.0004
Iron	mg/L	0.0920 J	**0.215**	0.0566 J	0.0256 J	0.0409 J	0.0293 J	0.0483 J	0.108 J	**0.201**	0.0612 J	0.134 J	0.0254 J	0.0328 J	0.0246 J	0.0248 J	0.0543 J	0.0915 J	0.198 J
Lead	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	**23.1**	**10.6**	**16.3**	**21.1**	**24.0**	**22.2**	**22.8**	**20.8**	**20.6**	**23.9**	**12.3**	**16.8**	**23.2**	**23.0**	**23.7**	**21.2**	**20.8**	**21.3**
Manganese	mg/L	**0.0905**	**1.58**	**0.778**	**0.494**	**0.275**	**0.308**	**0.163**	**0.0844**	**0.170**	**0.123**	**2.47**	**0.807**	**0.289**	**0.278**	**0.266**	**0.159**	**0.0683**	**0.131**
Mercury	mg/L	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	0.00129 J	0.00101 J	0.00116 J	0.00110 J	0.00108 J	0.00132 J	0.00138 J	0.00101 J	0.00155 J	0.00149 J	0.000964 J	0.00110 J	0.00121 J	0.00121 J	0.00139 J	0.00115 J	0.00122 J	0.00152 J
Potassium	mg/L	**2.60**	**2.62**	**2.93**	**2.81**	**3.00**	**2.85**	**2.99**	**2.85**	**2.41**	**2.64**	**2.96**	**3.02**	**3.01**	**2.94**	**3.00**	**2.75**	**2.91**	**2.43**
Sodium	mg/L	**300**	**113**	**233**	**284**	**320**	**294**	**321**	**219**	**240**	**302**	**129**	**232**	**286**	**340**	**304**	**268**	**230**	**255**
Strontium	mg/L	**0.76**	**0.40**	**0.599**	**0.713**	**0.805**	**0.744**	**0.800**	**0.744**	**0.692**	**0.787**	**0.458**	**0.624**	**0.778**	**0.780**	**0.769**	**0.745**	**0.765**	**0.723**
Vanadium		0.00235 J	0.00161 J	0.00223 J	0.00254 J	0.00198 J	0.00182 J	0.00144 J	0.00233 J	0.00141 J	0.00274 J	0.000979 J	0.00241 J	0.00320 J	0.00174 J	0.00200 J	0.00148 J	0.00124 J	0.00156 J
Zinc	mg/L	**0.0604**	**0.00808**	**0.00498**	0.00313 J	**0.00403**	**0.0127**	**0.00702**	<0.002	0.00327 J	**0.00401**	**0.00416**	0.00270 J	0.00327 J	**0.00721**	**0.0172**	<0.002	<0.002	0.00232 J
Anions/Water Quality Parameters																			
Bicarbonate Alkalinity	mg/L	**109**	**133**	**377**	**193**	**160**	**160**	**137**	**152**	**182**	**118**	**129**	**187**	**189**	**163**	**163**	**141**	**150**	**186**
Bromide	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Carbonate Alkalinity	mg/L	<3.5	<3	<3	<3	<3	<3	**5.20**	<3	<3	<3.5	<3	<3	<3	<3	<3	**5.40**	<3	<3
Chloride	mg/L	**464**	**203**	**386**	**482**	**532**	**540**	**443**	**402**	**428**	**476**	**209**	**375**	**477**	**552**	**551**	**441**	**404**	**424**
Sulfate	mg/L	**309**	**94.9**	**82.4**	**89.2**	**146**	**176**	**196**	**204**	**195**	**319**	**97.9**	**81.9**	**89.5**	**149**	**181**	**196**	**214**	**194**
Total Dissolved Solids (TDS)	mg/L	**1,220**	**512**	**7,550**	**1,070**	**1,100**	**1,030**	**1,010**	**1,000**	**1,060**	**1,180**	**556**	**1,050**	**1,110**	**1,050**	**1,240**	**1,020**	**1,090**	**1,100**
pH	SI	8.07 H	7.20 H	7.47 H	7.95 H	7.57 H	7.69 H	8.18 H	7.62 H	8.02 H	7.99 H	7.21 H	7.48 H	8.00 H	7.57 H	7.91 H	8.06 H	7.67 H	8.17 H
Sulfides																			
Hydrogen Sulfide	mg/L	<0.5	<0.5	<0.5	**3.57**	**1.62**	<0.5	<0.5	<0.5	<0.5	<0.5	0.552 J	<0.5	<0.5	<0.5	**1.40**	<0.5	<0.5	<0.5
Sulfide	mg/L	<1.2	<1.2	<1.2	**3.36**	1.52 J	<1.2	<1.2	<0.92	<0.92	<1.2	<1.2	<1.2	<1.2	<1.2	1.32 J	<1.2	<0.92	<0.92
Volatile Organic Compounds																			
Benzene	mg/L	<0.0002	<0.000460	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000460	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	<0.0003	<0.000385	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000385	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	<0.0002	<0.000475	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000475	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	<0.0005	<0.00124	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00124	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	<0.0003	<0.000502	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000502	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	<0.0003	<0.00124	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00124	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions																			
Aliphatics >C6-C8	mg/L	<0.01	<0.1	<0.167	<0.0333	<0.0333	<0.167	<0.0018	<0.0018	<0.0018	<0.01	<0.1	<0.167	<0.0333	<0.333	<0.167	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	<0.01	<0.1	<0.167	<0.0333	<0.0333	<0.167	<0.0004	<0.0004	<0.0004	<0.01	<0.1	<0.167	<0.0333	<0.333	<0.167	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	**0.0242**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	<0.008	<0.025	<0.025	<0.025	<0.025	<0.025	0.0519 J	<0.025	<0.025	**0.0483**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	<0.01	<0.1	<0.167	<0.0333	<0.0333	<0.167	<0.0006	<0.0006	<0.0006	<0.01	<0.1	<0.167	<0.0333	<0.333	<0.167	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - pH is received at the lab outside of hold time (15 min from sampling).
< - Not Detected at the reporting limit shown.
Bolded values detected in the sample.

Table 2
Surface Water Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

LDNR Sample No.		LDNR 8									LDNR 9								
Sample Date		3/27/24	6/18/24	9/25/24	10/23/24	11/19/24	12/18/24	1/29/25	2/24/25	3/19/25	3/28/24	6/19/24	9/26/24	10/24/24	11/21/24	12/17/24	1/27/25	2/19/25	3/19/25
Sample Interval (ft)		Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**	**Bubble Site (Surface Water)**																	
Total Metals																			
Arsenic	mg/L	0.00104 J	0.00109 J	0.00153 J	0.00140 J	0.00156 J	0.00104 J	0.000674 J	0.000697 J	0.000970 J	**0.00212**	**0.00641**	**0.00456**	**0.00484**	0.00146 J	0.00130 J	0.000961 J	0.00110 J	**0.00290**
Barium	mg/L	**0.125**	**0.14**	**0.291**	**0.295**	**0.276**	**0.257**	**0.121**	**0.128**	**0.104**	**0.0233**	**0.147**	**0.0513**	**0.252**	**0.126**	**0.122**	**0.0817**	**0.0708**	**0.0921**
Calcium	mg/L	**114**	**63**	**97.1**	**92.2**	**84.9**	**103**	**96.6**	**96.8**	**100**	**113**	**37.2**	**23.2**	**68.9**	**94.8**	**103**	**78.4**	**74.8**	**78.0**
Chromium	mg/L	<0.0004	<0.0004	0.00156 J	<0.0004	0.000823 J	0.000617 J	0.00314 J	<0.0004	<0.0004	0.000866 J	0.000569 J	0.00142 J	0.000633 J	<0.0004	0.000589 J	0.000765 J	0.000747 J	<0.0004
Iron	mg/L	0.0505 J	0.0896 J	0.0310 J	0.0224 J	0.0339 J	0.0201 J	0.0461 J	0.0997 J	0.0293 J	**1.24**	**0.658**	0.196 J	**1.76**	0.143 J	0.143 J	**1.17**	**0.238**	**0.918**
Lead	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	**22.6**	**11.9**	**20.5**	**22.3**	**21.4**	**24.7**	**21.1**	**21.2**	**22.9**	**12.7**	**5.75**	**5.28**	**10.6**	**11.6**	**11.4**	**8.86**	**8.69**	**9.32**
Manganese	mg/L	**0.113**	**1.58**	**1.07**	**0.383**	**0.345**	**0.253**	**0.0996**	**0.0656**	**0.139**	**0.135**	**3.00**	**0.0612**	**2.82**	0.142 J	**0.243**	**0.384**	**0.156**	**0.290**
Mercury	mg/L	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	0.00139 J	0.000779 J	0.00140 J	0.00110 J	0.00119 J	0.00129 J	**0.00230**	0.00114 J	0.00106 J	**0.0023**	0.000631 J	0.000715 J	0.00113 J	0.00142 J	0.00170 J	0.00164 J	**0.00244**	**0.00207**
Potassium	mg/L	**2.63**	**2.82**	**3.53**	**2.88**	**2.69**	**3.11**	**2.72**	**2.86**	**2.52**	**0.669**	**3.71**	**1.16**	**3.76**	**2.09**	**2.36**	**2.06**	**2.05**	**2.18**
Sodium	mg/L	**303**	**130**	**222**	**302**	**325**	**310**	**254**	**226**	**247**	**166**	**47.6**	**128**	**251**	**163**	**169**	**127**	**149**	**200**
Strontium	mg/L	**0.712**	**0.436**	**0.642**	**0.745**	**0.713**	**0.795**	**0.716**	**0.763**	**0.764**	**0.711**	**0.265**	**0.241**	**0.532**	**0.623**	**0.594**	**0.466**	**0.450**	**0.499**
Vanadium		0.00232 J	0.000874 J	0.00243 J	0.00336 J	0.00154 J	0.00205 J	0.00110 J	0.00130 J	0.00183 J	0.00316 J	0.00102 J	0.00133 J	0.00228 J	<0.0006	<0.0006	0.000959 J	0.000738 J	0.00162 J
Zinc	mg/L	**0.00633**	**0.00406**	**0.0422**	0.00208 J	0.00350 J	**0.00991**	0.00200 J	**0.0302**	0.00260 J	**0.00406**	**0.0335**	**0.00924**	**0.0244**	0.0026 J	**0.00410**	0.00332 J	0.00230 J	**0.00621**
Anions/Water Quality Parameters																			
Bicarbonate Alkalinity	mg/L	**113**	**132**	**209**	**196**	**168**	**170**	**140**	**150**	**134**	**63.6**	**146.0**	**62.8**	**322**	**130**	**148**	**172**	**203**	**223**
Bromide	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	**0.136**	<0.03	<0.03	<0.03	<0.03	<0.03
Carbonate Alkalinity	mg/L	<3.5	<3	<3	<3	<3	<3	4.00 J	<3	<3	<3.5	<3	**25.1**	<3	<3	<3	<3	<3	<3
Chloride	mg/L	**481**	**227**	**390**	**482**	**526**	**539**	**405**	**344**	**421**	**175**	**50.8**	**175**	**285**	**224**	**197**	**160**	**201**	**205**
Sulfate	mg/L	**339**	**98.1**	**82.2**	**89.9**	**140**	**169**	**182**	**174**	**194**	**503**	**12**	**35.1**	**8.10**	**300**	**255**	**161**	**140**	**90.8**
Total Dissolved Solids (TDS)	mg/L	**1,160**	**576**	**828**	**1,090**	**1,000**	**1,050**	**956**	**960**	**884**	**890**	**540**	**440**	**888**	**778**	1180 H	**972**	**678**	**702**
pH	SI	7.95 H	7.23 H	7.40 H	8.03 H	7.63 H	7.82 H	8.13 H	7.78 H	7.91 H	8.02 H	7.36 H	9.03 H	7.45 H	7.50 H	7.71 H	7.96 H	8.02 H	7.95 H
Sulfides																			
Hydrogen Sulfide	mg/L	<0.5	**1.19**	NA	**2.51**	<0.5	<0.5	<0.5	<0.5	**1.28**	<0.5	0.978 J	<0.5	**3.23**	**1.62**	<0.5 H	**1.28**	<0.5	<0.5
Sulfide	mg/L	<1.2	<1.2	<1.2	**2.36**	<1.2	<1.2	<1.2	<0.92	1.20 J	<1.2	<1.2	<1.2	**3.04**	1.52 J	<1.2 H	1.20 J	<0.92	<0.92
Volatile Organic Compounds																			
Benzene	mg/L	<0.0002	<0.000460	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000460	<0.0002	0.00097 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	<0.0003	<0.000385	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000385	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	<0.0002	<0.000475	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000475	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	<0.0005	<0.00124	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00124	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	<0.0003	<0.000502	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000502	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	<0.0003	<0.00124	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00124	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions																			
Aliphatics >C6-C8	mg/L	<0.01	<0.1	<0.333	<0.0333	<0.167	<0.167	<0.0018	<0.0018	<0.0018	<0.01	<0.1	<0.167	0.0655 J	<0.833	<0.833	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	<0.01	<0.1	<0.333	<0.0333	<0.167	<0.167	<0.0004	<0.0004	<0.0004	<0.01	<0.1	<0.167	<0.0333	<0.833	<0.833	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	**0.0125**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	**0.0259**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	**0.0176**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	**0.0406**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	**0.0319**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	<0.01	<0.1	<0.333	<0.0333	<0.167	<0.167	<0.0006	<0.0006	<0.0006	<0.01	<0.1	<0.167	<0.0333	<0.833	<0.833	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - pH is received at the lab outside of hold time (15 min from sampling).
< - Not Detected at the reporting limit shown.
Bolded values detected in the sample.

Table 2
Surface Water Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

LDNR Sample No.		LDNR 12									LDNR 13								
Sample Date		3/27/24	6/18/24	9/23/24	10/22/24	11/19/24	12/18/24	1/29/25	2/19/25	3/18/25	3/27/24	6/18/24	9/25/24	10/23/24	11/19/24	12/18/24	1/28/25	2/19/25	3/18/25
Sample Interval (ft)		Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**	**Bubble Site (Surface Water)**																	
Total Metals																			
Arsenic	mg/L	0.00104 J	0.00100 J	0.00124 J	0.00140 J	0.00161 J	0.00104 J	0.000633 J	0.000904 J	0.000963 J	0.00102 J	0.00117 J	0.00132 J	0.00126 J	0.00170 J	0.00102 J	0.000643 J	0.000839 J	0.000847 J
Barium	mg/L	**0.144**	**0.148**	**0.277**	**0.272**	**0.300**	**0.242**	**0.132**	**0.138**	**0.0991**	**0.155**	**0.156**	**0.299**	**0.290**	**0.304**	**0.252**	**0.130**	**0.130**	**0.0842**
Calcium	mg/L	**121**	**61.1**	**82.8**	**84.5**	**93.9**	**99.7**	**102**	**112**	**97.8**	**123**	**69.1**	**83.5**	**89.3**	**99.8**	**105**	**99.0**	**110**	**82.2**
Chromium	mg/L	0.000659 J	0.000510 J	0.00130 J	0.000862 J	0.00116 J	0.000650 J	<0.0004	0.00165 J	0.000442 J	0.00106 J	0.000468 J	0.00123 J	0.000537 J	0.00104 J	0.000590 J	<0.0004	0.00175 J	<0.0004
Iron	mg/L	0.0544 J	0.0945 J	0.0357 J	0.0182 J	0.0229 J	0.0209 J	0.0360 J	0.0700 J	0.0387 J	0.132 J	0.0877 J	0.0301 J	0.0402 J	0.0542 J	0.0194 J	0.0552 J	0.0281 J	**0.527**
Lead	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	**24.8**	**11.3**	**17.2**	**20.7**	**23.3**	**24.4**	**22.3**	**23.7**	**22.1**	**24.8**	**12.3**	**18.0**	**21.5**	**23.9**	**24.8**	**21.8**	**23.0**	**19.1**
Manganese	mg/L	**0.14**	**2.45**	**0.686**	**0.210**	**0.230**	**0.251**	**0.115**	**0.0965**	**0.166**	**0.336**	**2.10**	**0.703**	**0.390**	**0.303**	**0.288**	**0.106**	**0.0631**	**0.0827**
Mercury	mg/L	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	0.00148 J	0.000903 J	0.00129 J	0.00127 J	0.00128 J	0.00137 J	0.00120 J	0.00131 J	0.00115 J	0.00160 J	0.00108 J	0.00116 J	0.00131 J	0.00124 J	0.00190 J	0.00117 J	0.00135 J	**0.00331**
Potassium	mg/L	**2.74**	**2.74**	**3.11**	**2.76**	**2.98**	**3.03**	**2.89**	**3.15**	**2.46**	**2.88**	**3.06**	**3.09**	**2.77**	**3.03**	**3.11**	**2.85**	**3.04**	**2.10**
Sodium	mg/L	**318**	**120**	**272**	**293**	**363**	**305**	**264**	**276**	**236**	**318**	**145**	**210**	**287**	**349**	**344**	**271**	**269**	**276**
Strontium	mg/L	**0.829**	**0.419**	**0.627**	**0.710**	**0.799**	**0.780**	**0.769**	**0.749**	**0.737**	**0.828**	**0.474**	**0.650**	**0.719**	**0.802**	**0.801**	**0.750**	**0.736**	**0.671**
Vanadium		0.00264 J	0.000865 J	0.00271 J	0.00384 J	0.00172 J	0.00194 J	0.00150 J	0.00165 J	0.00195 J	0.00311 J	0.00133 J	0.00269 J	0.00291 J	0.00192 J	0.00158 J	0.00144 J	0.00136 J	<0.0006
Zinc	mg/L	**0.0237**	**0.00565**	**0.00468**	<0.002	0.00216 J	0.00254 J	<0.002	**0.130**	**0.00731**	**0.0111**	**0.0177**	**0.00900**	**0.00512**	0.00279 J	**0.00425**	**0.00480**	<0.002	**0.00404**
Anions/Water Quality Parameters																			
Bicarbonate Alkalinity	mg/L	**112**	**133**	**180**	**184**	**166**	**167**	**138**	**156**	**173**	**120**	**131**	**205**	**195**	**166**	**177**	**151**	**160**	**170**
Bromide	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Carbonate Alkalinity	mg/L	<3.5	<3	<3	<3.5	<3	<3	**5.40**	<3	<3	<3.5	<3	<3	<3	<3	<3	<3	<3	<3
Chloride	mg/L	**504**	**211**	**375**	**476**	**529**	**545**	**414**	**447**	**432**	**493**	**228**	**396**	**477**	**531**	**570**	**460**	**445**	**445**
Sulfate	mg/L	**339**	**96.5**	**81.3**	**91.3**	**142**	**170**	**184**	**209**	**198**	**316**	**93.1**	**80.3**	**90.6**	**143**	**171**	**197**	**201**	**193**
Total Dissolved Solids (TDS)	mg/L	**1,100**	**524**	**884**	**1,020**	**1,010**	**1,040**	**1,020**	**1,070**	**900**	**1,190**	**532**	**896**	**195**	**1,100**	**916**	**968**	**1,180**	**1,110**
pH	SI	7.93 H	7.24 H	8.04 H	8.07 H	7.70 H	7.93 H	7.96 H	7.55 H	8.18 H	7.58 H	7.23 H	7.42 H	7.99 H	7.73 H	7.73 H	8.17 H	7.45 H	8.19 H
Sulfides																			
Hydrogen Sulfide	mg/L	<0.5	0.978 J	<0.5	<0.5	<0.5	<0.5	**1.28**	<0.5	<0.5	<0.5	0.552 J	NA	<0.5	0.850 J	<0.5	<0.5	<0.5	<0.5
Sulfide	mg/L	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	1.20 J	<0.92	<0.92	<1.2	<1.2	1.20 J	<1.2	<1.2	<1.2	<1.2	<0.92	<0.92
Volatile Organic Compounds																			
Benzene	mg/L	<0.0002	<0.000460	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000460	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	<0.0003	<0.000385	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000385	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	<0.0002	<0.000475	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000475	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	<0.0005	<0.00124	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00124	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	<0.0003	<0.000502	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000502	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	<0.0003	<0.00124	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00124	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions																			
Aliphatics >C6-C8	mg/L	<0.01	<0.1	0.00729 J	<0.0333	<0.0333	<0.167	<0.0018	<0.0018	<0.0018	<0.01	<0.1	<0.333	<0.0333	<0.167	<0.167	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	<0.01	<0.1	<0.00599	<0.0333	<0.0333	<0.167	<0.0004	<0.0004	<0.0004	<0.01	<0.1	<0.333	<0.0333	<0.167	<0.167	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	<0.002	<0.025	<0.025	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	<0.008	<0.025	<0.025	<0.008	<0.025	<0.025	<0.025	<0.025	<0.025	<0.008	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	<0.01	<0.1	<0.018	<0.0333	<0.0333	<0.167	<0.0006	<0.0006	<0.0006	<0.01	<0.1	<0.333	<0.0333	<0.167	<0.167	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	<0.004	<0.025	<0.025	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	<0.003	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	<0.009	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - pH is received at the lab outside of hold time (15 min from sampling).
< - Not Detected at the reporting limit shown.
Bolded values detected in the sample.

Table 2
Surface Water Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

LDNR Sample No.		LDNR 14									LDNR 17								
Sample Date		3/27/24	6/18/24	9/25/24	10/23/24	11/19/24	12/18/24	1/28/25	2/19/25	3/18/25	3/26/24	6/17/24	9/24/24	10/21/24	11/21/24	12/18/24	1/29/25	2/18/25	3/18/25
Sample Interval (ft)		Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**	**Bubble Site (Surface Water)**																	
Total Metals																			
Arsenic	mg/L	0.000983 J	0.000965 J	0.00109 J	0.00139 J	0.00163 J	0.000930 J	0.000707 J	0.000745 J	0.00101 J	0.000926 J	0.00111 J	0.00130 J	0.00153 J	0.00101 J	0.00117 J	0.000918 J	0.000818 J	0.000814 J
Barium	mg/L	**0.142**	**0.135**	**0.265**	**0.300**	**0.304**	**0.244**	**0.123**	**0.128**	**0.0987**	**0.114**	**0.154**	**0.294**	**0.284**	**0.294**	**0.267**	**0.137**	**0.156**	**0.0915**
Calcium	mg/L	**118**	**60.1**	**73.1**	**94.5**	**99.7**	**99.2**	**96.0**	**110**	**99.0**	**101**	**65.2**	**79.5**	**90.9**	**93.6**	**109**	**102**	**107**	**90.7**
Chromium	mg/L	0.00251 J	<0.0004	0.000980 J	0.000403 J	0.00103 J	0.000526 J	<0.0004	0.00130 J	<0.0004	<0.0004	0.000616 J	0.000846 J	0.000828 J	<0.0004	0.000890 J	<0.0004	0.000544 J	<0.0004
Iron	mg/L	0.107 J	0.0719 J	0.0196 J	0.0225 J	0.0503 J	0.0257 J	0.0323 J	0.127 J	**0.242**	0.181 J	**0.214**	0.0575 J	0.0134 J	0.0522 J	0.0812 J	0.102 J	0.0285 J	0.0773 J
Lead	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	**24.2**	**10.8**	**15.8**	**22.9**	**23.8**	**23.7**	**21.0**	**23.3**	**22.8**	**20.2**	**12.9**	**16.6**	**21.8**	**22.7**	**25.5**	**21.8**	**23.0**	**20.6**
Manganese	mg/L	**0.234**	**1.70**	**0.591**	**0.387**	**0.303**	**0.304**	**0.0324**	**0.0682**	**0.192**	**0.171**	**1.43**	**0.936**	**0.180**	**0.245**	**0.342**	**0.204**	**0.154**	**0.196**
Mercury	mg/L	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	0.00200 J	0.000802 J	0.00114 J	0.00131 J	0.00138 J	0.00129 J	0.00122 J	0.00132 J	0.00183 J	0.00122 J	0.00161 J	0.00110 J	0.00144 J	0.00106 J	**0.00299**	0.00172 J	0.00161 J	0.00113 J
Potassium	mg/L	**2.78**	**2.69**	**2.76**	**2.97**	**3.02**	**2.95**	**2.71**	**3.06**	**2.47**	**2.36**	**3.01**	**2.89**	**2.92**	**2.80**	**3.25**	**3.01**	**3.18**	**2.36**
Sodium	mg/L	**309**	**123**	**203**	**315**	**271**	**301**	**295**	**265**	**285**	**269**	**132**	**214**	**292**	**304**	**311**	**268**	**256**	**246**
Strontium	mg/L	**0.786**	**0.412**	**0.598**	**0.763**	**0.814**	**0.784**	**0.725**	**0.730**	**0.740**	**0.663**	**0.474**	**0.634**	**0.731**	**0.775**	**0.792**	**0.758**	**0.800**	**0.682**
Vanadium		0.00229 J	0.000981 J	0.00243 J	0.00331 J	0.00187 J	0.00176 J	0.00129 J	0.00140 J	0.00107 J	0.00273 J	0.00280 J	0.00234 J	0.00496 J	0.00175 J	0.00196 J	0.00255 J	0.00166 J	0.00150J
Zinc	mg/L	**0.00932**	**0.00541**	0.00287 J	**0.00623**	0.00333 J	<0.002	<0.002	<0.002	**0.0159**	**0.0156**	**0.0139**	**0.00931**	<0.002	<0.002	0.00373 J	**0.00618**	0.00338 J	**0.0896**
Anions/Water Quality Parameters																			
Bicarbonate Alkalinity	mg/L	**114**	**122**	**197**	**182**	**160**	**180**	**147**	**156**	**190**	**114**	**152**	**209**	**199**	**160**	**163**	**140**	**165**	**178**
Bromide	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Carbonate Alkalinity	mg/L	<3.5	<3	<3	<3	<3	<3	**5.80**	<3	<3	<3.5	<3	<3	<3.5	<3	<3	<3	<3	<3
Chloride	mg/L	**503**	**219**	**391**	**497**	**543**	**559**	**452**	**436**	**433**	**428**	**203**	**381**	**488**	**551**	**527**	**437**	**424**	**418**
Sulfate	mg/L	**329**	**93.7**	**81.3**	**90.6**	**146**	**171**	**199**	**197**	**197**	**292**	**96.8**	**81.4**	**91.9**	**148**	**166**	**216**	**212**	**204**
Total Dissolved Solids (TDS)	mg/L	**1,240**	**548**	**816**	**1,050**	**1,070**	**1,070**	**1,010**	**1,020**	**852**	**1,170**	**544**	**828**	**1,020**	**1,100**	1290 H	**904**	**1,130**	**1,050**
pH	SI	7.71 H	7.20 H	8.03 H	8.05 H	7.50 H	7.66 H	8.23 H	7.70 H	8.44 H	7.66 H	7.19 H	7.21 H	7.86 H	7.53 H	7.36 H	7.62 H	5.63 H	7.75 H
Sulfides																			
Hydrogen Sulfide	mg/L	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5	**1.28**	<0.5	**1.66**	**2.08**	**1.28**	0.552 J	<0.5 H	<0.5	<0.5	<0.5
Sulfide	mg/L	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<0.92	1.20 J	<1.2	1.56 J	1.96 J	1.20 J	<1.2	<1.2 H	<1.2	<0.92	<0.92
Volatile Organic Compounds																			
Benzene	mg/L	<0.0002	<0.000460	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	<0.0003	<0.000385	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	<0.0002	<0.000475	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	<0.0005	<0.00124	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	<0.0003	<0.000502	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	<0.0003	<0.00124	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions																			
Aliphatics >C6-C8	mg/L	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.167	<0.0018	<0.0018	<0.0018	<0.01	<0.1	<0.167	<0.0333	<0.0333	<0.0333	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.167	<0.0004	<0.0004	<0.0004	<0.01	<0.1	<0.167	<0.0333	<0.0333	<0.0333	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.002	<0.025	<0.025	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	<0.008	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.008	<0.025	<0.025	<0.008	<0.025	<0.025	<0.025	0.0307 J	<0.025
Aromatics >C8-C10	mg/L	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.167	<0.0006	<0.0006	<0.0006	<0.01	<0.1	<0.167	<0.0333	<0.0333	<0.0333	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.004	<0.025	<0.025	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - pH is received at the lab outside of hold time (15 min from sampling).
< - Not Detected at the reporting limit shown.
Bolded values detected in the sample.

Table 2
Surface Water Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

LDNR Sample No.		LDNR 18									LDNR 19							
Sample Date		3/26/24	6/17/24	9/25/24	10/23/24	11/19/24	12/18/24	1/29/25	2/19/25	3/19/25	3/28/24	6/19/24	9/26/24	11/21/24	12/17/24	1/27/25	2/19/25	3/19/25
Sample Interval (ft)		Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**	**Bubble Site (Surface Water)**																
Total Metals																		
Arsenic	mg/L	0.00102 J	0.000929 J	0.00150 J	0.00135 J	**0.00218**	0.00104 J	0.000648 J	0.000781 J	0.00101 J	**0.00272**	**0.00341**	**0.00808**	0.00169 J	0.00118 J	0.000965 J	0.00102 J	**0.00272**
Barium	mg/L	**0.126**	**0.129**	**0.295**	**0.282**	**0.282**	**0.261**	**0.126**	**0.142**	**0.105**	**0.0379**	**0.099**	**0.0894**	**0.144**	**0.116**	**0.0809**	**0.0701**	**0.0917**
Calcium	mg/L	**109**	**59.4**	**92.1**	**88.9**	**87.1**	**103**	**97.9**	**95.1**	**105**	**112**	**52.5**	**24.4**	**100**	**97.2**	**77.8**	**72.8**	**76.6**
Chromium	mg/L	0.00128 J	<0.0004	0.00132 J	<0.0004	0.000894 J	0.000726 J	<0.0004	0.000768 J	<0.0004	0.000985 J	0.000457 J	0.00100 J	<0.0004	0.000451 J	0.000448 J	0.000650 J	<0.0004
Iron	mg/L	0.111 J	0.105 J	0.0416 J	0.0162 J	0.0438 J	0.0654 J	0.0450 J	0.0441 J	0.0322 J	**0.769**	**0.528**	**1.06**	**0.348**	0.0613 J	**0.878**	**0.212**	**1.12**
Lead	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	**22.7**	**11.9**	**19.5**	**21.0**	**21.2**	**24.8**	**21.1**	**22.2**	**23.7**	**12.4**	**3.06**	**5.14**	**11.8**	**10.8**	**8.56**	**8.55**	**8.95**
Manganese	mg/L	**0.113**	**1.29**	**0.887**	**0.254**	**0.297**	**0.251**	**0.104**	**0.105**	**0.135**	**0.0348**	**0.444**	**0.112**	**0.122**	**0.254**	**0.282**	**0.175**	**0.388**
Mercury	mg/L	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	.0000300
Nickel	mg/L	0.00150 J	0.00106 J	0.00128 J	0.00102 J	0.00126 J	0.00118 J	0.00130 J	0.00133 J	0.00113 J	**0.00229**	<0.0006	0.00115 J	0.00154 J	0.00187 J	0.00162 J	0.00165 J	0.00175 J
Potassium	mg/L	**2.55**	**2.72**	**3.27**	**2.73**	**2.80**	**3.08**	**2.79**	**2.99**	**2.60**	**0.619**	**0.846**	**1.11**	**2.13**	**2.23**	**2.03**	**1.98**	**2.09**
Sodium	mg/L	**287**	**120**	**236**	**285**	**320**	**296**	**276**	**282**	**262**	**168**	**22.9**	**131**	**171**	**164**	**124**	**150**	**205**
Strontium	mg/L	**0.743**	**0.435**	**0.654**	**0.723**	**0.738**	**0.774**	**0.737**	**0.729**	**0.786**	**0.709**	**0.272**	**0.251**	**0.655**	**0.586**	**0.465**	**0.455**	**0.488**
Vanadium		0.00194 J	0.000779 J	0.00306 J	0.00307 J	0.00213 J	0.00196 J	0.00136 J	0.00128 J	0.00177 J	0.00378 J	0.000796 J	0.00469 J	<0.0006	<0.0006	0.000651 J	0.000741 J	0.00208 J
Zinc	mg/L	**0.0119**	**0.00578**	**0.00446**	<0.002	**0.00429**	0.00302 J	**0.00942**	<0.002	<0.002	**0.0198**	**0.0308**	**0.0185**	**0.00672**	0.00392 J	**0.00847**	**0.00629**	**0.0143**
Anions/Water Quality Parameters																		
Bicarbonate Alkalinity	mg/L	**111**	**147**	**201**	**196**	**161**	**163**	**133**	**154**	**138**	**71.4**	**160**	**67**	**138**	**154**	**194**	**196**	**252**
Bromide	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Carbonate Alkalinity	mg/L	<3.5	<3	<3	<3	<3	<3	<3	<3	<3	<3.5	<3	**16.7**	<3	<3	<3	<3	<3
Chloride	mg/L	**475**	**206**	**395**	**481**	**524**	**550**	**430**	**437**	**424**	**171**	**23.7**	**184**	**220**	**207**	**157**	**194**	**257**
Sulfate	mg/L	**322**	**99.3**	**82.8**	**90.9**	**156**	**169**	**204**	**214**	**199**	**478**	**24.4**	**26.4**	**290**	**281**	**158**	**136**	**90.8**
Total Dissolved Solids (TDS)	mg/L	**1,130**	**512**	**828**	**1,090**	**1,000**	1190 H	**1,020**	**1,060**	**1,020**	**864**	**182**	**444**	**724**	**632**	**616**	**672**	**668**
pH	SI	7.85 H	7.29 H	8.06 H	8.05 H	7.73 H	7.50 H	7.74 H	7.75 H	7.94 H	8.13 H	7.35 H	9.11 H	7.48 H	7.75 H	8.09 H	7.46 H	7.83 H
Sulfides																		
Hydrogen Sulfide	mg/L	**1.15**	**2.51**	NA	<0.5	0.638 J	<0.5	<0.5	<0.5	<0.5	<0.5	**1.83**	<0.5	**1.62**	**1.62**	<0.5	<0.5	<0.5
Sulfide	mg/L	<1.2	**2.36**	1.20 J	<1.2	<1.2	<1.2	<1.2	<0.92	<0.92	<1.2	1.72 J	<1.2	1.52 J	1.52 J	<1.2	<0.92	<0.92
Volatile Organic Compounds																		
Benzene	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000460	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000385	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000475	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00124	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000502	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00124	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions																		
Aliphatics >C6-C8	mg/L	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0333	<0.0018	<0.0018	<0.0018	<0.01	<0.1	<0.167	<0.333	<0.167	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	<0.01	<0.1	<0.0333	<0.0333	0.0377 B J	<0.0333	<0.0004	<0.0004	<0.0004	<0.01	<0.1	<0.167	<0.333	<0.167	<0.0004	<0.0004	0.000562 J
Aliphatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	**0.0148**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	**0.0278**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.008	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	<0.01	<0.1	<0.0333	<0.0333	0.0333 J5	<0.0333	<0.0006	<0.0006	<0.0006	<0.01	<0.1	<0.167	<0.333	<0.167	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - pH is received at the lab outside of hold time (15 min from sampling).
< - Not Detected at the reporting limit shown.
Bolded values detected in the sample.

Table 2
Surface Water Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

LDNR Sample No.		LDNR 21									LDNR 22								
Sample Date		3/26/24	6/17/24	9/25/24	10/23/24	11/21/24	12/18/24	1/29/25	2/19/25	3/19/25	3/26/24	6/18/24	9/24/24	10/22/24	11/19/24	12/18/24	1/29/25	2/19/25	3/19/25
Sample Interval (ft)		Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**	**Bubble Site (Surface Water)**																	
Total Metals																			
Arsenic	mg/L	0.000873 J	0.000974 J	0.00118 J	0.00142 J	0.00101 J	0.00114 J	0.000606 J	0.000822 J	0.000910 J	0.000841 J	0.000963 J	0.00126 J	0.00145 J	0.00165 J	0.00110 J	0.000687 J	0.000968 J	0.000822 J
Barium	mg/L	**0.126**	**0.143**	**0.293**	**0.281**	**0.279**	**0.266**	**0.130**	**0.138**	**0.0979**	**0.121**	**0.131**	**0.293**	**0.291**	**0.310**	**0.259**	**0.119**	**0.139**	**0.0910**
Calcium	mg/L	**110**	**64.4**	**81.6**	**89.7**	**88.7**	**109**	**101**	**108**	**95.2**	**102**	**61.3**	**77.6**	**94.7**	**97.6**	**105**	**89.2**	**105**	**87.9**
Chromium	mg/L	0.00239 J	0.000634 J	0.00101 J	<0.0004	<0.0004	0.000620 J	<0.0004	0.00160 J	<0.0004	<0.0004	<0.0004	0.000733 J	0.00103 J	0.00139 J	0.000910 J	<0.0004	0.00160 J	<0.0004
Iron	mg/L	0.145 J	0.125 J	0.0336 J	0.0254 J	0.0268 J	0.0269 J	0.0473 J	0.0407 J	0.0316 J	0.0693 J	0.0807 J	0.0325 J	0.0502 J	0.0315 J	0.0244 J	0.0401 J	0.0581 J	0.0292 J
Lead	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	**23.0**	**13.0**	**17.5**	**21.0**	**22.0**	**25.9**	**21.2**	**22.1**	**22.9**	**21.1**	**11.5**	**16.1**	**22.4**	**24.5**	**24.9**	**19.7**	**22.6**	**22.5**
Manganese	mg/L	**0.152**	**1.450**	**0.973**	**0.283**	**0.253**	**0.265**	**0.101**	**0.124**	**0.117**	**0.12**	**1.25**	**0.910**	**0.246**	**0.233**	**0.260**	**0.0924**	**0.121**	**0.113**
Mercury	mg/L	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	**0.00219**	0.00112 J	0.00153 J	0.00117 J	0.00101 J	0.00135 J	0.00132 J	0.00132 J	0.00113 J	**0.0094**	0.000872 J	0.00153 J	0.00140 J	0.00131 J	0.00138 J	0.00112 J	0.00139 J	0.00100 J
Potassium	mg/L	**2.53**	**2.99**	**3.01**	**2.74**	**2.73**	**3.25**	**2.89**	**2.95**	**2.49**	**2.35**	**2.74**	**2.90**	**3.00**	**3.11**	**3.13**	**2.58**	**2.94**	**2.45**
Sodium	mg/L	**296**	**133**	**244**	**298**	**285**	**315**	**253**	**279**	**265**	**268**	**120**	**236**	**291**	**362**	**314**	**230**	**284**	**266**
Strontium	mg/L	**0.741**	**0.475**	**0.653**	**0.703**	**0.734**	**0.798**	**0.763**	**0.692**	**0.734**	**0.690**	**0.427**	**0.608**	**0.757**	**0.811**	**0.780**	**0.694**	**0.696**	**0.685**
Vanadium		0.00254 J	0.00108 J	0.00208 J	0.00396 J	0.00167 J	0.00195 J	0.00151 J	0.00172 J	0.00167 J	0.00232 J	0.00101 J	0.00225 J	0.00400 J	0.00180 J	0.00194 J	0.00143 J	0.00160 J	0.00170 J
Zinc	mg/L	**0.0319**	**0.00608**	**0.00863**	0.00298 J	0.00342 J	**0.0113**	**0.00435**	0.00385 J	<0.002	**0.00793**	0.00268 J	0.00351 J	**0.00828**	**0.00554**	0.00209 J	0.00334 J	**0.136**	<0.002
Anions/Water Quality Parameters																			
Bicarbonate Alkalinity	mg/L	**106**	**145**	**209**	**192**	**161**	**160**	**137**	**145**	**138**	**108**	**132**	**188**	**191**	**167**	**167**	**138**	**152**	**134**
Bromide	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Carbonate Alkalinity	mg/L	<3.5	<3	<3	<3	<3	<3	<3	<3	<3	<3.5	<3	<3	<3.5	<3	<3	3.20 J	<3	<3
Chloride	mg/L	**460**	**205**	**386**	**488**	**549**	**536**	**431**	**438**	**418**	**476**	**206**	**348**	**491**	**524**	**534**	**449**	**433**	**418**
Sulfate	mg/L	**312**	**99.6**	**82.1**	**90.8**	**152**	**164**	**201**	**210**	**197**	**320**	**99.5**	**81.4**	**91.8**	**142**	**162**	**201**	**205**	**195**
Total Dissolved Solids (TDS)	mg/L	**1,220**	**556**	**868**	**980**	**1,020**	1240 H	**1,030**	**2,260**	**1,020**	**1,250**	**572**	**868**	**1,020**	**1,120**	1260 H	**1,040**	**1,000**	**920**
pH	SI	7.82 H	7.20 H	7.36 H	8.04 H	7.66 H	7.60 H	7.89 H	7.77 H	7.86 H	7.82 H	7.29 H	7.40 H	8.03 H	7.78 H	7.75 H	8.12 H	7.84 H	7.92 H
Sulfides																			
Hydrogen Sulfide	mg/L	<0.5	<0.5	NA	**2.51**	**1.62**	<0.5 H	<0.5	<0.5	<0.5	<0.5	**1.19**	**1.02**	<0.5	<0.5	<0.5 H	<0.5	<0.5	<0.5
Sulfide	mg/L	<1.2	<1.2	<1.2	**2.36**	1.52 J	<1.2 H	<1.2	<0.92	<0.92	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2 H	<1.2	<0.92	<0.92
Volatile Organic Compounds																			
Benzene	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000460	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000385	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000475	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00124	<0.0005	<0.0005	<0.0005	<0.0005	0.0010 J	<0.0005	<0.0005
o-Xylene	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000502	<0.0003	<0.0003	<0.0003	<0.0003	0.00055 J	<0.0003	<0.0003
Xylenes, Total	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00124	<0.0003	<0.0003	<0.0003	<0.0003	0.0016 J	<0.0003	<0.0003
TPH Fractions																			
Aliphatics >C6-C8	mg/L	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0333	<0.0018	<0.0018	<0.0018	<0.01	<0.1	<0.167	<0.0333	<0.0333	<0.0333	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0333	<0.0004	<0.0004	<0.0004	<0.01	<0.1	<0.167	<0.0333	<0.0333	<0.0333	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.002	<0.025	<0.025	**0.0227**	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	<0.008	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.008	<0.025	0.0302 J	<0.008	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0333	<0.0006	<0.0006	<0.0006	<0.01	<0.1	<0.167	<0.0333	<0.0333	<0.0333	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.004	<0.025	<0.025	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - pH is received at the lab outside of hold time (15 min from sampling).
< - Not Detected at the reporting limit shown.
Bolded values detected in the sample.

Table 2
Surface Water Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

LDNR Sample No.		LDNR 23									LDNR 24								
Sample Date		3/27/24	6/18/24	9/25/24	10/23/24	11/21/24	12/18/24	1/29/25	2/24/25	3/20/25	3/26/24	6/17/24	9/23/24	10/21/24	11/20/24	12/17/24	1/28/25	2/18/25	3/17/25
Sample Interval (ft)		Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**	**Bubble Site (Surface Water)**																	
Total Metals																			
Arsenic	mg/L	0.00106 J	0.00106 J	0.00142 J	0.00146 J	0.00108 J	0.00112 J	0.000674 J	0.000731 J	0.00108 J	0.00105 J	0.000943 J	0.00180 J	**0.00268**	0.00116 J	**0.00295**	0.000873 J	0.000780 J	0.000945 J
Barium	mg/L	**0.147**	**0.151**	**0.307**	**0.302**	**0.292**	**0.247**	**0.123**	**0.128**	**0.103**	**0.122**	**0.118**	**0.320**	**0.395**	**0.315**	**0.362**	**0.173**	**0.155**	**0.0864**
Calcium	mg/L	**126**	**63.5**	**85.4**	**89.1**	**92.6**	**98.4**	**95.0**	**97.9**	**120**	**99.7**	**58.3**	**84.2**	**89.1**	**89.6**	**103**	**97.9**	**98.0**	**88.9**
Chromium	mg/L	0.000831 J	0.000514 J	0.00112 J	<0.0004	0.000472 J	0.000536 J	<0.0004	0.000462 J	<0.0004	<0.0004	0.000559 J	0.000954 J	0.00144 J	0.000423 J	0.00105 J	0.000713 J	0.000434 J	0.000573 J
Iron	mg/L	**0.245**	0.104 J	0.0337 J	0.0248 J	0.0978 J	0.0293 J	0.0425 J	0.0944 J	0.0291 J	**0.554**	0.0953 J	0.151 J	**0.463**	0.179 J	0.0602 J	0.0440 J	0.0383 J	**0.230**
Lead	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.00198 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	**25.7**	**11.5**	**18.3**	**21.7**	**22.9**	**23.6**	**20.7**	**20.9**	**21.6**	**19.5**	**10.9**	**17.6**	**21.2**	**21.1**	**24.4**	**22.0**	**21.3**	**19.8**
Manganese	mg/L	**0.148**	**2.08**	**0.888**	**0.446**	**0.318**	**0.272**	**0.138**	**0.112**	**0.158**	**0.177**	**0.809**	**1.07**	**1.10**	**0.329**	**0.872**	**0.327**	**0.133**	**0.117**
Mercury	mg/L	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	0.00155 J	0.000936 J	0.00109 J	0.00119 J	0.00142 J	0.00129 J	0.00109 J	0.00117 J	0.00105 J	0.00144 J	0.000800 J	0.00185 J	**0.00243**	0.000945 J	**0.00206**	0.00158 J	0.00129 J	**0.00302**
Potassium	mg/L	**2.91**	**2.82**	**3.19**	**2.87**	**2.84**	**3.00**	**2.72**	**2.88**	**2.37**	**2.37**	**2.62**	**3.88**	**3.27**	**2.83**	**3.26**	**2.97**	**2.92**	**2.35**
Sodium	mg/L	**327**	**121**	**213**	**299**	**297**	**293**	**267**	**225**	**275**	**272**	**114**	**262**	**239**	**288**	**325**	**318**	**268**	**248**
Strontium	mg/L	**0.849**	**0.436**	**0.668**	**0.742**	**0.748**	**0.762**	**0.721**	**0.752**	**0.799**	**0.666**	**0.394**	**0.626**	**0.724**	**0.768**	**0.813**	**0.759**	**0.754**	**0.677**
Vanadium		0.00182 J	0.00105 J	0.00254 J	0.00292 J	0.00249 J	0.00203 J	0.00133 J	0.00175 J	0.00203 J	0.00331 J	0.00151 J	0.00451 J	**0.00807**	0.00158 J	0.00462 J	0.00150 J	0.00134 J	0.000960 J
Zinc	mg/L	<0.002	0.00249 J	**0.00491**	0.00284 J	**0.00421**	0.00273 J	0.00356 J	<0.002	0.00264 J	**0.102**	**0.00824**	**0.00409**	**0.0412**	**0.00454**	**0.00489**	<0.002	**0.00418**	0.00380 J
Anions/Water Quality Parameters																			
Bicarbonate Alkalinity	mg/L	**112**	**126**	**197**	**183**	**155**	**164**	**136**	**150**	**146**	**111**	**127**	**184**	**217**	**159**	**154**	**149**	**162**	**195**
Bromide	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Carbonate Alkalinity	mg/L	<3.5	<3	<3	<3	<3	<3	**6.80**	<3	<3	<3.5	<3	<3	<3.5	<3	<3	<3	<3	<3
Chloride	mg/L	**489**	**201**	**388**	**478**	**549**	**545**	**448**	**404**	**426**	**480**	**195**	**378**	**516**	**529**	**581**	**422**	**441**	**422**
Sulfate	mg/L	**328**	**95.6**	**79.9**	**89.6**	**150**	**170**	**197**	**209**	**196**	**323**	**94.6**	**76.9**	**76.3**	**143**	**181**	**184**	**202**	**194**
Total Dissolved Solids (TDS)	mg/L	**1,250**	**540**	**780**	**1,070**	**936**	**1,040**	**1,030**	**1,050**	**1,070**	**1,150**	**524**	**840**	**1,110**	**1,190**	**1,060**	**976**	**1,090**	**612**
pH	SI	7.77 H	7.25 H	8.07 H	7.97 H	7.40 H	7.33 H	8.21 H	7.21 H	7.94 H	7.45 H	7.12 H	7.70 H	7.31 H	7.23 H	7.19 H	7.66 H	6.20 H	7.68 H
Sulfides																			
Hydrogen Sulfide	mg/L	<0.5	0.978 J	NA	**2.08**	0.552 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**7.48**	**5.52**	**1.62**	<0.5	**1.28**	<0.5	**1.28**
Sulfide	mg/L	<1.2	<1.20	1.96 J	1.96 J	<1.2	<1.2	<1.2	<0.92	<0.92	<1.2	<1.2	**7.04**	**5.20**	1.52 J	<1.2	1.20 J	<0.92	1.20 J
Volatile Organic Compounds																			
Benzene	mg/L	<0.0002	<0.000460	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000460	**0.0013**	**0.0016**	0.00072 J	0.00050 J	0.00061 J	0.00049 J	0.00040 J
Ethylbenzene	mg/L	<0.0003	<0.000385	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000385	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	<0.0002	<0.000475	0.00034 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000475	**0.0012**	**0.0022**	0.00073 J	0.00066 J	0.00069 J	0.00054 J	0.00046 J
m,p-Xylene	mg/L	<0.0005	<0.00124	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00124	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	<0.0003	<0.000502	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000502	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	<0.0003	<0.00124	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00124	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions																			
Aliphatics >C6-C8	mg/L	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.167	<0.0018	<0.0018	<0.0018	**0.0125**	<0.1	**0.526**	**0.588**	**0.196**	<0.167	**0.0652**	**0.0378**	**0.0249**
Aliphatics >C8-C10	mg/L	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.167	<0.0004	<0.0004	<0.0004	<0.01	<0.1	0.0114 J	<0.0333	0.0379 BJ	<0.167	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.002	<0.025	<0.025	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	<0.008	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.008	0.0371 J	0.0252 J	<0.008	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C8-C10	mg/L	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.167	<0.0006	<0.0006	<0.0006	<0.01	<0.1	<0.018	<0.0333	<0.0333	<0.167	0.00879 J	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.004	<0.025	<0.025	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - pH is received at the lab outside of hold time (15 min from sampling).
< - Not Detected at the reporting limit shown.
Bolded values detected in the sample.

Table 2
Surface Water Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

LDNR Sample No.		LDNR 25									LDNR 26								
Sample Date		3/27/24	6/18/24	9/25/24	10/22/24	11/21/24	12/18/24	1/28/25	2/24/25	3/18/25	3/26/24	6/18/24	9/24/24	10/21/24	11/20/24	12/17/24	1/28/25	2/17/25	3/17/25
Sample Interval (ft)		Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**	**Bubble Site (Surface Water)**																	
Total Metals																			
Arsenic	mg/L	0.000945 J	0.00103 J	0.00119 J	0.00139 J	0.00101 J	0.00101 J	0.000678 J	0.000694 J	0.000942 J	0.00166 J	0.00186 J	0.00172 J	0.00151 J	0.00178 J	**0.00203**	0.00138 J	0.00164 J	0.00154 J
Barium	mg/L	**0.145**	**0.137**	**0.264**	**0.275**	**0.287**	**0.241**	**0.127**	**0.118**	**0.0925**	**0.400**	**0.461**	**0.375**	**0.424**	**0.456**	**0.452**	**0.417**	**0.478**	**0.453**
Calcium	mg/L	**119**	**59.4**	**72.9**	**89.9**	**94.0**	**102**	**96.5**	**96.5**	**96.2**	**8.50**	**9.36**	**8.65**	**8.63**	**8.95**	**8.72**	**8.79**	**9.77**	**8.70**
Chromium	mg/L	0.000726 J	<0.0004	0.000722 J	0.000562 J	<0.0004	0.000541 J	0.00128 J	<0.0004	<0.0004	<0.0004	0.000502 J	0.000524 J	0.000875 J	<0.0004	0.000803 J	<0.0004	0.000413 J	<0.0004
Iron	mg/L	0.0721 J	0.0858 J	0.0423 J	0.0203 J	0.0206 J	0.0269 J	0.0532 J	0.0801 J	0.106 J	0.149 J	**0.208**	0.0748 J	0.111 J	0.182 J	0.121 J	<0.012	0.147 J	0.106 J
Lead	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.00132 J	<0.0006	<0.0006	0.000709 J	<0.0006	<0.0006	<0.0006	<0.0006
Magnesium	mg/L	**24.7**	**10.6**	**15.2**	**22.4**	**23.2**	**24.2**	**21.2**	**20.5**	**22.6**	**1.53**	**1.68**	**1.63**	**1.66**	**1.66**	**1.60**	**1.67**	**1.80**	**1.64**
Manganese	mg/L	**0.224**	**1.59**	**0.557**	0.00128 J	**0.135**	**0.192**	**0.0879**	**0.0474**	**0.154**	**0.0264**	**0.0468**	**0.0256**	**0.0358**	**0.047**	**0.0383**	0.00483 J	**0.0216**	**0.00919**
Mercury	mg/L	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003 J	.0000420 J	.0000300 J
Nickel	mg/L	0.00139 J	0.000804 J	0.00121 J	0.00128 J	0.00100 J	0.00120 J	0.00115 J	0.000989 J	0.00128 J	0.000764 J	0.000969 J	0.000604 J	0.000764 J	0.000728 J	0.00127 J	0.000991 J	0.000862 J	0.000899 J
Potassium	mg/L	**2.79**	**2.63**	**2.72**	**3.04**	**2.85**	**3.06**	**2.77**	**2.79**	**2.51**	**1.15**	**1.33**	**1.27**	**1.29**	**1.34**	**1.33**	**1.33**	**1.39**	**1.26**
Sodium	mg/L	**313**	**126**	**229**	**326**	**320**	**319**	**233**	**230**	**264**	**27.6**	**30.4**	**29.9**	**31.7**	**31.4**	**30.9**	**31.2**	**38.9**	**31.5**
Strontium	mg/L	**0.819**	**0.409**	**0.575**	**0.743**	**0.782**	**0.797**	**0.728**	**0.707**	**0.747**	**0.123**	**0.130**	**0.138**	**0.136**	**0.139**	**0.133**	**0.142**	**0.152**	**0.134**
Vanadium		0.00214 J	0.00123 J	0.00214 J	0.00331 J	0.00187 J	0.00191 J	0.00121 J	0.00118 J	0.00121 J	0.00314 J	0.00297 J	0.000908 J	0.00141 J	0.00165 J	0.000967 J	<0.0006	0.00155 J	<0.0006
Zinc	mg/L	0.00222 J	**0.00412**	0.00299 J	<0.002	**0.0331**	**0.00975**	<0.002	<0.002	<0.002	**0.00694**	**0.00635**	0.00267 J	**0.150**	0.00356 J	**0.00405**	0.00282 J	**0.168**	**0.00416**
Anions/Water Quality Parameters																			
Bicarbonate Alkalinity	mg/L	**111**	**130**	**205**	**183**	**151**	**167**	**139**	**148**	**225**	**38.3**	**36.3**	**37.7**	**38.3**	**38.9**	**39.4**	**38.1**	**40.4**	**45.0**
Bromide	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Carbonate Alkalinity	mg/L	<3.5	<3	<3	<3	4.60 J	<3	**5.60**	<3	<3	<3.5	<3	<3	<3.5	<3	<3	<3	<3	<3
Chloride	mg/L	**509**	**230**	**394**	**487**	**556**	**587**	**450**	**406**	**433**	**33.6**	**31.2**	**34.5**	**36.3**	**37.0**	**37.1**	**36.5**	**36.8**	**36.4**
Sulfate	mg/L	**340**	**92.3**	**80.1**	**91.7**	**149**	**188**	**199**	**204**	**196**	**24.6**	**20.2**	**18.6**	**19.6**	**20.3**	**20.2**	**22.0**	**22.6**	**20.7**
Total Dissolved Solids (TDS)	mg/L	**1,140**	**552**	**1,390**	**1,050**	**1,180**	**1,020**	**996**	**984**	**960**	**150**	**100**	**120**	**138**	**136**	**250**	**132**	**124**	**174**
pH	SI	7.75 H	7.21 H	7.46 H	8.18 H	7.91 H	8.00 H	7.53 H	7.70 H	8.19 H	7.50 H	7.56 H	7.56 H	7.71 H	7.53 H	7.23 H	7.73 H	7.92 H	7.44 H
Sulfides																			
Hydrogen Sulfide	mg/L	<0.5	**1.83**	**3.40**	**1.44**	**1.62**	0.552 J	**1.49**	<0.5	<0.5	<0.5	<0.5	<0.5	**3.40**	<0.5	<0.5	<0.5	<0.5	<0.5
Sulfide	mg/L	<1.2	1.72 J	**3.20**	1.36 J	1.52 J	<1.2	1.40 J	<0.92	<0.92	<1.2	<1.2	<1.2	**3.20**	<1.2	<1.2	<1.2	<0.92	<0.92
Volatile Organic Compounds																			
Benzene	mg/L	<0.0002	<0.000460	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000460	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Ethylbenzene	mg/L	<0.0003	<0.000385	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000385	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	<0.0002	<0.000475	0.00031 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.000475	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	<0.0005	<0.00124	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00124	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	<0.0003	<0.000502	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.000502	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	<0.0003	<0.00124	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00124	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions																			
Aliphatics >C6-C8	mg/L	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.167	<0.0018	<0.0018	<0.0018	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0333	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.167	<0.0004	<0.0004	<0.0004	<0.01	<0.1	<0.0333	<0.0333	0.0354 BJ	0.0336 J	<0.0004	<0.0004	<0.0004
Aliphatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	<0.002	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.0273 J	<0.002	<0.025	<0.025	<0.002	<0.025	0.0323 J	<0.025	<0.025	<0.025
Aliphatics >C16-C35	mg/L	<0.008	<0.025	<0.025	<0.025	<0.025	<0.025	0.0558 J	<0.025	0.0303 J	<0.008	<0.025	<0.025	<0.008	<0.025	**0.131**	0.0558 J	<0.025	<0.025
Aromatics >C8-C10	mg/L	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.167	<0.0006	<0.0006	<0.0006	<0.01	<0.1	<0.0333	<0.0333	<0.0333	<0.0333	<0.0006	<0.0006	<0.0006
Aromatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.001	<0.025	<0.025	**0.00826**	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	<0.004	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.004	<0.025	<0.025	**0.00867**	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.003	<0.025	<0.025	<0.003	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.009	<0.025	<0.025	<0.009	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - pH is received at the lab outside of hold time (15 min from sampling).
< - Not Detected at the reporting limit shown.
Bolded values detected in the sample.

Table 2
Surface Water Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

LDNR Sample No.		PPG 7B BS							
Sample Date		3/28/24	6/19/24	9/26/24	11/21/24	12/16/24	1/27/25	2/19/25	3/19/25
Sample Interval (ft)		Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**	**Bubble Site (Surface Water)**							
Total Metals									
Arsenic	mg/L	0.00136 J	<0.002	<0.002	<0.0004	0.00197 J	<0.02	0.00363 J	<0.008
Barium	mg/L	**1.48**	**2.38**	**0.345**	**0.368**	**0.548**	**1.41**	**1.16**	**1.59**
Calcium	mg/L	**46.4**	**62.3**	**37.9**	**34.4**	**53.1**	**224**	**200**	**240**
Chromium	mg/L	**0.00659**	0.00373 J	0.00525 J	0.00113 J	<0.0004	<0.02	**0.0440**	<0.008
Iron	mg/L	**1.29**	**2.4**	0.285 J	0.168 J	0.0552 J	<0.6	0.251 J	0.310 J
Lead	mg/L	0.00110 J	0.00442 J	<0.003	0.000920 J	<0.003	<0.03	<0.006	<0.012
Magnesium	mg/L	**1.97**	**1.90**	**1.19**	**1.66**	**1.57**	4.63 J	4.13 J	**5.22**
Manganese	mg/L	**0.215**	**0.333**	**0.21**	**0.342**	**0.316**	**0.599**	**0.527**	**0.648**
Mercury	mg/L	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Nickel	mg/L	**0.0067**	0.00728 J	0.00572 J	**0.0057**	**0.00589**	<0.03	**0.0206**	0.0193 J
Potassium	mg/L	**1.00**	**1.30**	**1.51**	**1.96**	**1.97**	5.08 J	4.55 J	**6.88**
Sodium	mg/L	**5,420**	**11,400**	**4,080**	**1,990**	**9,010**	**42,800**	**41,300**	**50,500**
Strontium	mg/L	**0.606**	**0.630**	**0.342**	**0.290**	**0.393**	**1.09**	**0.801**	**1.10**
Vanadium		0.00447 J	<0.003	<0.003	<0.0006	0.00316 J	<0.03	0.0174 J	<0.012
Zinc	mg/L	**0.259**	**0.618**	**0.621**	**0.883**	**0.921**	**1.24**	**1.07**	**1.04**
Anions/Water Quality Parameters									
Bicarbonate Alkalinity	mg/L	**152**	**153**	**109**	**98.5**	**104**	**131**	**130**	**138**
Bromide	mg/L	<0.3	**5.87**	<0.150	<0.06	<0.3	<1.5	<1.5	<1.5
Carbonate Alkalinity	mg/L	<3.5	<3	<3	<3	<3	<3	<3	<3
Chloride	mg/L	**8,540**	**16,300**	**5,810**	**3,410**	**16,100**	**62,000**	**60,900**	**67,000**
Sulfate	mg/L	**24.9**	**40.6**	**25.5**	**15.9**	**63.8**	**311**	**340**	**388**
Total Dissolved Solids (TDS)	mg/L	**12,300**	**23,600**	**6,060**	**4,820**	**26,200**	**97,300**	**94,500**	**92,700**
pH	SI	7.93 H	8.11 H	7.98 H	7.45 H	7.48 H	7.63 H	7.52 H	7.69 H
Sulfides									
Hydrogen Sulfide	mg/L	<0.5	<0.5	NA	**1.62**	<0.5	<0.5	<0.5	<0.5
Sulfide	mg/L	<1.2	<1.2	<1.2	1.52 J	<1.2	<1.2	<0.92	<0.92
Volatile Organic Compounds									
Benzene	mg/L	0.00038 J	<0.000460	<0.0002	0.00026 J	<0.0002	0.00020 J	<0.0002	<0.0002
Ethylbenzene	mg/L	<0.0003	<0.000385	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Toluene	mg/L	<0.0002	<0.000475	<0.0002	0.0042 J	<0.0002	<0.0002	<0.0002	<0.0002
m,p-Xylene	mg/L	<0.0005	<0.00124	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
o-Xylene	mg/L	<0.0003	0.000531 J	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Xylenes, Total	mg/L	<0.0003	<0.00124	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
TPH Fractions									
Aliphatics >C6-C8	mg/L	<0.01	<0.1	<0.333	<0.833	<0.333	<0.0018	<0.0018	<0.0018
Aliphatics >C8-C10	mg/L	<0.01	<0.1	<0.333	<0.833	<0.333	**0.00527**	0.00351 J	0.00363 J
Aliphatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aliphatics >C12-C16	mg/L	**0.0242**	<0.025	<0.025	<0.025	<0.025	0.0265 J	<0.025	<0.025
Aliphatics >C16-C35	mg/L	**0.0992**	<0.025	<0.025	**0.135**	**0.141**	**0.194**	0.0806 J	<0.025
Aromatics >C8-C10	mg/L	<0.01	<0.1	<0.333	<0.833	<0.333	**0.0658**	**0.0414**	**0.0441**
Aromatics >C10-C12	mg/L	<0.001	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C12-C16	mg/L	**0.0137**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C16-C21	mg/L	**0.0145**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Aromatics >C21-C35	mg/L	**0.0217**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Notes
J - Estimated Value reported below the detection limit.
H - pH is received at the lab outside of hold time (15 min from sampling).
< - Not Detected at the reporting limit shown.
Bolded values detected in the sample.

Table 3
Central Lake Water Column Profile
Sulphur Dome
Calcasieu Parish, Louisiana

4/5/2024	10:15	Water Column Station (water depth 5.3')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.87	2212	92	23.3	1636
3	7.69	2211	102	22.9	1639
5	7.63	2271	-172	23.4	1684

4/12/2024	7:38	Water Column Station (water depth 5.5')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.57	2021	135	20.5	1498
3	7.45	2034	116	20.0	1506
5	7.53	2031	-38	20.7	1503

4/19/2024	8:00	Water Column Station (water depth 5.3')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.92	2125	37	26.0	1566
3	7.68	2126	4	26.2	1568
5	7.16	2197	-254	26.0	1625

4/26/2024	9:52	Water Column Station (water depth 5.3')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.69	2181	107	25.5	1612
3	7.62	2169	103	25.3	1605
5	7.45	2199	-104	25.1	1626

5/3/2024	11:45	Water Column Station (water depth 6.6')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.49	1761	81	23.7	1280
3	7.57	1795	62	25.0	1305
5	7.42	1823	-104	23.9	1233

5/10/2024	10:33	Water Column Station (water depth 6.8')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.39	1503	29	27.8	1074
3	7.34	1589	-21	27.4	1141
5	6.96	2119	-251	26.8	1557

5/16/2024	8:20	Water Column Station (water depth 6.9')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.37	1461	50	26.8	1042
3	7.19	1465	7	26.6	1045
5	6.88	1868	-225	26.2	1362

5/24/2024	8:10	Water Column Station (water depth 6.6')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.49	1314	120	27.7	929.4
3	7.46	1324	-15	27.9	937.1
5	7.12	1730	-226	26.1	1252

5/31/2024	7:34	Water Column Station (water depth 6.1')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.41	1282	80	25.4	907.2
3	7.29	1283	26	25.7	908.7
5	7.13	1420	-195	25.9	1011

6/7/2024	8:41	Water Column Station (water depth 6.6')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.39	1079	73	28.0	756.0
3	7.17	1051	-48	27.9	736.0
5	6.48	1547	-223	28.2	1107

Table 3
Central Lake Water Column Profile
Sulphur Dome
Calcasieu Parish, Louisiana

6/14/2024	7:40	Water Column Station (water depth 6.0')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.40	1070	24	28.7	753.0
3	7.35	1063	-53	28.8	29.3
5	7.12	1540	-185	29.3	1098

6/21/2024	9:03	Water Column Station (water depth 5.6')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.42	1154	64	29.1	810.2
3	7.44	1152	44	29.2	808.6
5	7.34	1207	-50	29.4	848.2

6/28/2024	10:31	Water Column Station (water depth 5.7')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.39	1220	-9	32.0	845.3
3	7.34	1208	-36	32.0	844.3
5	7.18	1232	-122	32.1	861.7

7/5/2024	10:00	Water Column Station (water depth 5.3')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.31	1231	102	31	892.3
3	7.26	1268	-25	31.2	891.1
5	6.90	1527	-203	30.9	1088

7/12/2024	10:00	Water Column Station (water depth 5.3')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.36	1344	101	29.1	947.6
3	7.35	1341	69	29.5	947.2
5	7.17	1438	-154	29.8	1020

7/18/2024	12:49	Water Column Station (water depth 5.1')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.41	1421	77	30.8	1004
3	7.33	1414	43	30.5	998.5
5	7.13	1463	-93	30.6	1036

8/2/2024	8:22	Water Column Station (water depth 5.3')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.25	1267	90	30.7	892.5
3	7.22	1256	-69	30.4	885.6
5	7.08	1566	-161	30.0	1117

8/16/2024	10:26	Water Column Station (water depth 5.0')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.33	1459	122	33.3	1031
3	7.24	1457	-16	33.4	1028
5	7.06	1571	-106	33.9	1115

8/23/2024	8:05	Water Column Station (water depth 5.3')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.35	1555	82	30.1	1109
3	7.33	1552	50	30.3	1106
5	6.98	1639	-89	30.3	1174

8/30/2024	12:45	Water Column Station (water depth 5.3')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.37	1592	90	27.5	1144
3	7.36	1600	30	27.8	1144
5	7.28	1612	51	277	1156

Table 3
Central Lake Water Column Profile
Sulphur Dome
Calcasieu Parish, Louisiana

9/6/2024	7:50	Water Column Station (water depth 5.8')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.34	1596	156	26.6	1145
3	7.36	1541	42	27.1	1103
5	7.23	1569	38	27.2	1123

9/12/2024	8:15	Water Column Station (water depth 5.1')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.25	1521	228	25.4	1092
3	7.23	1519	130	25.6	1090
5	7.19	1560	62	25.8	1121

9/20/2024	10:00	Water Column Station (water depth 5.0')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.31	1627	176	30.4	1168
3	7.29	1618	117	30.6	1157
5	6.79	1867	-99	31.0	1352

9/27/2024	8:50	Water Column Station (water depth 5.0')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.27	1719	237	26.7	1244
3	7.38	1715	178	26.5	1238
5	7.31	1744	125	26.9	1260

10/4/2024	7:30	Water Column Station (water depth 5.0')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.60	1813	262	26.6	1315
3	7.45	1806	204	27.0	1306
5	7.49	1833	140	26.8	1328

#######	13:30	Water Column Station (water depth 5.0')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.80	1900	196	26.7	1390
3	7.69	1870	174	26.1	1363
5	7.70	1893	90	26.4	1384

#######	9:22	Water Column Station (water depth 4.5')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.65	1943	254	19.5	1437
3	7.62	1959	218	19.5	1443
5	7.62	1985	142	19.5	1464

#######	9:08	Water Column Station (water depth 4.5')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.91	2028	189	23.6	1493
3	7.70	2023	94	24.2	1487
5	7.77	2028	116	25.0	1489

11/1/2024	9:30	Water Column Station (water depth 4.5')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.56	2078	262	24.7	1531
3	7.44	2074	219	24.8	1528
5	7.54	2078	168	24.7	1531

11/8/2024	8:00	Water Column Station (water depth 4.9')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.56	2034	258	25.2	1498
3	7.65	2030	226	25.3	1492
5	7.59	2035	170	25.3	1496

Table 3
Central Lake Water Column Profile
Sulphur Dome
Calcasieu Parish, Louisiana

#######	7:30	Water Column Station (water depth 5.3')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.29	2041	141	19.4	1514
3	7.25	2032	97	19.9	1511
5	7.19	2067	84	20.0	1534

#######	9:00	Water Column Station (water depth 5.0')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.45	2147	279	17.6	1608
3	7.39	2095	236	17.4	1559
5	7.35	2094	195	17.2	1560

#######	12:00	Water Column Station (water depth 5.1')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.71	2230	263	22.3	1657
3	7.62	2161	260	20.9	1595
5	7.54	2128	187	21.2	1579

12/5/2024	12:50	Water Column Station (water depth 5.3')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.58	2158	60	16.9	1602
3	7.42	2169	103	16.6	1616
5	7.52	2190	64	17	1631

#######	7:20	Water Column Station (water depth 5.2')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.60	2206	109	13.9	1664
3	7.48	2128	82	13.2	1590
5	7.54	2107	89	13.3	1573

#######	8:00	Water Column Station (water depth 5.2')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.44	2160	246	16.3	1615
3	7.41	2150	176	16.3	1604
5	7.41	2159	37	16.3	1613

#######	12:15	Water Column Station (water depth 5.5')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.86	2119	209	21.4	1582
3	7.65	2134	108	21.2	1581
5	7.73	2129	111	20.3	1574

1/3/2025	9:15	Water Column Station (water depth 5.4')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.53	2047	185	17.2	1521
3	7.56	2051	142	17.6	1524
5	7.62	2035	92	17.4	1511

1/8/2025	12:39	Water Column Station (water depth NM)			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.98	2074	188	11.2	1541
3	7.87	2081	110	10.8	1550
5	7.99	2084	123	11.2	1554

1/17/2025	9:45	Water Column Station (water depth 5.5')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.98	1828	263	11.9	1351
3	7.93	1825	233	11.5	1350
5	7.84	1812	145	12.3	1337

Table 3
Central Lake Water Column Profile
Sulphur Dome
Calcasieu Parish, Louisiana

1/24/2025	9:37	Water Column Station (water depth 5.5')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	8.18	1832	236	7.9	1361
3	8.16	1842	225	7.3	1372
5	8.14	1856	198	7.3	1374
1/31/2025	9:11	Water Column Station (water depth 5.5')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	8.07	1909	238	17.4	1417
3	8.00	1855	227	17.1	1370
5	7.87	1881	180	16.8	1395

2/14/2025	12:30	Water Column Station (water depth 5.9')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.77	1884	161	14.3	1393
3	7.54	1876	84	15.2	1386
5	7.58	1878	61	15.2	1388

2/21/2025	12:35	Water Column Station (water depth 6.0')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.84	1886	207	8.7	1406
3	7.74	1889	90	8.4	1409
5	7.87	1886	90	8.5	1409

2/28/2025	9:16	Water Column Station (water depth 5.9')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	7.76	1750	226	17.3	1282
3	7.73	1737	181	16.7	1274
5	7.79	1755	198	17.9	1283

3/7/2025	9:30	Water Column Station (water depth 5.6')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	8.27	1814	91	18.2	1335
3	8.03	1802	110	17.7	1323
5	7.91	1833	110	18.6	1348
3/14/2025	9:30	Water Column Station (water depth 5.10')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	8.17	1841	222	22.2	1347
3	8.09	1835	215	22.1	1344
5	8.14	1858	173	22.1	1360
3/21/2025	9:16	Water Column Station (water depth 5.9')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	8.07	1901	137	17.9	1406
3	7.97	1898	138	17.6	1402
5	7.87	1897	65	16.9	1399
3/27/2025	12:33	Water Column Station (water depth 5.9')			
Depth (ft)	pH	SC (uS/cm)	ORP (mV)	Temp (°C)	TDS (ppm)
1	8.13	1933	102	23.9	1419
3	8.01	1923	125	23.7	1410
5	7.69	2024	13	22.9	1474

Notes:
Readings were recorded with an Ultrameter II, hand-held meter
NR - Not Recorded

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

Sample Location		LDNR 1									LDNR 3								
Sample ID																			
Sample Date		3/26/24*	6/17/24	9/23/24	10/22/24	11/21/24	12/17/24	1/29/25	2/18/25	3/20/25	3/26/24	6/18/24	9/24/24	10/21/24	11/20/24	12/16/24	1/28/25	2/24/25	3/18/25
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Surface Water (Bubble Site)																	
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	NA	**0.0049**	**0.0039**	**0.0061**	**0.0050**	**0.0047**	**0.0052**	**0.0045**	**0.0060**	ND	**0.0041**	**0.0029**	**0.0050**	**0.0049**	**0.0031**	**0.0040**	**0.0036**	**0.0035**
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**1.42**	**0.115**	**0.0972**	**0.101**	**0.573**	**0.0441**	**0.0652**	**0.0568**	**0.0658**	**0.648**	**0.0704**	**0.0701**	**0.0726**	**0.100**	**0.0397**	**0.054**	**0.0809**	**0.0553**
Oxygen	mol%	ND	**1.88**	**1.39**	**1.77**	**12.34**	**0.10**	**0.22**	**0.30**	**0.22**	**14.22**	**0.65**	**0.86**	**1.25**	**2.00**	**0.45**	**0.96**	**1.28**	**0.71**
Nitrogen	mol%	**88.37**	**8.29**	**6.90**	**7.93**	**46.80**	**2.29**	**3.54**	**2.91**	**3.50**	**52.31**	**4.10**	**4.73**	**5.55**	**7.92**	**1.90**	**3.44**	**4.82**	**2.75**
Carbon Dioxide	mol%	**10.05**	**2.15**	**2.14**	**2.16**	**1.08**	**2.56**	**2.73**	**1.55**	**1.75**	**0.68**	**2.15**	**2.61**	**2.26**	**2.07**	**1.93**	**1.54**	**1.15**	**1.18**
Methane	mol%	**0.137**	**85.46**	**87.36**	**85.96**	**38.28**	**92.76**	**91.32**	**93.01**	**92.33**	**31.77**	**91.97**	**90.70**	**89.87**	**86.95**	**94.64**	**93.00**	**91.40**	**94.29**
Ethane	mol%	**0.0014**	**1.38**	**1.40**	**1.34**	**0.616**	**1.46**	**1.39**	**1.42**	**1.40**	**0.221**	**0.646**	**0.631**	**0.593**	**0.573**	**0.613**	**0.605**	**0.905**	**0.612**
Ethylene	mol%	ND	**0.0009**	**0.0005**	**0.0006**	**0.0002**	**0.0007**	**0.0002**	**0.0005**	**0.0005**	**0.0075**	**0.0139**	**0.0148**	**0.0139**	**0.0122**	**0.0132**	**0.0104**	**0.0089**	**0.0116**
Propane	mol%	**0.0075**	**0.391**	**0.396**	**0.390**	**0.175**	**0.418**	**0.402**	**0.414**	**0.409**	**0.0619**	**0.176**	**0.173**	**0.167**	**0.161**	**0.177**	**0.171**	**0.175**	**0.175**
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	**0.0037**	**0.0942**	**0.0950**	**0.0935**	**0.0416**	**0.102**	**0.0977**	**0.100**	**0.100**	**0.0238**	**0.0680**	**0.0668**	**0.0639**	**0.0617**	**0.0683**	**0.6510**	**0.0635**	**0.0671**
N-butane	mol%	**0.0028**	**0.100**	**0.0992**	**0.0995**	**0.0430**	**0.108**	**0.101**	**0.104**	**0.104**	**0.0197**	**0.0568**	**0.0555**	**0.0533**	**0.0512**	**0.0571**	**0.0535**	**0.0510**	**0.0552**
Iso-pentane	mol%	**0.0014**	**0.0398**	**0.0389**	**0.0399**	**0.0167**	**0.0432**	**0.0403**	**0.0411**	**0.0419**	**0.0108**	**0.0316**	**0.0315**	**0.0303**	**0.0290**	**0.0329**	**0.0306**	**0.0274**	**0.0316**
N-pentane	mol%	**0.0005**	**0.0306**	**0.0262**	**0.0294**	**0.0119**	**0.0297**	**0.0279**	**0.0296**	**0.0296**	**0.0081**	**0.0231**	**0.0231**	**0.0224**	**0.0214**	**0.0245**	**0.0223**	**0.0190**	**0.0232**
Hexanes +	mol%	**0.0103**	**0.0686**	**0.0590**	**0.0728**	**0.0227**	**0.0685**	**0.0579**	**0.0591**	**0.0595**	**0.0154**	**0.0405**	**0.0422**	**0.0439**	**0.0398**	**0.0464**	**0.0413**	**0.0301**	**0.0430**
Stable Isotopes																			
$\delta^{13}C$ (CH_4)	‰	NA	**-39.17**	**-39.10**	**-39.06**	**-39.00**	**-38.94**	**-39.03**	**-39.07**	**-39.02**	**-33.97**	**-34.38**	**-33.50**	**-34.37**	**-34.25**	**-34.26**	**-34.24**	**-35.43**	**-34.21**
δD (CH_4)	‰	NA	**-153.9**	**-151.3**	**-151.8**	**-152.1**	**-151.5**	**-155.8**	**-153.4**	**-158.5**	**-141.1**	**-139.8**	**-143.1**	**-143.0**	**-141.5**	**-142.5**	**-142.1**	**-147.0**	**-139.0**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																			
Hydrogen Sulfide	ppmw	NA	NA	<0.1	**13.0**	**0.7**	**49.0**	**0.3**	**0.6**	**0.1**	NA	NA	**592.8**	**113.7**	**111.7**	<0.1	**3.3**	**5.1**	<0.1

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

	Sample Location	LDNR 4									LDNR 5								
	Sample ID																		
	Sample Date	3/26/24	6/18/24	9/23/24	10/21/24	11/20/24	12/17/24	1/28/25	2/18/25	3/17/25	3/26/24	6/18/24	9/24/24	10/22/24	11/19/24	12/16/24	1/27/25	2/18/25	3/18/25
	Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Surface Water (Bubble Site)																	
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	ND	**0.0035**	**0.0038**	**0.0026**	**0.0041**	**0.0033**	**0.0041**	**0.0040**	**0.0055**	ND	**0.0043**	**0.0037**	**0.0047**	**0.0049**	**0.0052**	**0.0044**	**0.0044**	**0.0036**
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**0.0872**	**0.122**	**0.0302**	**0.412**	**0.0916**	**0.0282**	**0.0429**	**0.0639**	**0.0267**	**0.797**	**0.0794**	**0.130**	**0.106**	**0.180**	**0.0874**	**0.0788**	**0.0544**	**0.0455**
Oxygen	mol%	**1.63**	**2.16**	**0.15**	**9.00**	**1.87**	**0.14**	**0.52**	**1.16**	**0.29**	**17.71**	**0.88**	**2.26**	**2.25**	**3.63**	**1.57**	**1.63**	**0.59**	**0.74**
Nitrogen	mol%	**6.81**	**8.95**	**1.72**	**33.53**	**7.61**	**1.57**	**2.64**	**5.03**	**1.46**	**64.69**	**4.57**	**9.71**	**8.14**	**13.85**	**3.97**	**3.93**	**2.63**	**2.27**
Carbon Dioxide	mol%	**1.39**	**1.47**	**1.90**	**1.17**	**1.46**	**1.63**	**1.21**	**1.36**	**1.35**	**0.17**	**1.41**	**1.61**	**1.27**	**1.08**	**0.51**	**0.48**	**0.97**	**1.02**
Methane	mol%	**88.44**	**85.66**	**94.39**	**54.84**	**87.34**	**94.81**	**93.81**	**90.69**	**95.09**	**16.34**	**91.38**	**84.76**	**86.72**	**79.88**	**92.25**	**92.34**	**94.19**	**94.37**
Ethane	mol%	**1.14**	**1.14**	**1.26**	**0.727**	**1.14**	**1.29**	**1.25**	**1.21**	**1.26**	**0.192**	**1.08**	**1.02**	**1.04**	**0.935**	**0.999**	**1.05**	**1.06**	**1.05**
Ethylene	mol%	**0.0409**	**0.0374**	**0.0379**	**0.0210**	**0.0329**	**0.0342**	**0.0319**	**0.0299**	**0.0305**	**0.0132**	**0.0967**	**0.0538**	**0.0143**	**0.0153**	**0.107**	**0.0155**	**0.0186**	**0.0181**
Propane	mol%	**0.250**	**0.243**	**0.264**	**0.153**	**0.239**	**0.258**	**0.251**	**0.243**	**0.255**	**0.0495**	**0.280**	**0.252**	**0.255**	**0.236**	**0.275**	**0.263**	**0.268**	**0.267**
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	**0.0723**	**0.0717**	**0.0787**	**0.0452**	**0.0712**	**0.0773**	**0.0757**	**0.0730**	**0.0770**	**0.0134**	**0.0763**	**0.0704**	**0.0713**	**0.0654**	**0.0786**	**0.0768**	**0.0774**	**0.0775**
N-butane	mol%	**0.0651**	**0.0643**	**0.0710**	**0.0405**	**0.0640**	**0.0694**	**0.0677**	**0.0653**	**0.0691**	**0.0121**	**0.0700**	**0.0639**	**0.0648**	**0.0592**	**0.0718**	**0.0686**	**0.0690**	**0.0692**
Iso-pentane	mol%	**0.0274**	**0.0273**	**0.0309**	**0.0174**	**0.0278**	**0.0302**	**0.0300**	**0.0288**	**0.0306**	**0.0045**	**0.0255**	**0.0240**	**0.0249**	**0.0221**	**0.0273**	**0.0270**	**0.0266**	**0.0270**
N-pentane	mol%	**0.0185**	**0.0185**	**0.0214**	**0.0121**	**0.0191**	**0.0207**	**0.0208**	**0.0199**	**0.0213**	**0.0030**	**0.0165**	**0.0154**	**0.0162**	**0.0141**	**0.0175**	**0.0173**	**0.0168**	**0.0171**
Hexanes +	mol%	**0.0265**	**0.0251**	**0.0309**	**0.0183**	**0.0279**	**0.0291**	**0.0318**	**0.0292**	**0.0323**	**0.0054**	**0.0232**	**0.0215**	**0.0239**	**0.0187**	**0.0238**	**0.0241**	**0.0222**	**0.0224**
Stable Isotopes																			
$\delta^{13}C$ (CH_4)	‰	**-37.29**	**-37.20**	**-37.06**	**-37.00**	**-37.04**	**-37.20**	**-37.19**	**-37.10**	**-37.04**	**-36.87**	**-36.81**	**-36.55**	**-36.61**	**-36.44**	**-36.22**	**-36.24**	**-36.19**	**-36.09**
δD (CH_4)	‰	**-149.6**	**-151.8**	**-150.7**	**-149.6**	**-152.1**	**-147.6**	**-152.1**	**-148.0**	**-152.1**	**-146.6**	**-146.8**	**-144.4**	**-145.7**	**-147.5**	**-145.1**	**-149.9**	**-144.0**	**-151.2**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																			
Hydrogen Sulfide	ppmw	NA	NA	**114.0**	**3.4**	**11.5**	**15.9**	**8.2**	**1.5**	**0.7**	NA	NA	**3.0**	<0.1	**0.7**	**0.1**	<0.1	<0.1	<0.1

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

Sample Location		LDNR 6									LDNR 7								
Sample ID																			
Sample Date		3/26/24	6/18/24	9/25/24	10/21/24	11/19/24	12/16/24	1/28/25	2/24/25	3/18/25	3/27/24	6/20/24	9/25/24	10/22/24	11/19/24	12/18/24	1/28/25	2/24/25	3/18/25
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Surface Water (Bubble Site)																	
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	ND	**0.004**	**0.0034**	**0.0046**	**0.0043**	**0.0031**	**0.0035**	**0.0040**	**0.0045**	ND	**0.0036**	**0.0029**	**0.0036**	**0.0038**	**0.0037**	**0.0027**	**0.0041**	**0.0025**
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**0.873**	**0.0859**	**0.132**	**0.102**	**0.101**	**0.117**	**0.134**	**0.128**	**0.0794**	**0.140**	**0.174**	**0.188**	**0.209**	**0.161**	**0.260**	**0.454**	**0.166**	**0.115**
Oxygen	mol%	**19.55**	**0.76**	**2.31**	**1.93**	**1.60**	**2.40**	**2.75**	**2.08**	**1.35**	**2.62**	**1.64**	**2.98**	**3.93**	**2.03**	**4.84**	**9.73**	**2.52**	**2.55**
Nitrogen	mol%	**71.76**	**4.99**	**9.65**	**7.45**	**7.08**	**7.38**	**5.95**	**7.47**	**3.89**	**6.52**	**9.54**	**12.94**	**12.34**	**9.01**	**16.93**	**34.01**	**9.11**	**5.71**
Carbon Dioxide	mol%	**0.13**	**1.95**	**1.68**	**1.52**	**1.38**	**0.82**	**0.20**	**0.60**	**0.74**	**0.47**	**1.16**	**1.47**	**0.50**	**0.73**	**0.45**	**0.20**	**0.49**	**0.29**
Methane	mol%	**7.59**	**91.05**	**85.13**	**87.92**	**88.72**	**88.20**	**89.90**	**88.65**	**92.80**	**87.04**	**84.19**	**79.30**	**79.98**	**84.84**	**74.69**	**53.57**	**85.09**	**88.05**
Ethane	mol%	**0.0549**	**0.698**	**0.663**	**0.633**	**0.671**	**0.626**	**0.622**	**0.638**	**0.664**	**2.82**	**2.92**	**2.76**	**2.69**	**2.84**	**2.49**	**1.78**	**2.31**	**2.90**
Ethylene	mol%	**0.003**	**0.0394**	**0.0386**	**0.0409**	**0.0393**	**0.0387**	**0.0311**	**0.0331**	**0.0373**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Propane	mol%	**0.0185**	**0.226**	**0.208**	**0.209**	**0.212**	**0.211**	**0.206**	**0.202**	**0.215**	**0.235**	**0.227**	**0.216**	**0.218**	**0.231**	**0.203**	**0.144**	**0.188**	**0.236**
Propylene	mol%	ND	**0.0001**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	**0.0067**	**0.0823**	**0.0776**	**0.0778**	**0.0793**	**0.0811**	**0.0812**	**0.0775**	**0.0830**	**0.0631**	**0.0574**	**0.0551**	**0.0576**	**0.0607**	**0.0536**	**0.0387**	**0.0550**	**0.0619**
N-butane	mol%	**0.0053**	**0.0643**	**0.0621**	**0.0617**	**0.0632**	**0.0650**	**0.0629**	**0.0599**	**0.0661**	**0.0506**	**0.0449**	**0.0451**	**0.0464**	**0.0491**	**0.0435**	**0.0312**	**0.0354**	**0.0498**
Iso-pentane	mol%	**0.0023**	**0.0263**	**0.0263**	**0.0256**	**0.0265**	**0.0277**	**0.0272**	**0.0249**	**0.0284**	**0.0189**	**0.0149**	**0.0163**	**0.0172**	**0.0183**	**0.0163**	**0.0118**	**0.0166**	**0.0184**
N-pentane	mol%	**0.0013**	**0.014**	**0.0143**	**0.0136**	**0.0142**	**0.0149**	**0.0143**	**0.0129**	**0.0153**	**0.0101**	**0.0075**	**0.0086**	**0.0091**	**0.0097**	**0.0088**	**0.0065**	**0.0065**	**0.0098**
Hexanes +	mol%	**0.0028**	**0.0135**	**0.0147**	**0.0135**	**0.0143**	**0.0151**	**0.0144**	**0.0119**	**0.0155**	**0.0148**	**0.0093**	**0.0128**	**0.0131**	**0.0149**	**0.0149**	**0.0116**	**0.0127**	**0.0141**
Stable Isotopes																			
$\delta^{13}C$ (CH_4)	‰	**-33.32**	**-35.08**	**-34.72**	**-34.75**	**-34.84**	**-34.67**	**-34.72**	**-34.93**	**-34.71**	**-43.87**	**-44.24**	**-44.45**	**-43.88**	**-43.89**	**-43.94**	**-43.77**	**-42.50**	**-43.89**
δD (CH_4)	‰	**-140.2**	**-142.8**	**-143.0**	**-140.3**	**-145.4**	**-144.3**	**-145.0**	**-142.2**	**-145.8**	**-183.8**	**-181.8**	**-181.9**	**-179.1**	**-181.8**	**-182.1**	**-178.1**	**-172.0**	**-183.6**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																			
Hydrogen Sulfide	ppmw	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	**0.3**	<0.1	NA	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

	Sample Location	LDNR 8									LDNR 9								
	Sample ID																		
	Sample Date	3/27/24	6/18/24*	9/24/24	10/23/24	11/19/24	12/16/24	1/28/25	2/24/25	3/19/25	3/28/24*	6/19/24*	9/26/24*	10/24/24	11/21/24	12/17/24	1/28/25	2/19/25	3/19/25
	Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Surface Water (Bubble Site)																	
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	ND	NA	**0.0037**	**0.0038**	**0.0045**	**0.0031**	**0.0036**	ND	ND	NA	NA	NA	**0.0029**	**0.0031**	**0.0026**	**0.0027**	**0.0035**	**0.0056**
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**0.117**	**1.08**	**0.132**	**0.158**	**0.153**	**0.101**	**0.228**	**0.667**	**0.169**	**1.27**	**1.63**	**0.971**	**0.167**	**0.122**	**0.0574**	**0.0681**	**0.0409**	**0.0444**
Oxygen	mol%	**1.92**	**17.86**	**1.77**	**2.61**	**2.21**	**1.61**	**4.74**	**14.24**	**3.22**	**39.56**	**16.68**	**28.76**	**3.44**	**2.33**	**0.84**	**0.94**	**0.49**	**0.44**
Nitrogen	mol%	**5.57**	**77.32**	**8.71**	**9.97**	**9.36**	**4.86**	**15.63**	**53.21**	**8.11**	**56.50**	**70.29**	**70.18**	**13.38**	**9.45**	**2.97**	**3.22**	**1.99**	**2.29**
Carbon Dioxide	mol%	**0.45**	**1.92**	**1.87**	**0.76**	**0.80**	**0.58**	**0.47**	**0.31**	**0.18**	**1.58**	**6.95**	**0.023**	**3.08**	**2.33**	**2.22**	**1.43**	**2.05**	**2.33**
Methane	mol%	**88.62**	**1.77**	**86.20**	**83.33**	**84.28**	**89.45**	**76.35**	**30.43**	**85.21**	**1.08**	**4.45**	**0.0682**	**79.31**	**85.10**	**93.18**	**93.61**	**94.67**	**94.15**
Ethane	mol%	**2.92**	**0.0432**	**0.877**	**2.79**	**2.81**	**3.00**	**2.25**	**1.02**	**2.75**	**0.0070**	**0.0079**	ND	**0.4630**	**0.495**	**0.534**	**0.539**	**0.557**	**0.558**
Ethylene	mol%	ND	ND	ND	ND	ND	ND	**0.0011**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Propane	mol%	**0.242**	**0.0035**	**0.221**	**0.222**	**0.224**	**0.238**	**0.189**	**0.0786**	**0.216**	**0.0009**	**0.0012**	ND	**0.0814**	**0.087**	**0.0967**	**0.0938**	**0.0960**	**0.0954**
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	**0.0652**	**0.0009**	**0.0726**	**0.0605**	**0.0616**	**0.0659**	**0.0539**	**0.0214**	**0.0615**	ND	ND	ND	**0.0361**	**0.0399**	**0.0443**	**0.0437**	**0.0441**	**0.0440**
N-butane	mol%	**0.0521**	**0.0006**	**0.0629**	**0.0489**	**0.0493**	**0.0533**	**0.0425**	**0.0164**	**0.0471**	ND	ND	ND	**0.0119**	**0.0123**	**0.0142**	**0.0131**	**0.0134**	**0.0133**
Iso-pentane	mol%	**0.0199**	ND	**0.0303**	**0.0187**	**0.0191**	**0.0207**	**0.0171**	**0.0061**	**0.0185**	ND	ND	ND	**0.0087**	**0.0099**	**0.0110**	**0.0106**	**0.0106**	**0.0106**
N-pentane	mol%	**0.0108**	ND	**0.0211**	**0.0102**	**0.0104**	**0.0113**	**0.0097**	**0.0032**	**0.0099**	ND	ND	ND	**0.0025**	**0.0027**	**0.0032**	**0.0029**	**0.0028**	**0.0028**
Hexanes +	mol%	**0.0161**	**0.0005**	**0.0336**	**0.0146**	**0.0154**	**0.0162**	**0.0137**	**0.0041**	**0.0134**	ND	ND	ND	**0.0188**	**0.0227**	**0.0234**	**0.0245**	**0.0233**	**0.0232**
Stable Isotopes																			
$\delta^{13}C$ (CH_4)	‰	**-43.45**	**-42.70**	**-36.06**	**-43.71**	**-43.61**	**-43.68**	**-42.25**	**-43.60**	**-43.90**	**-31.20**	**-49.50**	NA	**-34.60**	**-34.91**	**-34.95**	**-34.92**	**-34.97**	**-34.98**
δD (CH_4)	‰	**-184.2**	**-175.0**	**-144.0**	**-178.0**	**-181.2**	**-180.1**	**-175.0**	**-177.0**	**-184.0**	NA	**-232.0**	NA	**-142.4**	**-145.3**	**-141.8**	**-145.8**	**-142.1**	**-144.5**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																			
Hydrogen Sulfide	ppmw	NA	NA	**0.5**	<0.1	<0.1	**0.5**	<0.1	<0.1	<0.1	NA	NA	NA	**10.8**	**0.2**	**14.9**	<0.1	<0.1	<0.1

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

Sample Location		LDNR 10									LDNR 12								
Sample ID																			
Sample Date		3/28/24	6/19/24	9/26/24	10/23/24	11/20/24	12/17/24	1/30/25	2/19/25	3/20/25	3/27/24	6/18/24*	9/23/24	10/22/24	11/19/24	12/18/24	1/28/25	2/19/25	3/18/25
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Surface Water (Bubble Site)																	
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	**0.0026**	**0.0037**	**0.0038**	**0.0036**	**0.0043**	**0.0044**	**0.0031**
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**0.942**	**0.952**	**0.935**	**0.932**	**0.933**	**0.909**	**0.93**	**0.938**	**0.935**	**0.101**	**1.53**	**0.206**	**0.290**	**0.147**	**0.144**	**0.149**	**0.174**	**0.130**
Oxygen	mol%	**21.12**	**20.95**	**21.03**	**20.91**	**20.97**	**20.33**	**20.89**	**21.18**	**21.02**	**1.74**	**15.6**	**3.42**	**6.04**	**1.97**	**2.43**	**2.78**	**2.22**	**2.89**
Nitrogen	mol%	**77.75**	**77.51**	**77.82**	**78.01**	**78.01**	**75.35**	**78.09**	**77.82**	**77.97**	**5.25**	**72.05**	**13.28**	**20.99**	**9.00**	**6.65**	**8.08**	**7.91**	**6.37**
Carbon Dioxide	mol%	**0.037**	**0.15**	**0.074**	**0.069**	**0.048**	**0.30**	**0.044**	**0.046**	**0.048**	**0.61**	**8.76**	**0.95**	**0.61**	**0.91**	**0.38**	**0.30**	**0.43**	**0.20**
Methane	mol%	**0.148**	**0.440**	**0.146**	**0.0754**	**0.0374**	**3.11**	**0.0428**	**0.0132**	**0.0313**	**88.92**	**2.02**	**79.04**	**69.40**	**84.74**	**87.18**	**85.54**	**86.14**	**87.21**
Ethane	mol%	**0.0006**	**0.0003**	**0.0001**	**0.0001**	**0.0002**	**0.0104**	**0.0002**	**0.0001**	ND	**2.98**	**0.0361**	**2.74**	**2.36**	**2.86**	**2.86**	**2.78**	**2.75**	**2.83**
Ethylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Propane	mol%	ND	ND	ND	ND	ND	**0.0005**	ND	ND	ND	**0.240**	**0.0039**	**0.215**	**0.184**	**0.225**	**0.224**	**0.218**	**0.220**	**0.220**
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	ND	ND	ND	ND	ND	**0.0009**	ND	ND	ND	**0.0629**	ND	**0.0587**	**0.0501**	**0.0611**	**0.0603**	**0.0602**	**0.0618**	**0.0604**
N-butane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0487**	ND	**0.0461**	**0.0391**	**0.0478**	**0.0446**	**0.0459**	**0.0459**	**0.0455**
Iso-pentane	mol%	ND	ND	ND	ND	ND	**0.0002**	ND	ND	ND	**0.0185**	ND	**0.0181**	**0.0157**	**0.0192**	**0.0165**	**0.0183**	**0.0179**	**0.0175**
N-pentane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0096**	ND	**0.0096**	**0.0084**	**0.0103**	**0.0082**	**0.0096**	**0.0092**	**0.0090**
Hexanes +	mol%	**0.0004**	**0.0002**	**0.0001**	ND	**0.0002**	**0.0005**	**0.0004**	**0.0001**	**0.0003**	**0.0148**	**0.0016**	**0.0141**	**0.0127**	**0.0160**	**0.0101**	**0.0152**	**0.0130**	**0.0129**
Stable Isotopes																			
$\delta^{13}C$ (CH_4)	‰	**-36.50**	**-21.31**	**-33.40**	**-27.40**	NA	**-21.18**	NA	NA	NA	**-43.89**	**-40.70**	**-43.90**	**-43.72**	**-43.63**	**-43.81**	**-43.74**	**-43.74**	**-43.79**
δD (CH_4)	‰	NA	**-74.0**	NA	NA	NA	**-127.2**	NA	NA	NA	**-179.9**	NA	**-178.0**	**-177.4**	**-179.9**	**-183.9**	**-182.5**	**-180.6**	**-179.3**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																			
Hydrogen Sulfide	ppmw	NA	NA	<0.1	<0.1	<0.1	NA	<0.1	<0.1	<0.1	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

	Sample Location	LDNR 13									LDNR 14								
	Sample ID																		
	Sample Date	3/27/24	6/20/24*	9/25/24*	10/22/24*	11/19/24*	12/18/24*	1/28/25*	2/19/25*	3/18/25*	3/27/24*	6/20/24*	9/25/24*	10/22/24*	11/19/24*	12/18/24*	1/30/25*	2/19/25*	3/18/25*
	Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Surface Water (Bubble Site)																	
Carbon Monoxide	mol%	ND	ND	ND	**0.28**	ND	ND	ND	**0.15**	ND	ND	ND	ND	**0.12**	ND	ND	ND	ND	ND
Helium	mol%	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**0.370**	**1.67**	**1.50**	**1.58**	**1.62**	**1.49**	**1.50**	**1.65**	**1.44**	**1.65**	**1.73**	**1.36**	**1.55**	**1.16**	**1.57**	**1.5**	**1.63**	**1.41**
Oxygen	mol%	**0.61**	**15.76**	**13.10**	**19.75**	**21.68**	**27.03**	**31.55**	**22.55**	**34.90**	**22.53**	**14.97**	**18.57**	**24.43**	**19.90**	**28.25**	**32.97**	**22.89**	**36.20**
Nitrogen	mol%	**19.41**	**74.89**	**78.18**	**71.72**	**72.07**	**68.99**	**65.46**	**72.57**	**62.96**	**72.05**	**75.85**	**74.08**	**70.17**	**77.11**	**67.66**	**64.43**	**72.09**	**61.89**
Carbon Dioxide	mol%	**6.77**	**7.22**	**6.46**	**6.25**	**4.46**	**2.33**	**1.13**	**2.97**	**0.55**	**3.55**	**6.98**	**5.80**	**3.32**	**1.76**	**2.36**	**0.93**	**3.24**	**0.35**
Methane	mol%	**72.72**	**0.471**	**0.755**	**0.422**	**0.165**	**0.161**	**0.343**	**0.113**	**0.159**	**0.221**	**0.460**	**0.177**	**0.411**	**0.0686**	**0.161**	**0.175**	**0.138**	**0.140**
Ethane	mol%	**0.119**	ND	ND	**0.0018**	**0.0010**	**0.0018**	**0.0048**	**0.0015**	**0.0006**	**0.0007**	ND	ND	**0.0026**	ND	**0.0026**	**0.004**	**0.0078**	**0.0019**
Ethylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Propane	mol%	**0.0002**	ND	ND	ND	ND	ND	**0.0007**	ND	ND	ND	ND	ND	ND	ND	ND	**0.0006**	**0.0014**	ND
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	**0.0004**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-butane	mol%	**0.0001**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-pentane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0013**	ND	ND	ND	ND	ND	ND
N-pentane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexanes +	mol%	**0.0008**	**0.0017**	**0.003**	**0.0036**	ND	**0.0012**	**0.0047**	**0.0023**	ND	**0.0015**	**0.0021**	**0.0011**	**0.0037**	ND	**0.0008**	**0.0017**	ND	ND
Stable Isotopes																			
$\delta^{13}C$ (CH_4)	‰	**-67.98**	NA	**-54.10**	NA	NA	NA	**-46.60**	NA	NA	NA	NA	NA	**-49.10**	NA	NA	NA	NA	NA
δD (CH_4)	‰	**-277.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																			
Hydrogen Sulfide	ppmw	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

Sample Location		LDNR 17									LDNR 18								
Sample ID																			
Sample Date		3/26/24	6/18/24	9/24/24	10/21/24	11/21/24	12/16/24	1/27/25	2/19/25	3/18/25	3/26/24*	6/20/24	9/25/24	10/22/24	11/19/24	12/18/24	1/28/25	2/19/25	3/19/25
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Surface Water (Bubble Site)																	
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	ND	**0.0042**	**0.0027**	**0.0056**	**0.0037**	**0.0044**	**0.0027**	**0.0058**	**0.0046**	ND	**0.0039**	**0.0032**	**0.0048**	**0.0033**	**0.0031**	**0.0034**	**0.0038**	**0.0066**
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0121**
Argon	mol%	**0.890**	**0.109**	**0.125**	**0.121**	**0.271**	**0.081**	**0.287**	**0.184**	**0.088**	**0.895**	**0.101**	**0.198**	**0.145**	**0.150**	**0.173**	**0.275**	**0.223**	**0.356**
Oxygen	mol%	**19.89**	**1.07**	**1.72**	**2.21**	**3.80**	**1.10**	**5.89**	**2.55**	**1.31**	**20.03**	**1.13**	**2.90**	**2.83**	**2.50**	**2.58**	**5.64**	**3.30**	**6.83**
Nitrogen	mol%	**73.23**	**5.85**	**8.66**	**8.86**	**17.20**	**4.50**	**22.42**	**10.72**	**4.50**	**73.61**	**5.76**	**12.20**	**10.16**	**10.37**	**8.38**	**18.55**	**12.76**	**18.63**
Carbon Dioxide	mol%	**0.14**	**1.78**	**2.23**	**2.10**	**0.75**	**1.42**	**1.12**	**0.89**	**0.86**	**0.086**	**1.51**	**1.42**	**1.16**	**1.24**	**0.50**	**0.38**	**0.44**	**0.23**
Methane	mol%	**5.73**	**89.20**	**85.33**	**84.85**	**76.37**	**90.88**	**68.79**	**83.85**	**91.30**	**5.31**	**90.17**	**82.03**	**84.48**	**84.51**	**87.14**	**74.11**	**82.15**	**73.04**
Ethane	mol%	**0.0970**	**1.59**	**1.54**	**1.49**	**1.29**	**1.62**	**1.19**	**1.44**	**1.56**	**0.0470**	**0.882**	**0.848**	**0.795**	**0.798**	**0.797**	**0.679**	**0.742**	**0.605**
Ethylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0019**	ND	ND	ND	ND	ND	ND	ND	ND
Propane	mol%	**0.0136**	**0.221**	**0.214**	**0.204**	**0.175**	**0.216**	**0.162**	**0.197**	**0.212**	**0.0125**	**0.230**	**0.204**	**0.212**	**0.211**	**0.217**	**0.181**	**0.199**	**0.152**
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	**0.0044**	**0.0692**	**0.0688**	**0.0650**	**0.0581**	**0.0702**	**0.0522**	**0.0653**	**0.0698**	**0.0038**	**0.0741**	**0.0685**	**0.0693**	**0.0696**	**0.0735**	**0.0620**	**0.0680**	**0.0543**
N-butane	mol%	**0.0033**	**0.0511**	**0.0528**	**0.0487**	**0.0406**	**0.0520**	**0.382**	**0.0470**	**0.0502**	**0.0033**	**0.0630**	**0.0562**	**0.0597**	**0.0599**	**0.0615**	**0.0519**	**0.0554**	**0.0391**
Iso-pentane	mol%	**0.0016**	**0.0220**	**0.0238**	**0.0223**	**0.0187**	**0.0240**	**0.0173**	**0.0219**	**0.0232**	**0.0015**	**0.0286**	**0.0281**	**0.0285**	**0.0290**	**0.0297**	**0.0261**	**0.0264**	**0.0195**
N-pentane	mol%	**0.0010**	**0.0126**	**0.0143**	**0.0132**	**0.0107**	**0.0140**	**0.0101**	**0.0127**	**0.0134**	**0.0010**	**0.0190**	**0.0188**	**0.0197**	**0.0201**	**0.0201**	**0.0179**	**0.0172**	**0.0122**
Hexanes +	mol%	**0.0029**	**0.0176**	**0.0218**	**0.0223**	**0.0151**	**0.0221**	**0.0152**	**0.0207**	**0.0205**	**0.0030**	**0.0260**	**0.0274**	**0.0315**	**0.0328**	**0.0278**	**0.0314**	**0.0234**	**0.0173**
Stable Isotopes																			
$\delta^{13}C$ (CH_4)	‰	**-36.79**	**-39.55**	**-39.10**	**-39.47**	**-39.14**	**-39.36**	**-39.23**	**-39.09**	**-39.00**	**-35.54**	**-36.14**	**-35.99**	**-35.97**	**-36.03**	**-35.90**	**-35.99**	**-35.91**	**-35.45**
δD (CH_4)	‰	**-151.9**	**-158.2**	**-155.4**	**-157.3**	**-155.4**	**-155.9**	**156.3**	**-156.1**	**-156.7**	**-144.1**	**-145.7**	**-145.3**	**-144.0**	**-145.6**	**-146.0**	**-148.9**	**-143.5**	**-144.3**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																			
Hydrogen Sulfide	ppmw	NA	NA	**87.0**	**28.9**	<0.1	<0.1	**0.4**	<0.1	<0.1	NA	NA	**1.3**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

Sample Location		LDNR 19								LDNR 21							
Sample ID																	
Sample Date		3/28/24*	6/19/24*	9/26/24	11/21/24	12/17/24	1/28/25	2/19/25	3/19/25	6/20/24	9/25/24	10/22/24	11/21/24	12/18/24	1/28/25	2/24/25	3/19/25
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Surface Water (Bubble Site)															
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	NA	NA	ND	**0.0035**	ND	ND	**0.0047**	**0.0032**	**0.0048**	**0.0026**	**0.0041**	**0.0062**	**0.0056**	**0.0046**	**0.0056**	**0.0041**
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**1.17**	**1.04**	**0.0935**	**0.0816**	**0.144**	**0.135**	**0.0923**	**0.134**	**0.0755**	**0.311**	**0.105**	**0.250**	**0.156**	**0.107**	**0.208**	**0.176**
Oxygen	mol%	**38.25**	**20.21**	**1.70**	**1.17**	**2.40**	**1.99**	**1.24**	**2.19**	**0.86**	**5.34**	**1.95**	**3.65**	**2.56**	**1.72**	**2.53**	**2.95**
Nitrogen	mol%	**58.83**	**70.18**	**6.95**	**5.25**	**9.74**	**9.00**	**6.13**	**8.08**	**4.58**	**22.01**	**7.27**	**13.70**	**9.93**	**5.27**	**9.66**	**8.01**
Carbon Dioxide	mol%	**0.34**	**1.80**	**6.88**	**4.29**	**3.61**	**2.14**	**3.53**	**2.11**	**4.90**	**2.22**	**3.60**	**0.69**	**1.74**	**1.12**	**0.58**	**0.41**
Methane	mol%	**1.40**	**6.74**	**83.77**	**88.56**	**83.50**	**86.10**	**88.35**	**86.85**	**88.48**	**69.07**	**86.04**	**80.69**	**84.60**	**90.69**	**86.06**	**87.45**
Ethane	mol%	**0.0089**	**0.0312**	**0.508**	**0.533**	**0.497**	**0.519**	**0.537**	**0.536**	**0.890**	**0.812**	**0.825**	**0.808**	**0.800**	**0.856**	**0.762**	**0.800**
Ethylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0046**	ND	**0.0002**	ND	**0.0001**	ND	ND
Propane	mol%	ND	**0.0032**	**0.0458**	**0.0459**	**0.0459**	**0.0489**	**0.0535**	**0.0438**	**0.108**	**0.116**	**0.0914**	**0.0990**	**0.0912**	**0.1040**	**0.0919**	**0.100**
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	ND	**0.0016**	**0.0317**	**0.0326**	**0.0328**	**0.0354**	**0.0366**	**0.0316**	**0.0571**	**0.0501**	**0.0557**	**0.0573**	**0.0558**	**0.0599**	**0.0549**	**0.0572**
N-butane	mol%	ND	ND	**0.0001**	**0.0001**	**0.0003**	**0.0002**	**0.0017**	**0.0004**	**0.0044**	**0.0208**	**0.0037**	**0.0086**	**0.0041**	**0.0063**	**0.0040**	**0.0044**
Iso-pentane	mol%	ND	ND	**0.0083**	**0.0085**	**0.0084**	**0.0087**	**0.0091**	**0.0080**	**0.0215**	**0.0193**	**0.0228**	**0.0232**	**0.0230**	**0.0252**	**0.0212**	**0.0225**
N-pentane	mol%	ND	ND	ND	ND	**0.0002**	ND	**0.0004**	**0.0002**	**0.0003**	**0.0062**	**0.0004**	**0.0022**	**0.0004**	**0.0013**	**0.0004**	**0.0005**
Hexanes +	mol%	**0.0006**	**0.0006**	**0.0216**	**0.0264**	**0.0194**	**0.0179**	**0.0192**	**0.0215**	**0.0193**	**0.0184**	**0.0261**	**0.0207**	**0.0246**	**0.0289**	**0.0186**	**0.0226**
Stable Isotopes																	
$\delta^{13}C$ (CH_4)	‰	**-32.30**	**-30.27**	**-36.13**	**-36.45**	**-36.51**	**-36.55**	**-36.40**	**-36.54**	**-38.02**	**-37.51**	**-37.76**	**-37.70**	**-37.76**	**-37.70**	**-37.56**	**-37.56**
δD (CH_4)	‰	**-120.0**	**-113.6**	**-148.3**	**-147.4**	**-145.3**	**-149.3**	**-147.2**	**-153.0**	**-146.3**	**-148.3**	**-143.3**	**-145.0**	**-145.7**	**-147.6**	**-142.4**	**-144.8**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																	
Hydrogen Sulfide	ppmw	NA	NA	**110.0**	**14.0**	**1.1**	**3.9**	**12.4**	<0.1	NA	**0.4**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

	Sample Location	LDNR 22										LDNR 23								
	Sample ID																			
	Sample Date	3/26/24	6/20/24	9/24/24	10/22/24	11/19/24	11/21/24	12/16/24	1/28/25	2/19/25	3/19/25	3/27/24	6/20/24	9/24/24	10/21/24	11/19/24	12/18/24	1/28/25	2/24/25	3/20/25
	Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Surface Water (Bubble Site)																		
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	ND	**0.0039**	ND	**0.0045**	**0.0030**	**0.0052**	NA	**0.0038**	**0.0051**	**0.0056**	ND	**0.0036**	**0.0028**	**0.0045**	**0.0052**	**0.0049**	**0.0066**	**0.0038**	**0.0035**
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	**0.0037**	ND	ND	ND	ND
Argon	mol%	**0.875**	**0.190**	**0.471**	**0.107**	**0.167**	**0.148**	NA	**0.145**	**0.200**	**0.0806**	**0.0492**	**0.114**	**0.259**	**0.128**	**0.137**	**0.217**	**0.101**	**0.223**	**0.105**
Oxygen	mol%	**19.51**	**1.22**	**9.69**	**1.99**	**2.88**	**2.37**	NA	**2.90**	**2.44**	**1.20**	**0.34**	**0.87**	**4.93**	**2.68**	**2.14**	**4.04**	**1.78**	**4.38**	**1.71**
Nitrogen	mol%	**71.62**	**10.70**	**36.72**	**7.52**	**11.27**	**8.78**	NA	**9.44**	**8.91**	**3.93**	**2.41**	**6.01**	**19.61**	**8.42**	**8.55**	**9.59**	**4.79**	**15.28**	**5.40**
Carbon Dioxide	mol%	**0.12**	**1.24**	**1.04**	**1.23**	**0.83**	**0.81**	NA	**0.49**	**0.44**	**0.51**	**1.31**	**1.40**	**1.67**	**0.79**	**0.86**	**0.35**	**0.33**	**0.47**	**0.33**
Methane	mol%	**7.73**	**85.05**	**51.03**	**87.29**	**83.05**	**86.09**	NA	**85.35**	**86.36**	**92.43**	**94.26**	**90.06**	**72.25**	**86.47**	**86.74**	**84.41**	**91.39**	**78.35**	**90.87**
Ethane	mol%	**0.111**	**1.20**	**0.778**	**1.43**	**1.38**	**1.40**	NA	**1.26**	**1.23**	**1.39**	**1.13**	**1.09**	**0.911**	**1.05**	**1.13**	**0.972**	**1.130**	**0.922**	**1.130**
Ethylene	mol%	**0.0014**	**0.0044**	**0.0082**	**0.0042**	**0.0027**	**0.0018**	NA	**0.0035**	**0.0016**	**0.0020**	ND	ND	ND	**0.0003**	ND	ND	ND	**0.0009**	ND
Propane	mol%	**0.0182**	**0.203**	**0.134**	**0.221**	**0.210**	**0.204**	NA	**0.207**	**0.204**	**0.225**	**0.253**	**0.238**	**0.188**	**0.223**	**0.220**	**0.202**	**0.225**	**0.187**	**0.227**
Propylene	mol%	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	**0.0057**	**0.0658**	**0.0428**	**0.0695**	**0.0672**	**0.0657**	NA	**0.0679**	**0.0700**	**0.0741**	**0.0809**	**0.0774**	**0.0622**	**0.0747**	**0.0735**	**0.0717**	**0.0781**	**0.0646**	**0.0774**
N-butane	mol%	**0.0050**	**0.0541**	**0.0373**	**0.0600**	**0.0573**	**0.0542**	NA	**0.0572**	**0.0552**	**0.0618**	**0.0690**	**0.0642**	**0.0512**	**0.0623**	**0.0638**	**0.0550**	**0.0636**	**0.0526**	**0.0660**
Iso-pentane	mol%	**0.0024**	**0.0255**	**0.0179**	**0.0288**	**0.0279**	**0.0264**	NA	**0.0286**	**0.0284**	**0.0313**	**0.0352**	**0.0319**	**0.0273**	**0.0339**	**0.0327**	**0.0308**	**0.0361**	**0.0280**	**0.0344**
N-pentane	mol%	**0.0017**	**0.0167**	**0.0128**	**0.0200**	**0.0193**	**0.0178**	NA	**0.0199**	**0.0189**	**0.0216**	**0.0246**	**0.0217**	**0.0189**	**0.0241**	**0.0236**	**0.0208**	**0.0256**	**0.0193**	**0.0244**
Hexanes +	mol%	**0.0034**	**0.0243**	**0.0209**	**0.0339**	**0.0331**	**0.0261**	NA	**0.0334**	**0.0304**	**0.0369**	**0.0338**	**0.0259**	**0.0241**	**0.0310**	**0.0286**	**0.0286**	**0.0371**	**0.0241**	**0.0300**
Stable Isotopes																				
$\delta^{13}C$ (CH_4)	‰	**-38.67**	**-39.86**	**-37.63**	**-38.32**	**-38.44**	**-39.55**	NA	**-37.67**	**-37.59**	**-37.66**	**-36.56**	**-36.75**	**-36.70**	**-36.80**	**-37.06**	**-36.81**	**-36.82**	**-36.31**	**-36.67**
δD (CH_4)	‰	**-155.2**	**-163.7**	**-150.6**	**-154.1**	**-154.9**	**-159.9**	NA	**-154.3**	**-154.7**	**-153.6**	**-153.0**	**-148.5**	**-149.1**	**-147.4**	**-152.2**	**-151.1**	**-148.5**	**-149.0**	**-157.6**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																				
Hydrogen Sulfide	ppmw	NA	NA	<0.1	**0.6**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

	Sample Location	LDNR 24									LDNR 25									
	Sample ID																			
	Sample Date	3/26/24	6/18/24	9/23/24	10/21/24	11/20/24	12/17/24	1/28/25	2/18/25	3/17/25	3/27/24*	6/20/24*	9/25/24	10/22/24	11/21/24	12/18/24	1/28/25	2/24/25	3/18/25	12/11/23
	Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Surface Water (Bubble Site)																		
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	ND	ND	**0.0028**	**0.0058**	**0.0048**	**0.0047**	**0.0045**	**0.0057**	**0.0057**	NA	NA	ND	ND	ND	ND	ND	**0.0030**	ND	ND
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**0.491**	**0.780**	**0.276**	**0.0809**	**0.0636**	**0.0309**	**0.0469**	**0.0300**	**0.0369**	**0.946**	**1.69**	**0.208**	**0.154**	**0.241**	**0.219**	**0.138**	**0.197**	**0.0942**	**0.213**
Oxygen	mol%	**10.72**	**17.30**	**5.98**	**1.55**	**1.27**	**0.25**	**0.57**	**0.26**	**0.61**	**14.82**	**16.42**	**3.21**	**3.18**	**4.70**	**4.36**	**2.53**	**3.37**	**2.34**	**2.25**
Nitrogen	mol%	**39.50**	**62.91**	**22.31**	**6.49**	**5.30**	**1.73**	**2.88**	**1.76**	**1.87**	**41.82**	**73.51**	**13.75**	**8.98**	**16.47**	**9.45**	**6.48**	**9.79**	**4.35**	**13.90**
Carbon Dioxide	mol%	**1.23**	**0.61**	**2.17**	**2.41**	**2.69**	**2.51**	**1.82**	**2.29**	**1.66**	**2.04**	**7.71**	**2.15**	**1.76**	**1.14**	**0.49**	**0.60**	**0.42**	**1.87**	**1.39**
Methane	mol%	**47.33**	**18.12**	**68.19**	**88.13**	**89.31**	**94.00**	**93.27**	**94.22**	**94.38**	**39.39**	**0.671**	**78.54**	**83.86**	**75.60**	**84.14**	**87.98**	**84.16**	**89.75**	**81.36**
Ethane	mol%	**0.422**	**0.171**	**0.642**	**0.783**	**0.809**	**0.888**	**0.832**	**0.854**	**0.844**	**0.909**	ND	**1.92**	**1.85**	**1.66**	**1.25**	**2.03**	**1.83**	**1.59**	**0.723**
Ethylene	mol%	**0.0657**	**0.0236**	**0.0784**	**0.102**	**0.0942**	**0.0958**	**0.101**	**0.0979**	**0.100**	ND	ND	**0.0001**	ND	ND	ND	ND	ND	ND	ND
Propane	mol%	**0.123**	**0.0471**	**0.175**	**0.222**	**0.227**	**0.241**	**0.235**	**0.239**	**0.240**	**0.0432**	ND	**0.131**	**0.121**	**0.109**	**0.0581**	**0.1390**	**0.138**	**0.0059**	**0.0634**
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	**0.0388**	**0.0147**	**0.0561**	**0.0711**	**0.0728**	**0.0774**	**0.0753**	**0.0762**	**0.0768**	**0.0134**	ND	**0.0366**	**0.0337**	**0.0312**	**0.0172**	**0.0403**	**0.0417**	**0.0023**	**0.0736**
N-butane	mol%	**0.0351**	**0.0133**	**0.0507**	**0.0644**	**0.0662**	**0.0705**	**0.0673**	**0.0686**	**0.0691**	**0.0072**	ND	**0.0295**	**0.0248**	**0.0247**	**0.0128**	**0.0308**	**0.0309**	**0.0013**	**0.0030**
Iso-pentane	mol%	**0.0159**	**0.0061**	**0.0240**	**0.0310**	**0.0325**	**0.0346**	**0.0329**	**0.0336**	**0.0342**	**0.0021**	ND	**0.0114**	**0.0106**	**0.0099**	**0.0052**	**0.0123**	**0.0130**	**0.0004**	**0.0150**
N-pentane	mol%	**0.0120**	**0.0047**	**0.0183**	**0.0237**	**0.0252**	**0.0268**	**0.0251**	**0.0259**	**0.0265**	**0.0010**	ND	**0.0064**	**0.0058**	**0.0057**	**0.0028**	**0.0067**	**0.0073**	**0.0002**	**0.0001**
Hexanes +	mol%	**0.0188**	**0.0065**	**0.0270**	**0.0408**	**0.0404**	**0.0444**	**0.0415**	**0.0443**	**0.0458**	**0.0046**	ND	**0.0090**	**0.0100**	**0.0081**	**0.0040**	**0.0120**	**0.0100**	**0.0006**	**0.0065**
Stable Isotopes																				
$\delta^{13}C$ (CH_4)	‰	**-35.56**	**-35.61**	**-35.36**	**-35.56**	**-35.39**	**-35.50**	**-35.48**	**-35.51**	**-35.44**	**-51.54**	**-44.50**	**-52.81**	**-54.76**	**-54.66**	**-61.02**	**-52.62**	**-50.98**	**-68.47**	**-38.38**
δD (CH_4)	‰	**-147.6**	**-140.5**	**-143.2**	**-144.8**	**-143.9**	**-144.0**	**-144.9**	**-144.1**	**-145.4**	**-191.4**	NA	**-204.0**	**-204.7**	**-209.7**	**-233.7**	**-206.9**	**-197.6**	**-236.8**	**-155.6**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																				
Hydrogen Sulfide	ppmw	NA	NA	**106.1**	**120.4**	**54.8**	**10.7**	**5.2**	**2.2**	**0.2**	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

	Sample Location	LDNR 26									LDNR 27							
	Sample ID																	
	Sample Date	3/26/24	6/18/24	9/24/24	10/21/24	11/20/24	12/17/24	1/28/25	2/17/25	3/17/25	3/28/24	6/19/24	9/26/24	10/24/24	11/20/24	1/30/25	2/19/25	3/20/25
	Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Surface Water (Bubble Site)																
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	**0.0052**	**0.0054**	**0.0039**	**0.0055**	**0.0049**	**0.0059**	**0.0045**	**0.0063**	**0.0062**	ND	ND	ND	ND	ND	ND	ND	ND
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**0.157**	**0.163**	**0.250**	**0.157**	**0.252**	**0.131**	**0.267**	**0.162**	**0.186**	**0.942**	**0.952**	**0.935**	**0.935**	**0.933**	**0.932**	**0.934**	**0.937**
Oxygen	mol%	**1.23**	**1.55**	**3.67**	**1.89**	**3.79**	**0.83**	**4.39**	**1.58**	**2.01**	**21.22**	**21.43**	**21.07**	**20.99**	**20.96**	**20.93**	**21.07**	**21.08**
Nitrogen	mol%	**8.79**	**9.60**	**17.12**	**10.24**	**17.67**	**7.53**	**19.42**	**9.36**	**10.74**	**77.78**	**77.53**	**77.94**	**78.02**	**78.05**	**78.09**	**77.95**	**77.94**
Carbon Dioxide	mol%	**1.14**	**1.30**	**1.23**	**1.43**	**0.94**	**1.20**	**1.07**	**0.62**	**0.56**	**0.052**	**0.091**	**0.048**	**0.057**	**0.047**	**0.042**	**0.042**	**0.044**
Methane	mol%	**87.76**	**86.46**	**76.87**	**85.39**	**76.55**	**89.38**	**74.09**	**87.37**	**85.63**	**0.0063**	**0.0012**	**0.0005**	**0.0003**	**0.0036**	**0.0003**	**0.0025**	**0.0005**
Ethane	mol%	**0.748**	**0.766**	**0.702**	**0.738**	**0.659**	**0.758**	**0.624**	**0.741**	**0.717**	ND	ND	ND	ND	**0.0001**	ND	ND	ND
Ethylene	mol%	ND	ND	**0.0001**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Propane	mol%	**0.0634**	**0.0600**	**0.0562**	**0.0585**	**0.0531**	**0.0601**	**0.0495**	**0.0615**	**0.0599**	ND	ND	ND	ND	ND	ND	ND	ND
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	**0.0779**	**0.0751**	**0.0705**	**0.0745**	**0.0683**	**0.0777**	**0.0625**	**0.0787**	**0.0769**	ND	ND	ND	ND	ND	ND	ND	ND
N-butane	mol%	**0.0027**	**0.0025**	**0.0028**	**0.0025**	**0.0022**	**0.0024**	**0.0019**	**0.0025**	**0.0025**	ND	ND	ND	ND	ND	ND	ND	ND
Iso-pentane	mol%	**0.0155**	**0.0143**	**0.0143**	**0.0150**	**0.0135**	**0.0151**	**0.0120**	**0.0156**	**0.0151**	ND	ND	ND	ND	ND	ND	ND	ND
N-pentane	mol%	**0.0001**	**0.0002**	**0.0003**	**0.0002**	**0.0001**	**0.0001**	ND	**0.0001**	**0.0001**	ND	ND	ND	ND	ND	ND	ND	ND
Hexanes +	mol%	**0.0074**	**0.0057**	**0.0065**	**0.0066**	**0.0041**	**0.0060**	**0.0052**	**0.0065**	**0.0047**	**0.0003**	**0.0001**	ND	**0.0004**	**0.0006**	**0.0003**	**0.0002**	**0.0003**
Stable Isotopes																		
$\delta^{13}C$ (CH_4)	‰	**-38.14**	**-38.31**	**-37.82**	**-38.02**	**-37.95**	**-37.95**	**-38.03**	**-37.54**	**-37.93**	NA	NA	NA	NA	NA	NA	NA	NA
δD (CH_4)	‰	**-153.6**	**-151.6**	**-143.3**	**-147.9**	**-146.6**	**-149.9**	**-151.8**	**-148.7**	**-152.2**	NA	NA	NA	NA	NA	NA	NA	NA
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																		
Hydrogen Sulfide	ppmw	NA	NA	<0.1	<0.1	**1.4**	<0.1	<0.1	<0.1	<0.1	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

	Sample Location	LDNR 28								SN 67269								
	Sample ID									PPG 7A BS								
	Sample Date	3/28/24	6/19/24	9/26/24	11/20/24	12/17/24	1/30/25	2/19/25	3/20/25	3/28/24	6/19/24	9/26/24	10/23/24	11/21/24	12/16/24	1/27/25	2/18/25	3/20/25
	Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Surface Water (Bubble Site)																
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
Helium	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0048**	NA	ND	ND	**0.0058**	**0.005**	**0.0050**	ND
Hydrogen	mol%	ND	**0.0027**	ND	ND	ND	ND	ND	ND	ND	**0.0070**	NA	ND	ND	**0.0040**	ND	ND	ND
Argon	mol%	**0.942**	**0.945**	**0.936**	**0.938**	**0.942**	**0.93**	**0.932**	**0.935**	**0.927**	**0.0740**	NA	**0.932**	**0.797**	**0.0762**	**0.0796**	**0.0441**	**0.933**
Oxygen	mol%	**21.21**	**21.24**	**21.08**	**19.93**	**18.90**	**20.84**	**20.99**	**20.95**	**20.72**	**0.89**	NA	**20.89**	**17.61**	**1.11**	**1.22**	**0.23**	**20.94**
Nitrogen	mol%	**77.75**	**76.86**	**77.93**	**78.55**	**77.80**	**78.01**	**78.03**	**77.93**	**76.20**	**5.39**	NA	**77.73**	**66.42**	**5.89**	**5.65**	**3.03**	**77.81**
Carbon Dioxide	mol%	**0.057**	**0.053**	**0.043**	**0.54**	**1.21**	**0.061**	**0.047**	**0.084**	**0.047**	**0.092**	NA	**0.066**	**0.091**	**0.087**	**0.063**	**0.10**	**0.043**
Methane	mol%	**0.0434**	**0.893**	**0.0071**	**0.0480**	**1.14**	**0.162**	**0.0050**	**0.101**	**2.08**	**92.37**	NA	**0.378**	**14.90**	**91.70**	**91.91**	**95.46**	**0.270**
Ethane	mol%	**0.0003**	**0.0042**	ND	**0.0480**	**0.0041**	**0.0007**	ND	**0.0005**	**0.0159**	**0.820**	NA	**0.0025**	**0.126**	**0.785**	**0.739**	**0.775**	**0.0022**
Ethylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0002**	NA	ND	ND	**0.0001**	**0.0001**	ND	ND
Propane	mol%	ND	**0.0007**	ND	ND	**0.0018**	**0.0002**	ND	**0.0002**	**0.0047**	**0.231**	NA	**0.0007**	**0.0360**	**0.222**	**0.216**	**0.227**	**0.001**
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	ND	**0.0003**	ND	ND	**0.0018**	**0.0001**	ND	**0.0002**	**0.0017**	**0.0782**	NA	**0.0004**	**0.0122**	**0.0775**	**0.0750**	**0.0790**	**0.0003**
N-butane	mol%	ND	**0.0002**	ND	ND	**0.0004**	ND	ND	ND	**0.0006**	**0.0275**	NA	**0.0001**	**0.0043**	**0.0270**	**0.0256**	**0.0271**	**0.0001**
Iso-pentane	mol%	ND	ND	ND	ND	**0.0003**	ND	ND	ND	**0.0001**	**0.0060**	NA	ND	**0.0010**	**0.0063**	**0.0059**	**0.0064**	ND
N-pentane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0015**	NA	ND	**0.0003**	**0.0017**	**0.0015**	**0.0017**	ND
Hexanes +	mol%	**0.0002**	**0.0002**	ND	**0.0002**	**0.0002**	**0.0005**	**0.0001**	**0.0003**	**0.0003**	**0.0037**	NA	**0.0002**	**0.0013**	**0.0045**	**0.0040**	**0.0062**	**0.0003**
Stable Isotopes																		
$\delta^{13}C$ (CH_4)	‰	NA	**-40.53**	NA	NA	**-19.78**	**-39.30**	NA	**-27.60**	**-34.17**	**-35.42**	NA	**-27.33**	**-34.74**	**-34.77**	**-35.13**	**-35.15**	**-34.94**
δD (CH_4)	‰	NA	**-144.9**	NA	NA	**-93.0**	NA	NA	NA	**-141.9**	**-143.4**	NA	**-139.0**	**-142.8**	**-137.0**	**-145.5**	**-143.0**	**-144.0**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																		
Hydrogen Sulfide	ppmw	NA	NA	<0.1	**0.3**	<0.1	<0.1	<0.1	<0.1	NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	NA	<0.1

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

	Sample Location	SN 67270							WW 11											
	Sample ID	PPG 7B BS							019-580											
	Sample Date	3/28/24*	6/19/24*	9/26/24*	12/16/24[a]	2/27/2025	2/19/25*	3/19/25*	3/28/24*	4/23/24*	5/22/24*	6/18/24*	7/25/24*	8/21/24*	9/25/24*	10/23/24[a]	12/17/24[a]	1/30/25*	2/17/25*	3/18/25*
	Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Surface Water (Bubble Site)							Industrial Water Wells											
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**1.40**	**1.80**	**1.31**	**0.999**	**1.27**	**1.38**	**1.39**	**1.44**	**1.79**	**1.75**	**1.62**	**1.51**	**1.62**	**1.35**	**1.71**	**1.70**	**1.68**	**1.70**	**1.81**
Oxygen	mol%	**17.34**	**19.76**	**24.26**	**20.26**	**11.9**	**0.76**	**17.15**	**8.42**	**3.73**	**6.47**	**8.27**	**10.10**	**9.08**	**11.39**	**4.65**	**4.82**	**3.58**	**3.83**	**1.73**
Nitrogen	mol%	**79.85**	**70.63**	**67.17**	**76.71**	**54.42**	**59.49**	**60.98**	**82.49**	**83.25**	**79.17**	**77.83**	**76.68**	**77.68**	**78.10**	**78.50**	**80.11**	**82.95**	**82.61**	**85.43**
Carbon Dioxide	mol%	**0.64**	**1.36**	**1.68**	**0.33**	**3.52**	**2.97**	**1.69**	**7.62**	**11.18**	**12.59**	**12.23**	**11.66**	**11.58**	**9.13**	**13.87**	**13.32**	**11.74**	**11.82**	**10.99**
Methane	mol%	**0.756**	**6.42**	**5.57**	**1.65**	**28.21**	**34.78**	**18.74**	**0.0339**	**0.055**	**0.0116**	**0.042**	**0.0454**	**0.0426**	**0.0255**	**1.27**	**0.0431**	**0.0483**	**0.0430**	**0.0527**
Ethane	mol%	**0.0011**	**0.0018**	**0.0085**	**0.0414**	**0.561**	**0.592**	**0.0505**	ND	**0.0008**	ND	ND	ND	**0.0007**	ND	**0.0016**	ND	**0.0008**	**0.0007**	**0.0007**
Ethylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Propane	mol%	**0.0026**	**0.0038**	**0.0013**	**0.0089**	**0.0985**	**0.0194**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	**0.0026**	**0.0089**	ND	**0.0009**	**0.0091**	**0.0084**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-butane	mol%	**0.0037**	**0.0082**	ND	**0.0011**	**0.0098**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-pentane	mol%	**0.0016**	**0.0051**	ND	ND	**0.0012**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-pentane	mol%	**0.0005**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexanes +	mol%	**0.0011**	**0.002**	ND	**0.0002**	**0.0037**	**0.0024**	**0.0017**	**0.0009**	**0.0011**	ND	ND	ND	ND	**0.0010**	**0.0009**	**0.0012**	ND	**0.0017**	ND
Stable Isotopes																				
$\delta^{13}C$ (CH_4)	‰	**-74.10**	**-65.20**	**-39.80**	**-40.15**	**-43.50**	**-42.86**	**-41.54**	NA	NA	NA	NA	NA	NA	NA	**-59.30**	NA	NA	NA	NA
δD (CH_4)	‰	NA	**-275.0**	**-140.0**	**-143.6**	**-159.3**	**-150.7**	**-143.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																				
Hydrogen Sulfide	ppmw	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

Sample Location		**WW 13**									**WW 12**									
Sample ID		**019-582**									**019-995**									
Sample Date		3/28/24*	4/24/24*	5/22/24*	9/26/24*	10/23/24[a]	11/19/24[a]	1/30/25*	2/17/25*	3/20/25*	3/28/24*	4/23/24*	5/22/24*	6/18/24*	9/25/24*	10/23/24[a]	11/19/24[a]	2/17/25*	3/18/25*	
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	
Component	Units	Industrial Water Wells																		
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Helium	mol%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Argon	mol%	**1.46**	**1.41**	**1.82**	**1.27**	**1.78**	**1.67**	**1.12**	**1.13**	**1.83**	**1.80**	**1.65**	**1.70**	**1.64**	**1.17**	**1.70**	**1.72**	**1.61**	**1.85**	
Oxygen	mol%	**8.46**	**3.23**	**3.33**	**3.62**	**2.95**	**3.77**	**2.06**	**0.97**	**2.20**	**4.57**	**7.24**	**9.33**	**11.06**	**6.59**	**4.13**	**6.67**	**4.44**	**1.80**	
Nitrogen	mol%	**81.68**	**87.79**	**83.12**	**86.96**	**83.68**	**82.25**	**92.1**	**93.44**	**85.26**	**77.39**	**82.06**	**74.07**	**74.81**	**79.63**	**79.31**	**78.43**	**76.09**	**84.68**	
Carbon Dioxide	mol%	**8.35**	**7.52**	**11.71**	**8.12**	**10.73**	**11.99**	**3.98**	**4.40**	**10.62**	**16.23**	**9.05**	**14.7**	**12.37**	**12.53**	**13.21**	**12.76**	**17.81**	**11.66**	
Methane	mol%	**0.0443**	**0.0469**	**0.0208**	**0.0246**	**0.851**	**0.314**	**0.733**	**0.0636**	**0.104**	**0.0089**	**0.0118**	**0.191**	**0.115**	**0.0765**	**1.65**	**0.410**	**0.0526**	**0.0167**	
Ethane	mol%	ND	**0.0005**	ND	ND	**0.003**	**0.0037**	**0.0012**	**0.0004**	ND	ND	ND	ND	ND	ND	**0.0027**	ND	ND	ND	
Ethylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Propane	mol%	ND	ND	ND	ND	**0.0032**	**0.0023**	**0.0017**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Iso-butane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
N-butane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Iso-pentane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
N-pentane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Hexanes +	mol%	**0.0010**	ND	**0.0007**	ND	**0.0007**	ND	ND	**0.0005**	ND	**0.0010**	ND	ND	ND	**0.0020**	**0.0018**	ND	**0.0011**	ND	
Stable Isotopes																				
$\delta^{13}C$ (CH_4)	‰	NA	NA	NA	NA	**-79.90**	NA	**-90.40**	NA	NA	NA	NA	NA	NA	NA	**-57.60**	**-64.90**	NA	NA	
δD (CH_4)	‰	NA	NA	NA	NA	NA	NA	**-377.0**	NA	NA	NA	NA	NA	NA	NA	**-114.0**	NA	NA	NA	
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Hydrogen Sulfide																				
Hydrogen Sulfide	ppmw	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

Sample Location		**WW 19**										**WW 40**							
Sample ID		**019-1055**										**019-1603**							
Sample Date		4/23/24*	5/22/24*	6/18/24*	7/24/24*	8/21/24*	9/25/24*	10/23/24*	11/19/24*	12/17/24*	1/30/25*	3/28/24*	5/23/24*	10/23/24*	11/19/24*	12/18/24*	1/30/25*	2/18/25*	3/20/25*
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Industrial Water Wells																	
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**1.55**	**1.69**	**1.60**	**1.53**	**1.44**	**1.60**	**1.71**	**1.50**	**1.65**	**1.74**	**1.95**	**1.71**	**1.55**	**1.09**	**1.31**	**1.65**	**1.57**	**1.65**
Oxygen	mol%	**7.32**	**5.68**	**8.63**	**10.57**	**11.07**	**4.92**	**5.21**	**3.70**	**4.79**	**2.38**	**3.05**	**6.74**	**6.88**	**11.22**	**10.43**	**4.21**	**5.30**	**5.07**
Nitrogen	mol%	**82.3**	**80.44**	**75.01**	**74.86**	**73.88**	**78.43**	**78.85**	**86.15**	**82.45**	**81.63**	**81.14**	**80.24**	**76.29**	**82.31**	**80.93**	**82.26**	**80.65**	**79.85**
Carbon Dioxide	mol%	**8.57**	**11.80**	**14.38**	**12.68**	**13.13**	**14.69**	**12.98**	**8.44**	**10.79**	**13.84**	**13.83**	**10.57**	**13.87**	**1.59**	**6.76**	**11.07**	**11.44**	**6.73**
Methane	mol%	**0.261**	**0.390**	**0.375**	**0.360**	**0.312**	**0.366**	**1.260**	**0.209**	**0.315**	**0.394**	**0.0268**	**0.732**	**1.4**	**3.77**	**0.560**	**0.806**	**1.03**	**6.69**
Ethane	mol%	**0.0012**	**0.0018**	**0.0015**	**0.0017**	**0.0031**	**0.0018**	**0.0029**	**0.0011**	**0.0016**	**0.0023**	ND	**0.0011**	**0.0085**	**0.0032**	**0.0029**	**0.0036**	**0.0036**	**0.0096**
Ethylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Propane	mol%	ND	ND	ND	ND	**0.0021**	ND	ND	ND	ND	ND	ND	ND	ND	**0.0004**	ND	ND	ND	**0.0010**
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0007**	ND	ND	ND	ND	**0.0006**
N-butane	mol%	ND	ND	ND	ND	**0.0017**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-pentane	mol%	ND	ND	ND	ND	**0.0012**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-pentane	mol%	ND	ND	ND	ND	UNK	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexanes +	mol%	**0.0007**	ND	**0.001**	**0.0010**	**0.0014**	**0.0023**	**0.0009**	ND	**0.0024**	ND	ND	ND	**0.0017**	**0.0002**	**0.0007**	**0.0008**	**0.0006**	**0.0010**
Stable Isotopes																			
$\delta^{13}C$ (CH_4)	‰	**-52.80**	**-52.10**	NA	**-52.20**	NA	NA	**-67.10**	NA	**-55.20**	**-53.50**	NA	**-65.20**	**-57.80**	**-82.86**	**-58.50**	**-61.50**	**-59.10**	**-86.25**
δD (CH_4)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**-252.0**	NA	NA	NA	**-246.4**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																			
Hydrogen Sulfide	ppmw	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

Sample Location		Cottages Well									MW-1												
Sample ID		019-17636Z									MW-1-200												
Sample Date		3/28/24*	4/23/24*	5/22/24*	7/25/24*	8/21/24*	9/25/24*	10/23/24*	11/19/24*	12/18/24*	3/27/24*	4/22/24*	5/21/24*	6/19/24*	7/23/24*	8/20/24*	9/26/24*	10/21/24*	11/18/24*	12/16/24*	1/29/25*	2/18/25*	3/17/25*
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Industrial Water Wells									Monitoring Wells												
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	NA	**0.0098**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**1.26**	**0.96**	**1.74**	**1.22**	**1.51**	**1.21**	**1.56**	**1.34**	**1.60**	**0.564**	**0.34**	**0.357**	**0.352**	**0.34**	**0.374**	**0.327**	**0.328**	**0.338**	**0.358**	**0.326**	**0.336**	**0.352**
Oxygen	mol%	**10.17**	**18.84**	**4.85**	**24.90**	**12.38**	**2.79**	**0.34**	**8.70**	**2.48**	**8.34**	**1.41**	**1.80**	**2.06**	**2.70**	**3.50**	**1.26**	**1.42**	**1.56**	**1.80**	**0.97**	**1.34**	**1.47**
Nitrogen	mol%	**81.74**	**78.29**	**80.31**	**62.77**	**70.63**	**75.55**	**84.08**	**80.23**	**82.78**	**39.44**	**14.49**	**15.41**	**14.85**	**15.01**	**16.05**	**14.22**	**14.34**	**15.25**	**17.40**	**14.67**	**15.79**	**15.66**
Carbon Dioxide	mol%	**5.71**	**1.66**	**11.16**	**10.75**	**13.72**	**12.00**	**7.30**	**7.74**	**9.60**	**0.25**	**0.35**	**0.33**	**0.48**	**0.46**	**0.51**	**0.81**	**0.64**	**0.27**	**0.37**	**0.45**	**0.39**	**0.21**
Methane	mol%	**1.12**	**0.241**	**1.94**	**0.36**	**1.76**	**8.45**	**6.72**	**2.00**	**3.53**	**51.39**	**83.37**	**82.07**	**82.23**	**81.46**	**79.43**	**83.34**	**83.23**	**82.55**	**80.04**	**83.55**	**82.11**	**82.28**
Ethane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0194**	**0.0322**	**0.0304**	**0.0326**	**0.0324**	**0.0395**	**0.0358**	**0.0332**	**0.0314**	**0.0290**	**0.0324**	**0.0315**	**0.0296**
Ethylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Propane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0037**	ND	ND	**0.0001**	ND	ND	**0.002**	ND
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0009**	ND	ND	ND	ND	ND	ND	ND
N-butane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0017**	ND	ND	ND	ND	ND	ND	ND
Iso-pentane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0009**	ND	ND	ND	ND	ND	ND	ND
N-pentane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	UNK	ND	ND	ND	ND	ND	ND	ND
Hexanes +	mol%	**0.0006**	**0.0002**	**0.0008**	ND	ND	**0.0036**	ND	ND	**0.0024**	**0.0003**	ND	**0.0002**	ND	ND	**0.0006**	ND	ND	**0.0002**	**0.0002**	**0.0006**	**0.0004**	ND
Stable Isotopes																							
$\delta^{13}C$ (CH_4)	‰	**-89.70**	**-92.60**	**-80.00**	NA	**-78.90**	**-95.56**	**-99.32**	**-94.40**	**-97.36**	**-56.81**	**-56.68**	**-56.53**	**-55.65**	**-56.40**	**-56.31**	**-56.24**	**-56.38**	**-56.68**	**-56.46**	**-56.61**	**-56.55**	**-56.50**
δD (CH_4)	‰	**-231.0**	**-258.0**	**-155.0**	NA	NA	**-311.0**	**-286.5**	**-274.0**	**-293.0**	**-191.1**	**-195.8**	**-191.8**	**-187.6**	**-192.1**	**-188.5**	**-185.6**	**-190.8**	**-191.7**	**-186.2**	**-194.9**	**-190.5**	**-194.0**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																							
Hydrogen Sulfide	ppmw	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

Sample Location		MW-1													MW-1											
Sample ID		MW-1-500													MW-1-700											
Sample Date		3/27/24*	4/22/24*	5/21/24*	6/18/24*	7/23/24*	8/20/24*	9/23/24*	10/21/24*	11/18/24*	12/16/24*	1/29/25*	2/18/25*	3/17/25*	3/26/24*	4/22/24*	5/22/24*	6/19/24*	7/23/24*	8/20/24*	9/23/24*	10/21/24*	11/19/24*	12/16/24*	1/29/25*	2/18/25*	3/18/25*
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Monitoring Wells																								
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**1.85**	**1.36**	**1.34**	**1.23**	**1.16**	**1.23**	**1.13**	**1.11**	**1.04**	**1.01**	**1.01**	**0.948**	**1.01**	**1.60**	**1.67**	**1.26**	**1.51**	**1.42**	**1.33**	**1.33**	**1.44**	**1.42**	**1.35**	**1.29**	**1.28**	**1.39**
Oxygen	mol%	**3.31**	**3.67**	**11.28**	**6.84**	**9.14**	**11.33**	**4.35**	**4.00**	**5.61**	**4.38**	**2.42**	**3.54**	**3.14**	**2.01**	**3.12**	**11.64**	**5.82**	**8.58**	**13.05**	**6.51**	**5.04**	**5.05**	**4.40**	**2.82**	**1.98**	**1.59**
Nitrogen	mol%	**84.03**	**60.04**	**74.16**	**57.21**	**53.97**	**57.68**	**52.02**	**50.48**	**47.20**	**45.08**	**44.06**	**41.33**	**44.22**	**75.24**	**73.73**	**74.86**	**68.82**	**65.79**	**65.04**	**70.70**	**65.59**	**64.63**	**60.64**	**55.91**	**56.83**	**57.22**
Carbon Dioxide	mol%	**2.48**	**1.05**	**0.10**	**0.29**	**0.25**	**0.35**	**0.17**	**0.24**	**0.30**	**0.20**	**0.14**	**0.36**	**0.21**	**0.12**	**0.15**	**0.074**	**0.14**	**0.096**	**0.22**	**0.067**	**0.1**	**0.11**	**0.11**	**0.054**	**0.071**	**0.075**
Methane	mol%	**8.33**	**33.87**	**13.12**	**34.43**	**35.48**	**29.14**	**42.33**	**44.17**	**45.85**	**49.34**	**52.36**	**53.82**	**51.43**	**21.02**	**21.32**	**12.17**	**23.71**	**24.1**	**20.07**	**21.38**	**27.82**	**28.78**	**33.50**	**39.91**	**39.83**	**39.72**
Ethane	mol%	**0.0009**	ND	**0.0008**	**0.0007**	**0.0008**	**0.0065**	**0.0010**	**0.0009**	**0.0008**	**0.0008**	**0.0009**	**0.0011**	**0.0006**	**0.0043**	**0.0037**	**0.0017**	**0.0032**	**0.0035**	**0.0093**	**0.0027**	**0.0037**	**0.0035**	**0.0034**	**0.0031**	**0.0035**	**0.0030**
Ethylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Propane	mol%	ND	ND	ND	ND	ND	**0.0051**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0057**	ND	ND	ND	ND	ND	ND	ND
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	ND	ND	ND	ND	ND	**0.0015**	ND	ND	ND	ND	ND	ND	ND	**0.0006**	**0.001**	**0.001**	**0.0019**	**0.002**	**0.0035**	**0.0020**	**0.0022**	**0.0021**	**0.0020**	**0.0015**	**0.0018**	**0.0016**
N-butane	mol%	ND	ND	ND	ND	ND	**0.0037**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0039**	ND	ND	ND	ND	ND	ND	ND
Iso-pentane	mol%	ND	ND	ND	ND	ND	**0.0024**	**0.0007**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0024**	**0.0164**	ND	ND	ND	ND	ND	ND
N-pentane	mol%	ND	ND	ND	ND	ND	UNK	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	UNK	ND	ND	ND	ND	ND	ND	ND
Hexanes +	mol%	ND	ND	ND	**0.0007**	ND	**0.0018**	ND	**0.0007**	ND	**0.0004**	ND	ND	ND	**0.0067**	ND	ND	**0.0015**	**0.0006**	**0.0020**	ND	**0.0010**	ND	**0.0008**	**0.0021**	ND	ND
Stable Isotopes																											
$\delta^{13}C$ (CH_4)	‰	**-86.06**	**-75.80**	**-91.53**	**-65.00**	**-69.25**	**-77.02**	**-67.15**	**-72.46**	**-74.10**	**-72.94**	**-67.96**	**-65.85**	**-64.60**	**-81.93**	**-82.87**	**-85.90**	**-85.82**	**-86.12**	**-86.49**	**-86.74**	**-86.87**	**-87.87**	**-89.86**	**-88.29**	**-86.93**	**-86.35**
δD (CH_4)	‰	**-353.0**	**-319.9**	**-312.9**	**-281.4**	**-309.7**	**-311.7**	**-309.1**	**-303.6**	**-309.9**	**-310.8**	**-314.6**	**-300.2**	**-302.5**	**-208.3**	**-210.6**	**-258.5**	**-233.0**	**-257.7**	**-257.1**	**-269.1**	**-264.1**	**-259.6**	**-266.3**	**-290.6**	**-286.3**	**-285.0**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																											
Hydrogen Sulfide	ppmw	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

Sample Location		MW-2													MW-2												
Sample ID		**MW-2-200**													**MW-2-500**												
Sample Date		3/26/24*	4/23/24*	5/24/24*	6/18/24*	7/23/24*	8/20/24*	9/24/24*	10/23/24*	11/19/24*	12/18/24*	1/28/25*	2/19/25*	3/19/25*	3/26/24*	4/22/24*	5/22/24*	6/19/24*	7/23/24*	8/20/24*	9/24/24*	10/23/24*	11/19/24*	12/18/24*	1/28/25*	2/19/25*
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Monitoring Wells																									
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	NA	NA	NA	NA	NA	NA	NA	**0.0088**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**0.331**	**0.316**	**0.291**	**0.364**	**0.316**	**0.368**	**0.328**	**0.849**	**0.256**	**0.533**	**0.213**	**0.257**	**0.254**	**2.01**	**1.93**	**1.74**	**1.43**	**1.27**	**1.26**	**1.23**	**1.01**	**1.22**	**1.22**	**1.28**	**1.26**
Oxygen	mol%	**1.72**	**0.84**	**2.40**	**4.36**	**3.89**	**6.80**	**3.36**	**18.60**	**2.03**	**9.88**	**0.87**	**2.00**	**1.17**	**2.82**	**3.13**	**4.38**	**5.66**	**8.67**	**8.34**	**3.69**	**11.77**	**3.49**	**2.11**	**2.09**	**1.34**
Nitrogen	mol%	**11.89**	**11.09**	**9.62**	**14.08**	**12.43**	**17.66**	**14.07**	**71.72**	**9.61**	**41.08**	**7.08**	**9.41**	**8.64**	**92.24**	**86.68**	**78.33**	**67.01**	**63.28**	**61.69**	**58.11**	**71.62**	**56.52**	**56.45**	**52.36**	**56.68**
Carbon Dioxide	mol%	ND	ND	ND	ND	ND	ND	**0.071**	**0.044**	**0.094**	**0.063**	**0.069**	**0.16**	**0.18**	**2.19**	**2.05**	**1.72**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methane	mol%	**85.97**	**87.67**	**87.58**	**81.1**	**83.28**	**75.02**	**82.09**	**8.78**	**87.94**	**48.41**	**91.68**	**88.09**	**89.68**	**0.743**	**6.21**	**13.82**	**25.89**	**26.75**	**28.56**	**36.92**	**15.60**	**38.76**	**40.21**	**44.25**	**40.70**
Ethane	mol%	**0.0690**	**0.0685**	**0.0836**	**0.0731**	**0.0697**	**0.0678**	**0.0694**	**0.0067**	**0.0723**	**0.0412**	**0.0818**	**0.0794**	**0.0720**	ND	**0.0008**	**0.0009**	**0.0127**	**0.0135**	**0.0131**	**0.0096**	**0.0035**	**0.0079**	**0.0072**	**0.0069**	**0.0056**
Ethylene	mol%	ND	ND	ND	ND	**0.0014**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0006**	**0.0002**	ND	**0.0005**	**0.0005**	ND
Propane	mol%	**0.0097**	**0.0094**	**0.0136**	**0.0105**	**0.0071**	**0.0062**	**0.0021**	**0.0001**	**0.0011**	**0.0006**	**0.0016**	**0.0015**	**0.0011**	ND	ND	ND	**0.0019**	**0.0019**	**0.0041**	**0.0015**	**0.0006**	**0.0013**	**0.0012**	**0.0011**	**0.0010**
Propylene	mol%	ND	ND	ND	ND	**0.0003**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	**0.0050**	**0.0051**	**0.0064**	**0.0047**	**0.0032**	**0.0027**	**0.0010**	ND	**0.0004**	ND	**0.0002**	ND	ND	ND	**0.0013**	**0.0015**	**0.0041**	**0.0041**	**0.0045**	**0.0039**	**0.0016**	**0.0034**	**0.0031**	**0.0029**	**0.0028**
N-butane	mol%	**0.0022**	**0.0015**	**0.0019**	**0.0013**	**0.0011**	**0.0018**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.002**	ND	ND	ND	ND	ND	ND
Iso-pentane	mol%	**0.0004**	**0.0004**	**0.0005**	**0.0003**	ND	**0.0009**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0013**	**0.0228**	ND	ND	ND	ND	ND
N-pentane	mol%	ND	ND	ND	ND	ND	UNK	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	UNK	ND	ND	ND	ND	ND	ND
Hexanes +	mol%	**0.0004**	ND	ND	**0.0008**	**0.0005**	**0.0015**	ND	**0.0002**	**0.0004**	**0.0002**	**0.0003**	ND	ND	**0.0018**	**0.0018**	**0.0012**	**0.0010**	**0.0007**	**0.0016**	ND	**0.0010**	ND	**0.0005**	**0.0031**	**0.0005**
Stable Isotopes																											
$\delta^{13}C$ (CH_4)	‰	**-49.82**	**-49.33**	**-48.35**	**-48.45**	**-49.20**	**-48.99**	**-49.45**	**-49.58**	**-49.20**	**-49.11**	**-49.12**	**-48.78**	**-48.74**	**-62.10**	**-77.13**	**-68.16**	**-56.96**	**-58.96**	**-63.60**	**-62.44**	**-66.24**	**-68.96**	**-71.06**	**-73.32**	**-75.23**
δD (CH_4)	‰	**-183.6**	**-182.4**	**-177.6**	**-183.0**	**-175.7**	**-178.5**	**-187.6**	**-174.3**	**-179.1**	**-180.4**	**-180.0**	**-175.8**	**-179.8**	NA	**-319.0**	**-306.2**	**-252.3**	**-258.3**	**-285.9**	**-296.5**	**-289.5**	**-279.3**	**-292.8**	**-313.0**	**-312.0**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																											
Hydrogen Sulfide	ppmw	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

Sample Location		MW-2													MW-3											
Sample ID		MW-2-700													MW-3-200											
Sample Date		3/26/24*	4/23/24*	5/22/24*	6/19/24*	7/23/24*	8/21/24*	9/23/24*	10/23/24*	11/19/24*	12/18/24*	1/28/25*	2/19/25*	3/19/25*	3/27/24*	4/23/24*	5/23/24*	6/20/24*	7/24/24*	8/21/24*	9/24/24*	10/22/24*	11/20/24*	12/17/24*	1/27/25*	2/17/25*	3/18/25*
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Monitoring Wells																								
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**1.80**	**1.83**	**1.82**	**1.76**	**1.67**	**1.71**	**1.95**	**1.97**	**1.95**	**1.26**	**1.61**	**1.87**	**1.73**	**0.411**	**0.324**	**0.470**	**0.320**	**0.269**	**0.368**	**0.300**	**0.271**	**0.335**	**0.260**	**0.396**	**0.205**	**0.234**
Oxygen	mol%	**3.71**	**5.21**	**7.97**	**8.25**	**13.18**	**13.42**	**1.91**	**0.28**	**0.43**	**11.19**	**4.42**	**0.16**	**5.09**	**0.92**	**0.44**	**7.34**	**4.63**	**4.19**	**5.60**	**2.51**	**2.48**	**1.29**	**1.11**	**6.50**	**0.75**	**1.55**
Nitrogen	mol%	**85.21**	**83.34**	**80.10**	**80.25**	**80.35**	**80.14**	**89.36**	**90.82**	**90.51**	**84.57**	**87.14**	**86.40**	**84.17**	**17.82**	**11.99**	**29.45**	**11.01**	**11.07**	**13.09**	**17.07**	**10.37**	**12.68**	**9.28**	**28.95**	**7.05**	**9.23**
Carbon Dioxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.015**	ND	**0.028**	**0.029**	ND	**0.024**	**0.13**	**0.12**	**0.27**
Methane	mol%	**9.27**	**9.62**	**10.10**	**9.73**	**4.8**	**4.58**	**6.75**	**6.92**	**7.10**	**2.98**	**6.82**	**11.55**	**9.00**	**80.80**	**87.19**	**62.70**	**83.98**	**84.40**	**80.78**	**80.03**	**86.80**	**85.63**	**89.27**	**63.99**	**91.82**	**88.67**
Ethane	mol%	**0.0027**	**0.0025**	**0.0033**	**0.0033**	**0.0032**	**0.0058**	**0.0047**	**0.0056**	**0.0054**	**0.0020**	**0.0038**	**0.0043**	**0.0040**	**0.0431**	**0.0493**	**0.0387**	**0.0533**	**0.0518**	**0.0566**	**0.0539**	**0.0513**	**0.0599**	**0.0544**	**0.0364**	**0.0524**	**0.0530**
Ethylene	mol%	ND	ND	ND	ND	ND	ND	ND	**0.0009**	**0.0009**	**0.0003**	**0.0010**	**0.0012**	**0.0009**	**0.0005**	**0.0004**	ND	ND	ND	ND	ND	ND	ND	ND	**0.0003**	ND	ND
Propane	mol%	**0.0013**	**0.0008**	**0.001**	**0.001**	**0.0012**	**0.0035**	**0.0017**	**0.0018**	**0.0018**	**0.0006**	**0.0010**	**0.0014**	**0.0012**	ND	ND	ND	ND	ND	**0.0016**	ND	ND	ND	ND	ND	ND	ND
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	ND	**0.001**	ND	**0.001**	**0.0023**	**0.0025**	**0.0028**	**0.0026**	**0.0023**	**0.0009**	**0.0014**	**0.0022**	**0.0017**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-butane	mol%	ND	ND	ND	ND	ND	**0.0019**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0012**	ND	ND	ND	ND	ND	ND	ND
Iso-pentane	mol%	ND	ND	ND	ND	ND	**0.0012**	**0.0200**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0008**	ND	ND	ND	ND	ND	ND	ND
N-pentane	mol%	ND	ND	ND	ND	ND	UNK	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	UNK	ND	ND	ND	ND	ND	ND	ND
Hexanes +	mol%	**0.0013**	**0.0018**	ND	ND	ND	**0.0038**	ND	**0.0011**	ND	ND	**0.0008**	ND	ND	**0.0026**	**0.0011**	ND	**0.0009**	ND	**0.0009**	ND	**0.0005**	**0.0006**	**0.0009**	**0.0009**	**0.0009**	ND
Stable Isotopes																											
$\delta^{13}C$ (CH_4)	‰	**-83.69**	**-83.68**	**-82.98**	**-82.27**	**-79.20**	**-78.30**	**-74.94**	**-70.85**	**-70.48**	**-72.92**	**-75.32**	**-76.73**	**-75.55**	**-48.64**	**-47.50**	**-47.21**	**-47.05**	**-47.35**	**-47.01**	**-47.25**	**-47.34**	**-47.41**	**-47.33**	**-47.37**	**-47.29**	**-47.09**
δD (CH_4)	‰	**-193.6**	**-187.8**	**-183.8**	**-192.8**	**-192.0**	**-192.0**	**-203.0**	**-203.0**	**-214.0**	**-206.8**	**-234.6**	**-242.7**	**-253.6**	**-187.3**	**-186.8**	**-182.1**	**-182.7**	**-184.1**	**-184.1**	**-183.3**	**-186.7**	**-184.9**	**-180.4**	**-182.9**	**-191.0**	**-194.3**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																											
Hydrogen Sulfide	ppmw	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

Sample Location		MW-3													MW-3												
Sample ID		MW-3-500													MW-3-700												
Sample Date		3/27/24*	4/23/24*	5/23/24*	6/20/24*	7/24/24*	8/21/24*	9/25/24*	10/22/24*	11/20/24*	12/17/24*	1/28/25*	2/17/25*	3/18/25*	3/27/24*	4/24/24*	5/23/24*	6/20/24*	7/24/24*	8/21/24*	9/24/24*	10/22/24*	11/20/24*	2/17/202	1/28/25*	2/18/25*	3/19/25*
Sampler		ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Component	Units	Monitoring Wells																									
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Argon	mol%	**0.873**	**0.859**	**0.872**	**0.829**	**0.804**	**0.839**	**0.811**	**0.809**	**0.821**	**0.798**	**0.868**	**0.830**	**0.769**	**1.12**	**1.29**	**1.35**	**1.26**	**1.17**	**1.20**	**1.20**	**1.24**	**1.24**	**1.21**	**1.20**	**1.19**	**1.26**
Oxygen	mol%	**7.47**	**1.24**	**4.37**	**0.047**	**0.13**	**0.10**	**0.38**	**0.47**	**0.32**	**1.10**	**13.34**	**2.41**	**0.057**	**10.21**	**5.51**	**7.39**	**7.08**	**11.96**	**8.01**	**5.05**	**3.38**	**4.83**	**3.67**	**5.06**	**3.78**	**3.51**
Nitrogen	mol%	**55.64**	**36.97**	**36.28**	**35.69**	**34.1**	**35.21**	**34.04**	**32.84**	**33.45**	**34.41**	**65.03**	**38.36**	**39.36**	**63.14**	**53.69**	**55.6**	**57.54**	**55.37**	**53.67**	**55.83**	**56.78**	**55.18**	**54.75**	**57.78**	**53.77**	**50.11**
Carbon Dioxide	mol%	**0.32**	**0.02**	ND	**1.95**	**2.24**	**1.20**	**0.91**	ND	ND	ND	ND	ND	**1.00**	**1.00**	**0.28**	**0.07**	**0.03**	**0.040**	ND	ND	ND	ND	ND	ND	ND	ND
Methane	mol%	**35.35**	**60.34**	**57.89**	**60.86**	**62.05**	**61.95**	**63.18**	**65.19**	**64.73**	**63.03**	**20.54**	**57.78**	**58.22**	**24.48**	**39.16**	**35.53**	**34.04**	**31.41**	**37.07**	**37.86**	**38.54**	**38.71**	**40.32**	**35.91**	**41.21**	**45.07**
Ethane	mol%	**0.299**	**0.509**	**0.519**	**0.56**	**0.605**	**0.602**	**0.620**	**0.606**	**0.630**	**0.594**	**0.190**	**0.545**	**0.534**	**0.0466**	**0.0733**	**0.0486**	**0.0462**	**0.0421**	**0.0468**	**0.0481**	**0.0467**	**0.0472**	**0.0432**	**0.0385**	**0.0392**	**0.0411**
Ethylene	mol%	**0.0015**	**0.0027**	**0.0033**	**0.0019**	**0.0014**	**0.0025**	**0.0028**	**0.0029**	**0.0024**	**0.0024**	**0.0008**	**0.0018**	**0.0011**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0005**	**0.0004**	**0.0006**	**0.0007**
Propane	mol%	**0.0217**	**0.0318**	**0.0346**	**0.0306**	**0.0258**	**0.0327**	**0.0333**	**0.0312**	**0.0314**	**0.0283**	**0.0079**	**0.0237**	**0.0239**	**0.0052**	**0.0069**	**0.0042**	**0.0041**	**0.0035**	**0.0043**	**0.0044**	**0.0042**	**0.0041**	**0.0037**	**0.0032**	**0.0032**	**0.0031**
Propylene	mol%	ND	**0.0004**	**0.0005**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	**0.0066**	**0.0065**	**0.0074**	**0.0112**	**0.0117**	**0.0122**	**0.0120**	**0.0106**	**0.0125**	**0.0120**	**0.0036**	**0.0143**	**0.0149**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-butane	mol%	**0.0009**	**0.0007**	**0.0009**	**0.0009**	**0.0007**	**0.0011**	**0.0012**	**0.001**	**0.0012**	**0.0010**	**0.0003**	**0.0010**	**0.0010**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iso-pentane	mol%	ND	ND	ND	**0.0004**	ND	ND	ND	ND	ND	ND	ND	**0.0005**	**0.0005**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-pentane	mol%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexanes +	mol%	**0.0173**	**0.0199**	**0.0248**	**0.0232**	**0.0337**	**0.0472**	**0.0117**	**0.0365**	**0.0081**	**0.0281**	**0.0122**	**0.0276**	**0.0249**	**0.0009**	ND	**0.0031**	**0.0011**	**0.001**	ND	**0.0024**	**0.001**	ND	ND	**0.0013**	ND	**0.0006**
Stable Isotopes																											
$\delta^{13}C$ (CH_4)	‰	**-44.75**	**-44.71**	**-44.57**	**-44.84**	**-44.85**	**-44.64**	**-44.91**	**-44.75**	**-45.11**	**-45.00**	**-44.91**	**-44.98**	**-44.54**	**-72.08**	**-71.75**	**-67.76**	**-66.42**	**-65.55**	**-64.93**	**-64.45**	**-64.83**	**-63.98**	**-63.22**	**-62.39**	**-62.41**	**-62.31**
δD (CH_4)	‰	**-151.5**	**-156.4**	**-150.6**	**-149.4**	**-150.2**	**-150.7**	**-148.9**	**-154.0**	**-153.4**	**-159.4**	**-151.8**	**-149.5**	**-155.0**	**-193.5**	**-200.7**	**-238.9**	**-240.5**	**-244.1**	**-250.7**	**-250.1**	**-256.0**	**-253.6**	**-266.2**	**-276.8**	**-278.8**	**-279.4**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide																											
Hydrogen Sulfide	ppmw	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 4
Gas Data Summary
Sulphur Dome
Calcasieu Parish, Louisiana

	Sample Location	SN 32069	SN 37320				Starks	Sulphur
	Sample ID	Brine Well 2	Cavern 4				Brine	Production
	Sample Date	3/28/24	5/29/24	8/10/24	8/10/24	8/10/24	8/10/24	9/25/24*	9/25/24*
	Sampler	ERM	ERM	Lonquist	Lonquist	Lonquist	Lonquist	ERM	ERM
Component	Units	Brine							
Carbon Monoxide	mol%	ND	ND	ND	ND	ND	ND	ND	ND
Helium	mol%	ND	ND	ND	ND	ND	ND	NA	NA
Hydrogen	mol%	**0.0136**	**0.0056**	ND	ND	ND	ND	ND	ND
Argon	mol%	**0.0411**	**0.157**	**0.0478**	**0.0494**	**0.0477**	**0.0477**	**0.979**	**0.903**
Oxygen	mol%	**0.46**	**1.76**	**0.025**	**0.067**	**0.020**	**0.025**	**19.17**	**11.40**
Nitrogen	mol%	**7.32**	**71.48**	**89.27**	**89.26**	**89.26**	**89.25**	**56.65**	**41.19**
Carbon Dioxide	mol%	**1.99**	**0.16**	**0.40**	**0.40**	**0.39**	**0.4**	**18.36**	**41.77**
Methane	mol%	**86.93**	**25.44**	**9.51**	**9.45**	**9.52**	**9.51**	**4.84**	**4.71**
Ethane	mol%	**0.433**	**0.166**	**0.0782**	**0.0779**	**0.0783**	**0.0782**	**0.0026**	**0.0382**
Ethylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND
Propane	mol%	**0.135**	**0.210**	**0.133**	**0.133**	**0.133**	**0.133**	ND	**0.0021**
Propylene	mol%	ND	ND	ND	ND	ND	ND	ND	ND
Iso-butane	mol%	**0.0955**	**0.0694**	**0.0479**	**0.0485**	**0.0482**	**0.0482**	ND	ND
N-butane	mol%	**0.466**	**0.232**	**0.167**	**0.169**	**0.168**	**0.168**	ND	ND
Iso-pentane	mol%	**0.389**	**0.0917**	**0.0733**	**0.0756**	**0.0744**	**0.0742**	ND	ND
N-pentane	mol%	**0.622**	**0.1140**	**0.0963**	**0.0995**	**0.0984**	**0.0979**	ND	ND
Hexanes +	mol%	**1.10**	**0.123**	**0.156**	**0.171**	**0.169**	**0.166**	ND	ND
Stable Isotopes									
$\delta^{13}C$ (CH_4)	‰	**-34.22**	**-34.11**	**-34.05**	**-33.90**	**-34.05**	**-34.10**	**-62.10**	**-38.80**
δD (CH_4)	‰	**-145.6**	**-143.1**	**-140.2**	**-140.9**	**-143.0**	**-141.2**	**-190.0**	**-157.0**
$\delta^{13}C$ (CO_2)	‰	NA	NA	NA	NA	NA	NA	NA	NA
Hydrogen Sulfide									
Hydrogen Sulfide	ppmw	NA	NA	NA	NA	NA	NA	NA	NA

BCKGRD ATM								
3/28/24	6/19/24	9/26/24	10/24/24	11/18/24	12/16/24	1/30/25	2/19/25	3/19/25
ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Background Soil Gas								
ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND
0.942	**0.953**	**0.941**	**0.932**	**0.930**	**0.942**	**0.931**	**0.937**	**0.936**
21.22	**21.46**	**21.22**	**20.93**	**20.88**	**21.24**	**20.91**	**21.15**	**21.10**
77.79	**77.52**	**77.80**	**78.08**	**78.15**	**77.76**	**78.11**	**77.87**	**77.92**
0.51	**0.063**	**0.039**	**0.061**	**0.043**	**0.050**	**0.044**	**0.044**	**0.043**
0.0006	**0.0023**	**0.0004**	**0.0006**	**0.0011**	**0.0041**	**0.0003**	**0.0021**	**0.0012**
ND	ND	ND	ND	ND	**0.003**	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND
0.0002	**0.0002**	ND	ND	**0.0002**	**0.0001**	**0.0002**	ND	**0.0004**
NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Notes:
Bolded values deteted in the sample.
ND - Not Detected
NA - Not Analyzed (insufficient volume)
* - Dissolved Gas sample

Table 5

Oil Data Summary

Sulphur Dome

Calcalsieu Parish, Louisiana

		Cavern 7 Oil								Cavern 4 Oil			Stock Tank	
	Sample ID	**7B Oil**	**Cavern 7B**	**7B Oil**	**7B Oil**	**Cavern 7 Oil**	**7B Oil**	**7B Oil**	**7B Oil**	**Cavern 4**	**PPG No. 004**	**#4 Oil**	**Pad Oil**	**Pad Oil**
	Sample Date	3/30/23	5/25/23	6/16/23	10/25/23	2/7/24	9/26/24	12/18/24	1/9/25	5/25/23	8/10/24	1/9/25	1/18/23	6/16/23
	Location	Cavern 7 frac tank	Cavern 7	Cavern 7	Cavern 7	Cavern 7	Cavern 7	Cavern 7	Cavern 7	Cavern 4	Cavern 4	Cavern 4	Pad Oil Pump Oil	Pad Oil Pump Oil
	Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	Lonquist	ERM	Intertek	ERM
Constituent	**Units**													
Average API Gravity	**°**	**33.6**	**33.52**	**33.98**	**33.85**	**34.09**	**33.98**	**33.82**	**33.84**	**31.21**	**31.44**	**33.00**	**29.1**	**29.27**
Sulfur	**Wt %**	**1.37**	**1.401**	**1.350**	**1.362**	**1.336**	NA	**1.408**	**1.559**	**1.548**	**1.515**	**1.691**	**1.17**	**1.265**
Vanadium	**mg/kg**	**100**	**23**	**25**	**21**	**25**	**17**	**29.3**	**29.8**	**42**	**42**	**49.9**	**19**	**18**
Nickel	**mg/kg**	**26**	**6**	**6**	**5**	**6**	**5**	**7.66**	**7.90**	**9**	**9**	**10.4**	**4.94**	**5**
Iron	**mg/kg**	**12**	<1	**1**	**1**	<1	<1	**0.308**	**0.29**	**4**	**15**	**2.02**	**24.5**	**29**
Salt	**lb/1000 bbl**	**18**	**5.0**	**10.6**	**23.2**	**20.0**	**16.0**	**9.0**	**5.0**	**10.4**	**883.3**	**8.6**	**46.7**	**258.0**
Organic Chloride	**mg/kg**	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	**63.7**	**2.1**
Total Chloride	**mg/kg**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**202.9**	NA
Inorganic Chloride	**mg/kg**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**139.2**	NA
Specific Gravity	**°**	**0.8571**	**0.8575**	**0.8551**	**0.8557**	**0.8545**	**0.8550**	**0.8559**	**0.8558**	**0.8696**	**0.8684**	**0.8602**	NA	**0.8801**
Density	**g/ml**	**0.8562**	**0.8566**	**0.8542**	**0.8549**	**0.8537**	**0.8524**	**0.8550**	**0.8549**	**0.8688**	**0.8675**	**0.8593**	NA	**0.8793**

Notes:

< Not detected at the reporting limit shown.

Bolded values detected in sample

NA - Not Analyzed

Table 5

Oil Data Summary

Sulphur Dome

Calcalsieu Parish, Louisiana

		Produced Oil											
	Sample ID	**209459**		**185997**		**210185**	**Tank Battery**	**252112**	**109963**	**235998**	**41842**	**189416**	
	Sample Date	5/2/23	6/16/23	5/2/23	6/16/23	5/25/23	5/25/23	6/16/23	6/16/23	8/17/23	8/17/23	8/29/23	8/29/23
	Location	SN 209459 Well Sample	SN 209459 Well Sample	SN 185997 Well Sample	SN 185997 Well Sample	SN 210185 Well Sample	Tank Battery	SN 252112 Well Sample	SN 109963 Well Sample	SN 235998 Well Sample	SN 41842 Well Sample	SN 189416 1,250'	SN 189416 170'
	Sampler	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM	ERM
Constituent	**Units**												
Average API Gravity	**°**	**22.81**	**21.56**	**21.53**	**22.96**	**22.79**	**26.95**	**29.72**	**24.05**	**16.88**	**26.55**	**20.65**	**20.8**
Sulfur	**Wt %**	**0.435**	**0.433**	**0.407**	**0.411**	**0.476**	**0.327**	**0.295**	**0.431**	**0.747**	**0.403**	**0.450**	**0.447**
Vanadium	**mg/kg**	**2**	**2**	**2**	**2**	**2**	**1**	**1**	**2**	**2.3**	**2**	<0.1	<0.1
Nickel	**mg/kg**	**8**	**9**	**9**	**10**	**10**	**6**	**5**	**8**	**9.6**	**22.2**	**10.9**	**8.3**
Iron	**mg/kg**	**13**	**6**	**6**	**7**	**59**	**15**	**11**	**17**	**11.7**	**16.3**	**204**	**179**
Salt	**lb/1000 bbl**	**1,290**	**9.2**	**1,015**	**138.0**	**9.8**	**32.0**	**74.0**	**54.0**	**9,850.0**	**10.6**	**232.0**	**88.0**
Organic Chloride	**mg/kg**	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1	<1	**9.0**	**6.2**
Total Chloride	**mg/kg**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic Chloride	**mg/kg**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Specific Gravity	**°**	**0.917**	**0.9245**	**0.9246**	**0.9161**	**0.9171**	**0.893**	**0.8887**	**0.9096**	**0.9536**	**0.8953**	**0.9300**	**0.9291**
Density	**g/ml**	**0.9161**	**0.9235**	**0.9237**	**0.9152**	**0.9162**	**0.8921**	**0.8878**	**0.9087**	**0.9527**	**0.8944**	**0.9291**	**0.9282**

Notes:

< Not detected at the reporting limit shown.

Bolded values detected in sample

NA - Not Analyzed

Table 6
Survey Results and Groundwater Elevations
Sulphur Dome
Calcasieu Parish, Louisiana

Well ID	UTM X	UTM Y	Screened Interval	Screen Length	Top of Casing Elevation	Ground Elevation	Stickup	Total Depth	Mid Screen	Mid Screen Elevation	TDS	Calcuated Density	4/22/2024			5/21/2024			6/18/2024			7/23/2024		
													DTW	Water Elevation	EFWH	DTW	Water Elevation	EFWH	DTW	Water Elevation	EFWH	DTW	Water Elevation	EFWH
	m	m	ft bgs	ft	ft	ft	ft	ft btoc	ft bgs	ft	mg/L	kg/m^3	ft btoc	ft	ft	ft btoc	ft	ft	ft btoc	ft	ft	ft btoc	ft	ft
MW-1-200	460257.857	3347201.961	162-172	10	12.75	9.22	3.53	175.81	167	-158.06	328	998.434	23.83	-11.08	-10.61	23.39	-10.64	-10.34	23.12	-10.37	-10.41	23.19	-10.44	-11.05
MW-1-500	460260.314	3347203.590	503-513	10	12.11	9.30	2.81	515.90	508	-498.79	296	998.411	54.65	-42.54	-41.98	54.19	-42.08	-43.14	55.35	-43.24	-42.82	55.03	-42.92	-42.44
MW-1-700	460262.682	3347205.242	694-674	10	12.17	9.26	2.91	708.40	699	-691.23	494	998.553	54.08	-41.91	-41.17	53.57	-41.40	-42.31	54.71	-42.54	-42.05	54.45	-42.28	-41.68
MW-2-200	460190.048	3346592.350	230-240	10	14.56	11.40	3.16	243.06	235	-223.50	260	998.386	47.20	-32.64	-32.39	46.98	-32.42	-32.59	47.18	-32.62	-32.92	47.51	-32.95	-32.61
MW-2-500	460186.918	3346593.844	502-512	10	14.61	11.51	3.10	515.10	507	-495.49	296	998.411	58.66	-44.05	-43.78	58.49	-43.88	-45.25	59.96	-45.35	-44.62	59.33	-44.72	-43.95
MW-2-700	460198.229	3346589.473	680-690	10	14.69	11.09	3.60	694.60	685	-674.91	594	998.624	58.63	-43.94	-43.47	58.43	-43.74	-44.88	59.84	-45.15	-44.35	59.31	-44.62	-43.67
MW-3-200	460555.076	3346638.627	228-238	10	14.74	12.04	2.70	242.69	233	-222.95	552	998.594	51.49	-36.75	-36.54	51.35	-36.61	-37.15	51.96	-37.22	-37.75	52.56	-37.82	-36.68
MW-3-500	460555.867	3346635.699	464-474	10	15.08	11.64	3.44	475.95	469	-455.87	2,220	999.786	57.92	-42.84	-41.96	57.70	-42.62	-43.36	59.09	-44.01	-42.84	58.58	-43.50	-42.18
MW-3-700	460557.858	3346628.300	680-690	10	14.41	11.53	2.88	695.38	685	-675.97	4,320	1,001.286	57.75	-43.34	-41.12	57.49	-43.08	-42.60	58.96	-44.55	-42.07	58.43	-44.02	-41.38

Well ID	UTM X	UTM Y	Screened Interval	Screen Length	Top of Casing Elevation	Ground Elevation	Stickup	Total Depth	Mid Screen	Mid Screen Elevation	TDS	Calcuated Density	8/20/2024			9/23/2024			10/21/2024			11/18/2024		
													DTW	Water Elevation	EFWH	DTW	Water Elevation	EFWH	DTW	Water Elevation	EFWH	DTW	Water Elevation	EFWH
	m	m	ft bgs	ft	ft	ft	ft	ft btoc	ft bgs	ft	mg/L	kg/m^3	ft btoc	ft	ft	ft btoc	ft	ft	ft btoc	ft	ft	ft btoc	ft	ft
MW-1-200	460257.857	3347201.961	162-172	10	12.75	9.22	3.53	175.81	167	-158.06	328	998.434	23.23	-10.48	-10.38	23.16	-10.41	-10.82	23.60	-10.85	-10.83	23.61	-10.86	-10.45
MW-1-500	460260.314	3347203.590	503-513	10	12.11	9.30	2.81	515.90	508	-498.79	296	998.411	55.16	-43.05	-42.74	54.95	-42.84	-43.46	55.67	-43.56	-44.19	56.40	-44.29	-42.95
MW-1-700	460262.682	3347205.242	694-674	10	12.17	9.26	2.91	708.40	699	-691.23	494	998.553	54.56	-42.39	-41.94	54.34	-42.17	-42.63	55.03	-42.86	-43.02	55.42	-43.25	-42.16
MW-2-200	460190.048	3346592.350	230-240	10	14.56	11.40	3.16	243.06	235	-223.50	260	998.386	47.36	-32.80	-32.91	47.50	-32.94	-33.20	47.79	-33.23	-33.16	47.75	-33.19	-32.77
MW-2-500	460186.918	3346593.844	502-512	10	14.61	11.51	3.10	515.10	507	-495.49	296	998.411	59.44	-44.83	-44.55	59.26	-44.65	-45.32	60.03	-45.42	-45.74	60.45	-45.84	-44.73
MW-2-700	460198.229	3346589.473	680-690	10	14.69	11.09	3.60	694.60	685	-674.91	594	998.624	59.40	-44.71	-44.25	59.21	-44.52	-45.05	60.01	-45.32	-45.41	60.37	-45.68	-44.44
MW-3-200	460555.076	3346638.627	228-238	10	14.74	12.04	2.70	242.69	233	-222.95	552	998.594	52.48	-37.74	-37.72	52.53	-37.79	-38.19	53.00	-38.26	-38.13	52.94	-38.20	-37.67
MW-3-500	460555.867	3346635.699	464-474	10	15.08	11.64	3.44	475.95	469	-455.87	2,220	999.786	58.70	-43.62	-42.77	58.51	-43.43	-43.53	59.26	-44.18	-43.82	59.55	-44.47	-42.97
MW-3-700	460557.858	3346628.300	680-690	10	14.41	11.53	2.88	695.38	685	-675.97	4,320	1,001.286	58.54	-44.13	-42.01	58.37	-43.96	-42.76	59.12	-44.71	-43.15	59.51	-45.10	-42.18

Well ID	UTM X	UTM Y	Screened Interval	Screen Length	Top of Casing Elevation	Ground Elevation	Stickup	Total Depth	Mid Screen	Mid Screen Elevation	TDS	Calcuated Density	12/16/2024			1/27/2025			2/17/2025			3/17/2025		
													DTW	Water Elevation	EFWH	DTW	Water Elevation	EFWH	DTW	Water Elevation	EFWH	DTW	Water Elevation	EFWH
	m	m	ft bgs	ft	ft	ft	ft	ft btoc	ft bgs	ft	mg/L	kg/m^3	ft btoc	ft	ft	ft btoc	ft	ft	ft btoc	ft	ft	ft btoc	ft	ft
MW-1-200	460257.857	3347201.961	162-172	10	12.75	9.22	3.53	175.81	167	-158.06	328	998.434	23.85	-11.10	-10.90	23.68	-10.93	-10.77	23.55	-10.80	-10.43	23.21	-10.46	-11.07
MW-1-500	460260.314	3347203.590	503-513	10	12.11	9.30	2.81	515.90	508	-498.79	296	998.411	55.84	-43.73	-42.95	55.16	-43.05	-42.98	55.19	-43.08	-42.12	54.33	-42.22	-43.63
MW-1-700	460262.682	3347205.242	694-674	10	12.17	9.26	2.91	708.40	699	-691.23	494	998.553	55.19	-43.02	-42.12	54.52	-42.35	-42.14	54.54	-42.37	-41.29	53.69	-41.52	-42.79
MW-2-200	460190.048	3346592.350	230-240	10	14.56	11.40	3.16	243.06	235	-223.50	260	998.386	48.21	-33.65	-33.40	47.99	-33.43	-33.48	48.07	-33.51	-33.16	47.75	-33.19	-33.62
MW-2-500	460186.918	3346593.844	502-512	10	14.61	11.51	3.10	515.10	507	-495.49	296	998.411	60.33	-45.72	-44.78	59.49	-44.88	-44.81	59.52	-44.91	-43.58	58.29	-43.68	-45.62
MW-2-700	460198.229	3346589.473	680-690	10	14.69	11.09	3.60	694.60	685	-674.91	594	998.624	62.50	-47.81	-44.48	59.44	-44.75	-44.51	59.47	-44.78	-44.34	59.30	-44.61	-47.54
MW-3-200	460555.076	3346638.627	228-238	10	14.74	12.04	2.70	242.69	233	-222.95	552	998.594	53.50	-38.76	-38.37	53.18	-38.44	-38.59	53.40	-38.66	-38.04	52.85	-38.11	-38.69
MW-3-500	460555.867	3346635.699	464-474	10	15.08	11.64	3.44	475.95	469	-455.87	2,220	999.786	59.48	-44.40	-42.92	58.65	-43.57	-42.88	58.62	-43.54	-41.68	57.42	-42.34	-43.75
MW-3-700	460557.858	3346628.300	680-690	10	14.41	11.53	2.88	695.38	685	-675.97	4,320	1,001.286	59.40	-44.99	-42.30	58.66	-44.25	-42.21	58.57	-44.16	-40.98	57.35	-42.94	-43.04

Notes:
Coordinates, Top of Casing Elevation, and Ground elevation data from Mayeux Surveying.
All elevation data are referenced to NAVD '88 datum.
Depth to water (DTW) measurements are shown as depth below top of casing (btoc).
Density is calculated using Langevin, et al., 2003.
ft bgs = feet below ground surface
EFWH = Equivalent fresh water head (corrected for density based on TDS), based on Post, et al., 2007.

ATTACHMENT 1: LABORATORY REPORTS

ATTACHMENT 2: FIELD NOTES