

# Microseismic Monitoring Report

## Sulphur Mines Salt Dome – Louisiana (US)

### Borehole and Surface Seismic Arrays

Report Period: February 2026

Reference: 2634399-SUL-MR-260201

Report Review: Michael Reese – Baker Hughes LBPG #1428

LBPG review using results from Baker Hughes and Nanometrics Inc.



This review is based solely on microseismic monitoring results provided in the Baker Hughes February 2026 monthly report from the Baker Hughes microseismic team. The report results were passed through the Baker Hughes QA/QC microseismic processing workflows for accuracy and repeatability. No other information, data or observations from the Sulfur Mines Salt Dome operations were provided to support Baker Hughes report results for this PG review. Interpretation of the events is performed by Sulphur Mines Salt Dome. Details of processing and events are provided in the Baker Hughes February 2026 report (appended to this cover letter).

Seismic monitoring and data processing at Sulphur Mines Salt Dome combines the borehole and surface seismic arrays data for microseismic event processing. This includes the following:

- Nanometrics operates and performs seismic processing for the surface seismic array using broadband network stations. Baker Hughes accesses the real time surface array waveform data and integrates it into the borehole waveform data for processing the microseismic location and magnitude. Baker Hughes provides event locations and magnitudes for all seismic events at Sulphur Mines Salt Dome using the combined borehole arrays and surface array waveform data.

#### **Alert Level Status: Low (Green)**

There was no seismic event with a magnitude  $>0.5$  in the AOI and less than 30 MEQ per day in AOI with magnitudes  $> -1$ , thus maintaining the defined alert level status at Low (green).

With the borehole arrays, activity decreased with 59 detections / 24 located events were observed in February 2026 compared to 133 detections / 71 located events observed in January 2026. There were 15 events reported in the AOI. Within AOI caverns: AOI-PPG-16 (4 events), AOI-LGS-02 (3 events), AOI-PPG-02 (3 events), AOI-PPG-04 (2 events) and AOI Caprock (3 events). There were 9 events outside the AOI with Flank (8 events) and Caprock (1 event). No rockfall events were detected in February 2026. The maximum recorded magnitude of  $-0.6$  in AOI-Caprock (1250 ft.). The depths of all observed events from 1050 ft to 6050 ft.

# **MICROSEISMIC MONITORING**

## **MONTHLY REPORT: February 2026**

**Sulphur Mines Salt Dome – Louisiana (US)**

2634299-SUL-MR-260201

<b>Client / Site</b>	Sulphur Mines Salt Dome	
<b>Recipient</b>	Trisha Mier (Westlake) Coleman Hale (Lonquist) Andrew Jupe (Altcom)	
<b>Reference</b>	2634299-SUL-MR-260201	
<b>Period</b>	<b>from</b>	2026/02/01
	<b>to</b>	2026/02/28

### Revision history

Version	Date	Issued by	Verified by	Approved by	Description
1.0	2026/03/10	E. Fortier	G. Regis	JM. Embry	Monthly report

### Acronyms

Acronym	Signification
N/A	Not Applicable
PGV	Peak Ground Velocity
AOI	Area Of Interest

## Table of contents

Summary.....	4
Introduction.....	5
I.    Alert Level Status.....	5
II.   Seismic Network.....	5
Microseismic activity during reporting period.....	6
I.    Distribution of the microseismic event.....	7
Event Location.....	9
I.    All event locations (inside and outside AOI) .....	9
II.   Event Locations in AOI.....	11
Magnitude and depth distribution .....	14
Microseismic history from the beginning of the acquisition.....	16
I.    History of detections.....	16
II.   Historical magnitude distribution.....	17
III.  History of the event locations.....	18
History in Cap-Rock and on the Flank.....	18
History around the caverns.....	19
APPENDIX 1 – Alert level criteria .....	21
APPENDIX 2 – Network Coordinates .....	21
APPENDIX 3 – Located events catalogue.....	23

## Summary

<b>Network &amp; IT status</b>	<b>System Uptime</b>	100 % - Borehole arrays 100 % - Surface Network
	<b>Digitizers connectivity</b>	Continuous, with no acquisition stops
	<b>Sensors / Noise level</b>	<ul style="list-style-type: none"> <li>• <b>Borehole arrays:</b> 100 %                             <ul style="list-style-type: none"> <li>○ <b>PPG-6</b> (6 levels) → noise level: 5 to 20 nm/s (RMS) except sensors PPG-6.1Z with 60 nm/s (up to 250 nm/s since 27/01) and PPG-6.2XZ with 100 nm/s since 27/01.</li> <li>○ <b>PPG-2</b> (6 levels) → noise level: 5 to 30 nm/s (RMS) except sensors PPG-2.3 [40 ; 300 nm/s] and PPG-2.6 [20 ; 70 nm/s]</li> </ul> </li> <li>• <b>Surface receivers:</b> 100 %                             <ul style="list-style-type: none"> <li>○ 6 sensors (3-axis) →N/A</li> </ul> </li> </ul>
<b>seismic activity</b>	<b>BOREHOLE ARRAY</b>	
	Detections	59
	(of which) Located	24
	Max magnitude	-0.6
	Max PGV	0.0488 mm/s
	Min depth	1,050 (ft)
	Max depth	6,050 (ft)
	<b>Number of alerts in the month</b>	<b>No alert triggered in February 2026</b>

PGV = Peak Ground Velocity – Maximum vibration measured on the sensors (mm/s)

# Introduction

## I. Alert Level Status

During February 2026 the alert level status was Low (Green). Alert level criteria are listed in Appendix 1.

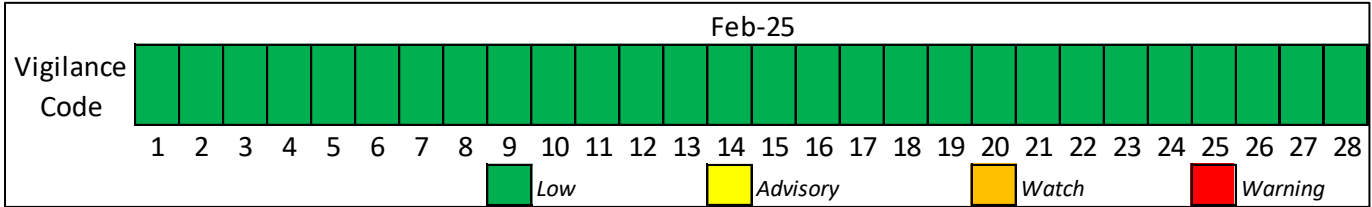


Figure 1: Alert status level during February 2026.

## II. Seismic Network

Microseismic monitoring in Sulphur Mine Salt Dome is executed by:

- **Two borehole arrays**
  - Baker Hughes Microseismic Services group operates, and processes data of the borehole seismic arrays located in PPG Well No. 006-X and PPG Well No. 020. The seismic array locations are shown in Figure 2, and the coordinates are listed in the Appendix 2. The borehole arrays were fully functional in April 2024.
- **A surface network, composed by 6 Broadband Trillium sensors**
  - Nanometrics operates the surface broadband array, while Baker Hughes processes the data. The broadband station locations are shown in Figure 2 and listed in Appendix 2.

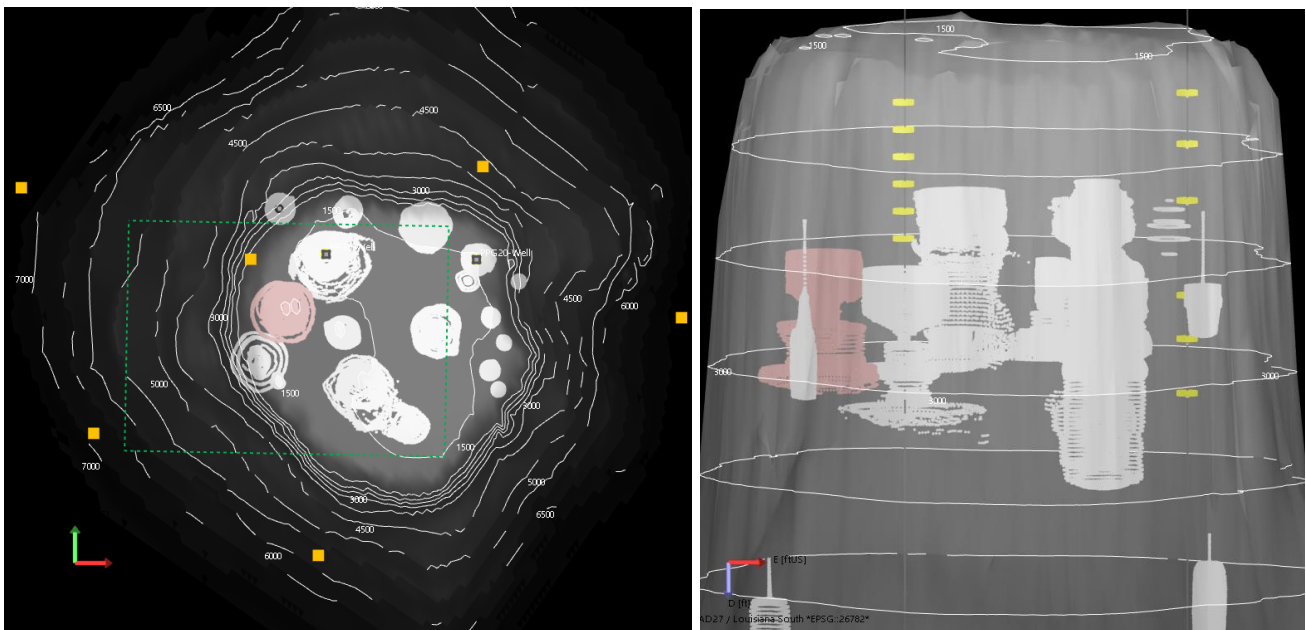


Figure 2: Map (left) and West-East cross section (looking from the South) of the Sulphur Mines Salt Dome. The salt boundary is indicated by gray contour lines. The wellbores with the borehole array sensors are marked by yellow dots for PPG No. 006X and PPG No. 020. Cavern 7 is represented with a red sonar survey. The proposed AOI is indicated on the map view by the green square. The surface network is indicated by the orange squares.

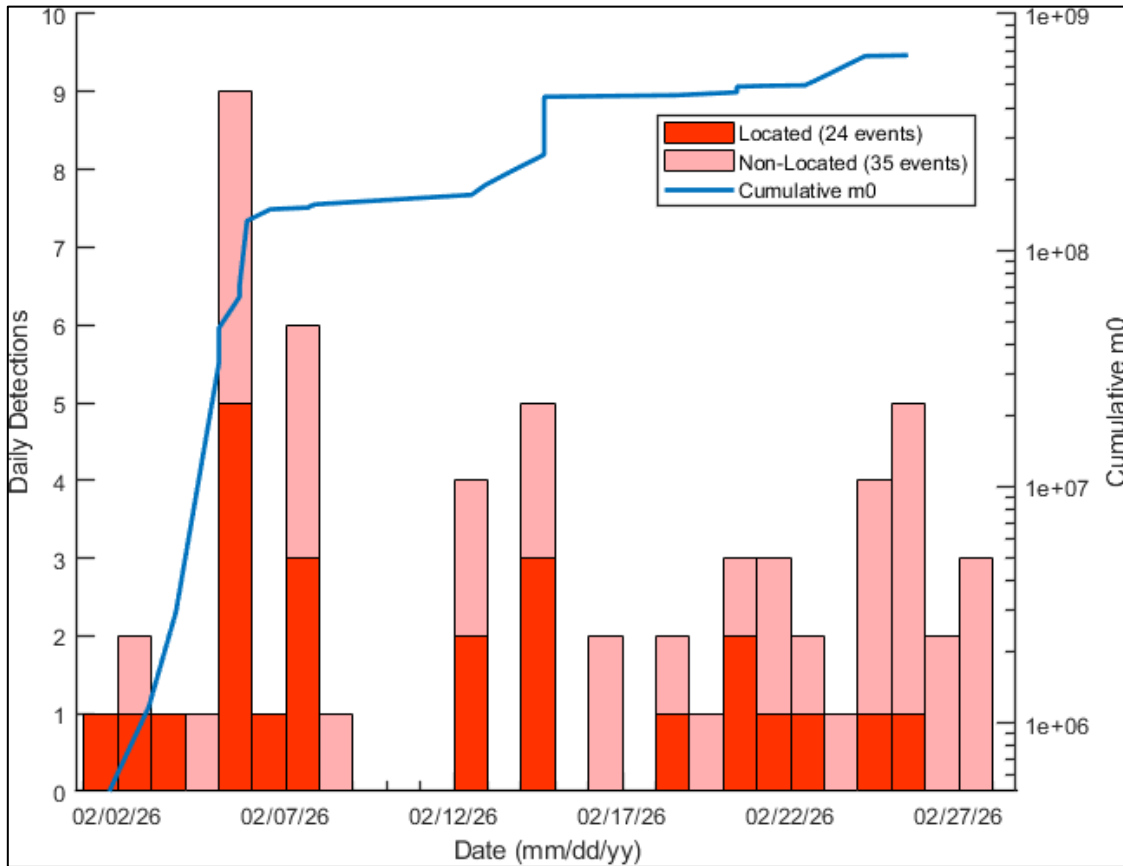
## Microseismic activity during reporting period

- In February 2026, 59 seismic events have been detected by the borehole arrays, **24** events had waveform with sufficient signal to noise ratio to compute their location and magnitude. Amongst the 24 located events:
  - 15 are located inside the AOI (Area of Interest) and distributed as follows (Figure 4):
    - 3 events associated with the cavern LGS-02.
    - 3 events associated with the cavern PPG-02.
    - 2 events associated with the cavern PPG-04.
    - 4 events associated with the cavern PPG-16.
    - 3 events in the cap-rock.
  - 9 events are located outside the AOI and distributed as follows:
    - 1 event on the cap-rock.
    - 8 events on the flank of the salt dome.
- The maximum magnitude during this period was -0.6, occurring on:
  - 2026/02/24 06:24:25 (CST), on the AOI cap rock.
- No rockfall event has been detected in February 2026.

The catalog of the located events is presented in Appendix 3.

### I. Distribution of the microseismic event

The histogram below shows the number of the locatable and non-locatable events during February 2026



**Figure 3: Daily distribution of all events during February 2026. Dark color represents located events while light one shows the not located events. Blue line represents the cumulative seismic moment Mo for the located events.**

Figure 4 shows the distribution of events by area. In February 2026, the seismicity occurred mainly in the caverns PPG-16 (4 events), and on the flank (8 events).

Linked with Figure 5, showing the cumulated seismic energy with respect to the areas, the main release of seismic energy occurred on PPG-02 and on the cap rock (with the Mw = -0.6 event).

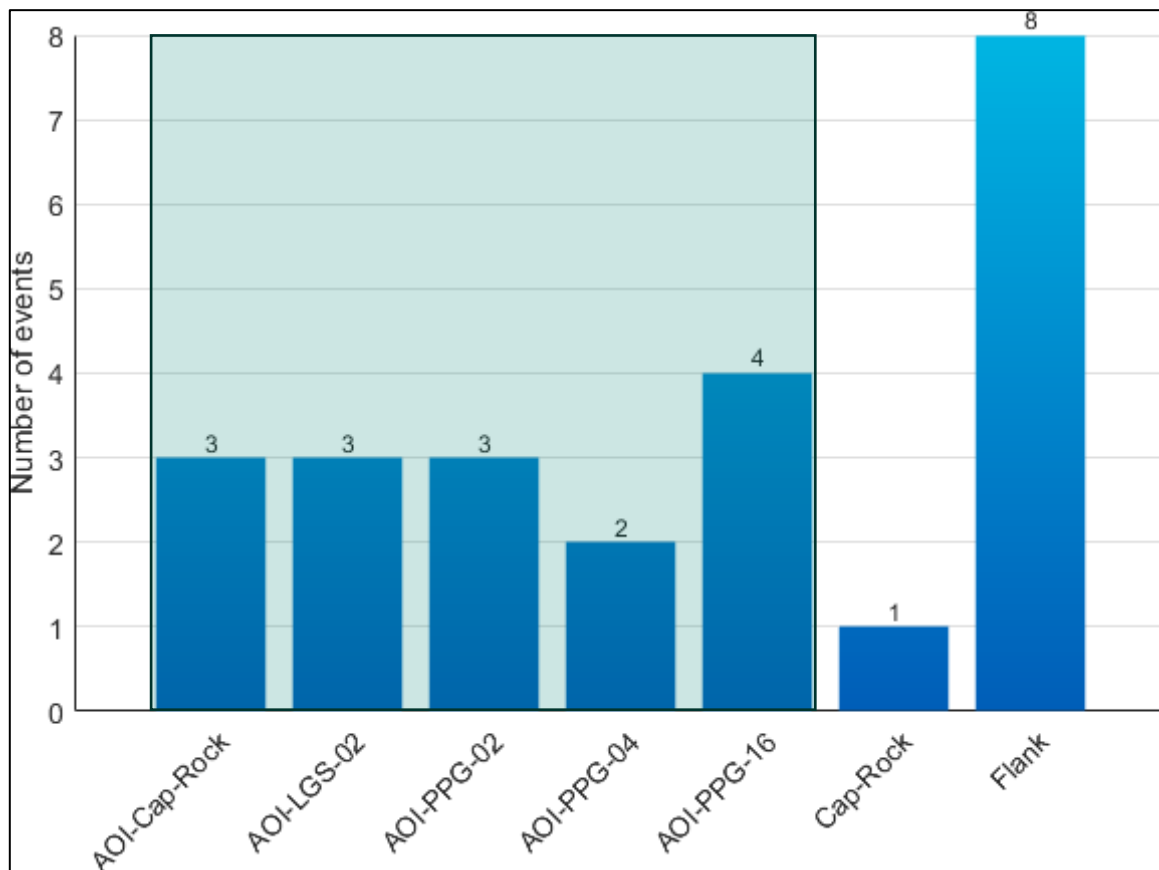


Figure 4: Events distribution by associated cavern. The green rectangle indicates the events in AOI.

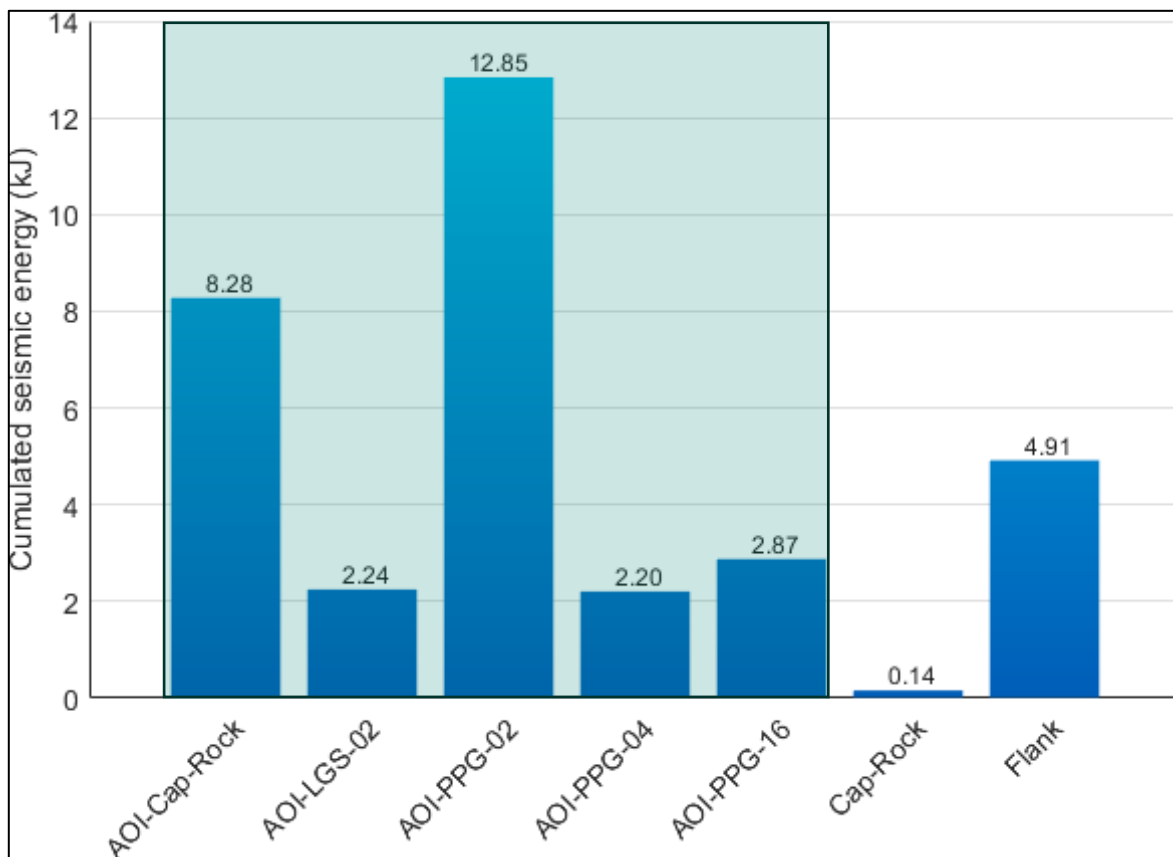


Figure 5: Events energy distribution by cavern. The green rectangle indicates the events in AOI.

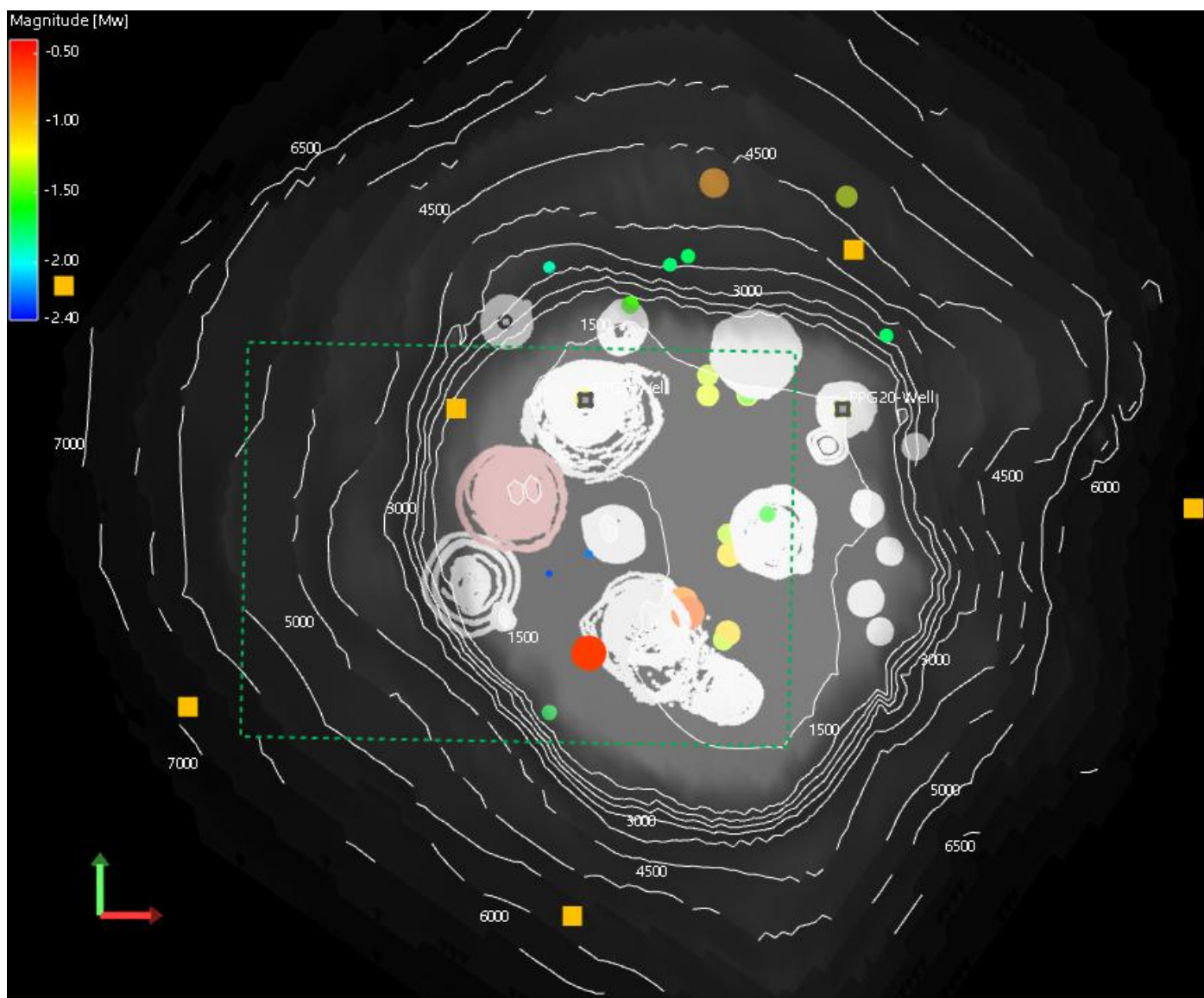
## Event Location

The location maps are presented in the report as:

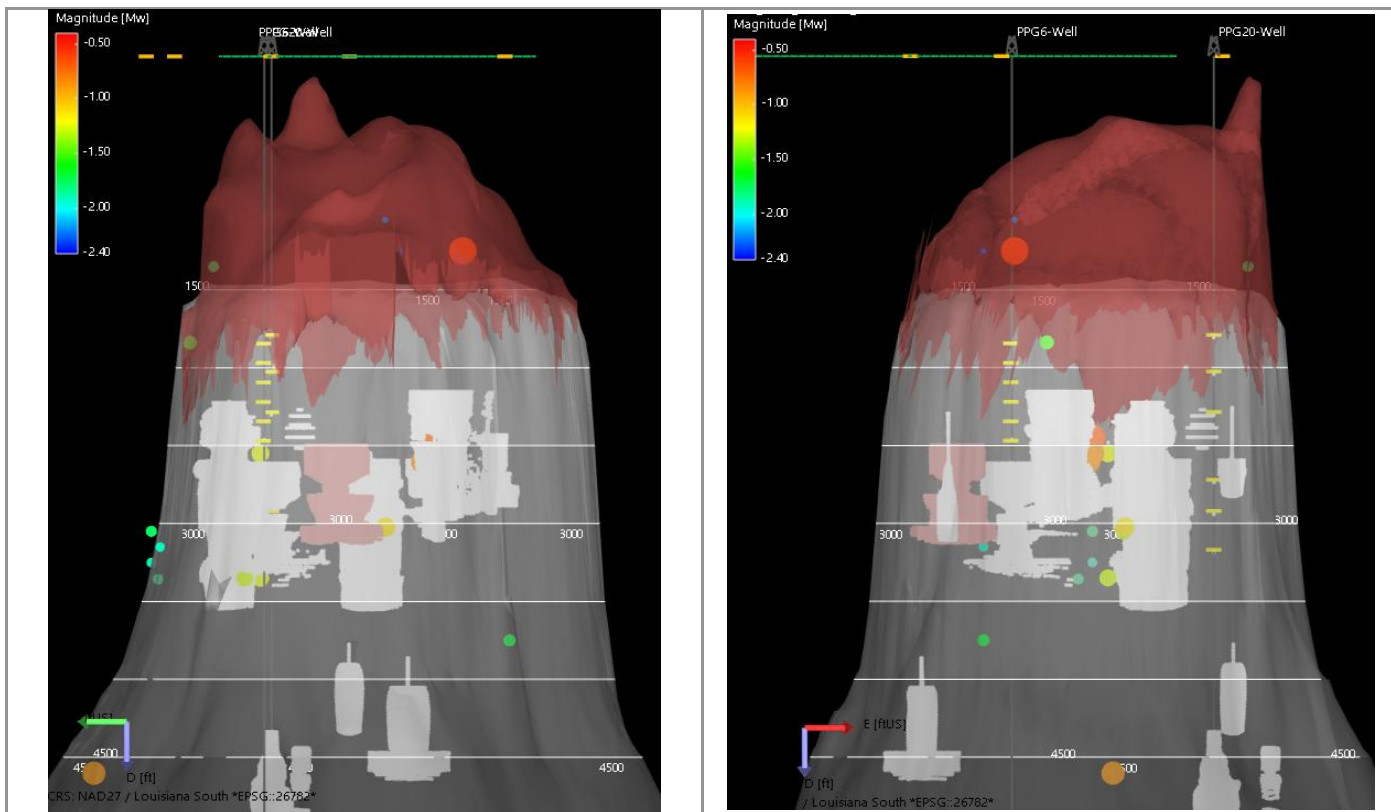
- All events location: inside and outside the AOI (Figure 6 and Figure 7).
- Events located in the AOI (Figure 8, Figure 9, Figure 10).

### I. All event locations (inside and outside AOI)

The figures below show the event locations using the borehole arrays.



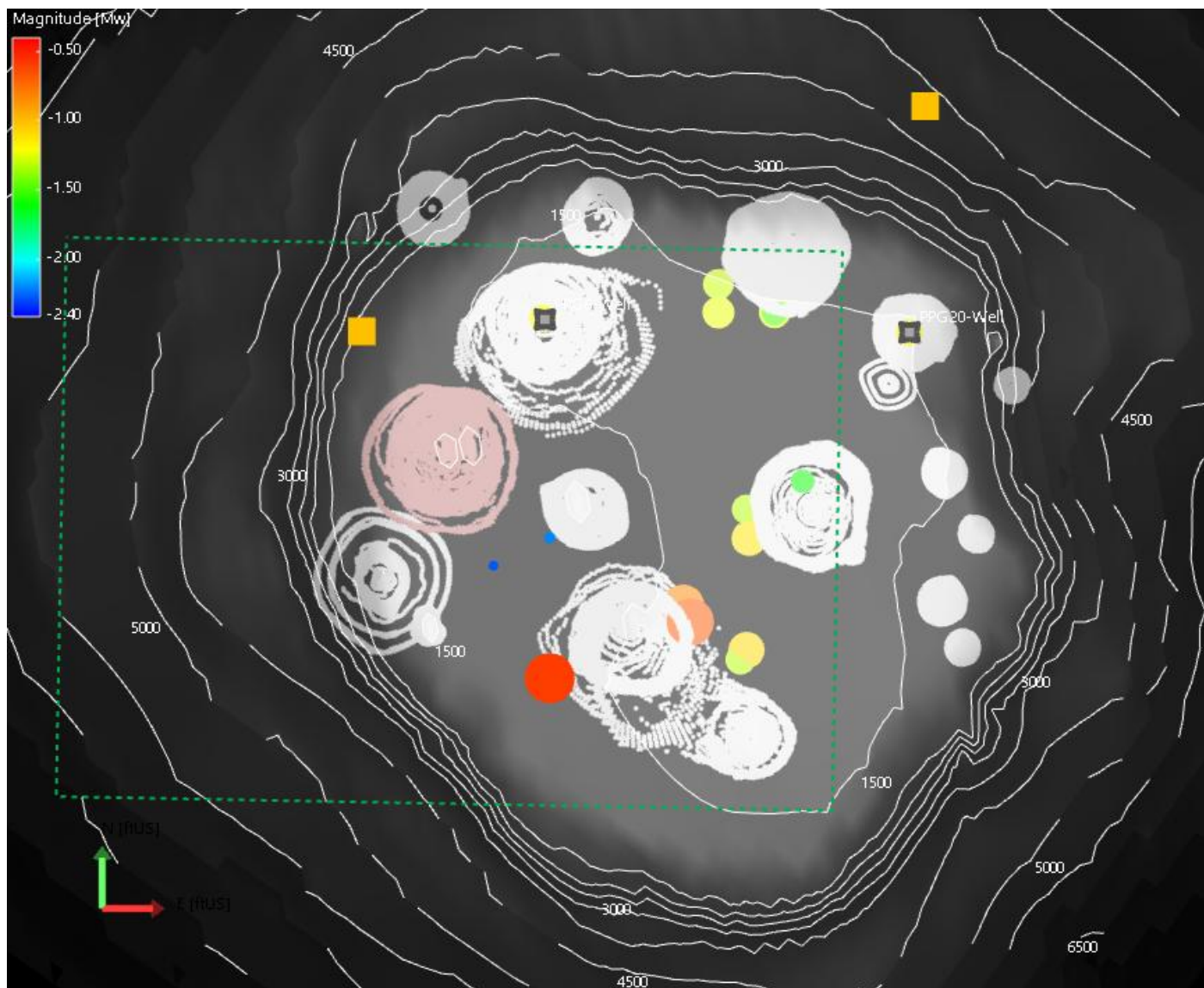
**Figure 6: Map of located events in February 2026. The events are colored, from blue to red, and sized by magnitude; the green rectangle represents the AOI, the orange squares represent the surface stations.**



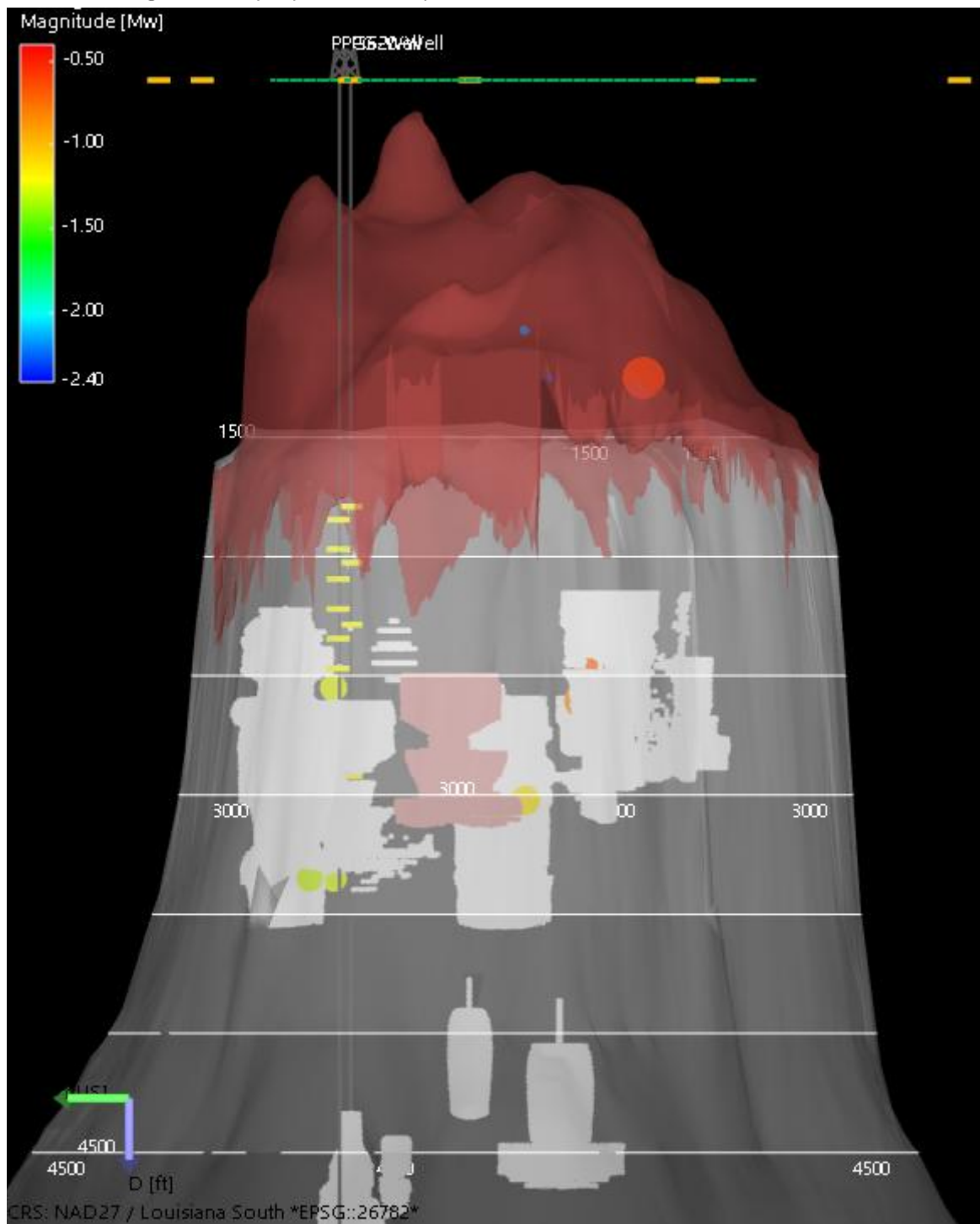
**Figure 7: Cross sections W-E (right) looking from the South, and N-S (left), looking from the West. The events are colored, from blue to red, and sized by magnitude.**

## II. Event Locations in AOI

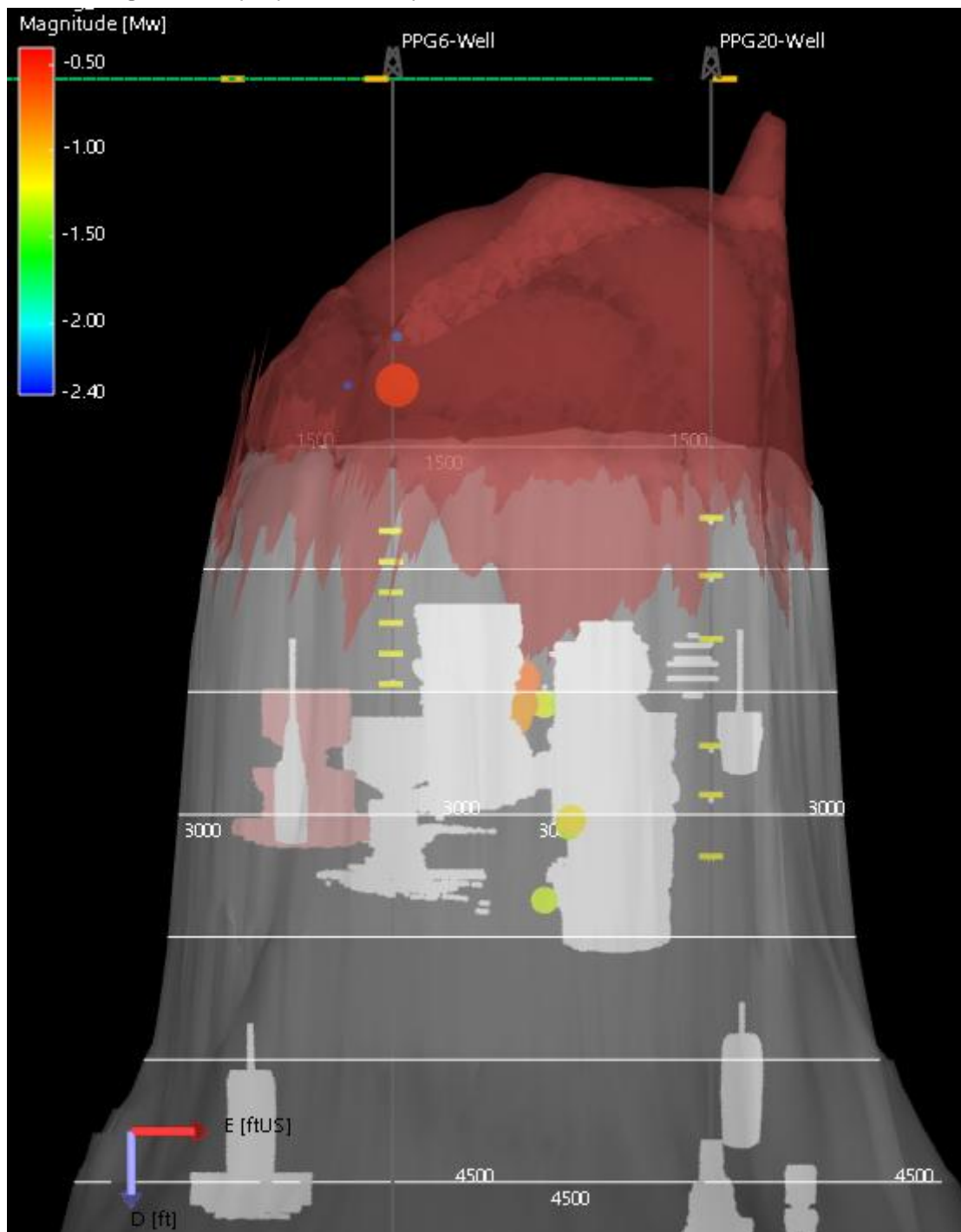
The figures below show the location of the events inside the AOI.



**Figure 8: Map of located events inside the AOI in February 2026. The events are colored, from blue to red, and sized by magnitude; the green rectangle represents the AOI, the orange squares represent the surface stations.**



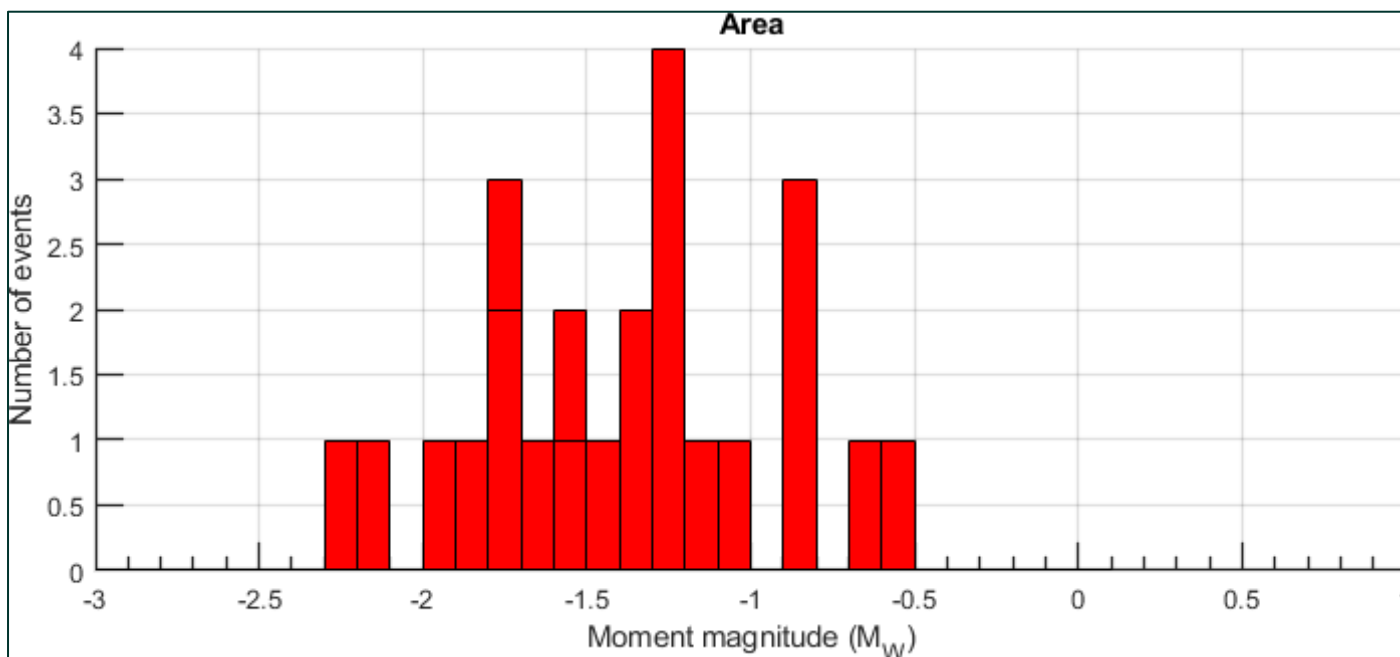
**Figure 9: Cross sections N-S (looking from West) of located events. The events are colored, from blue to red, and sized by magnitude.**



**Figure 10: Cross sections W-E (looking from south) of located events. The events are colored, from blue to red, and sized by magnitude.**

## Magnitude and depth distribution

The figure below shows the distribution of the moment magnitudes in February 2026. The values vary between -2.3 and -0.6, median value is -1.3.

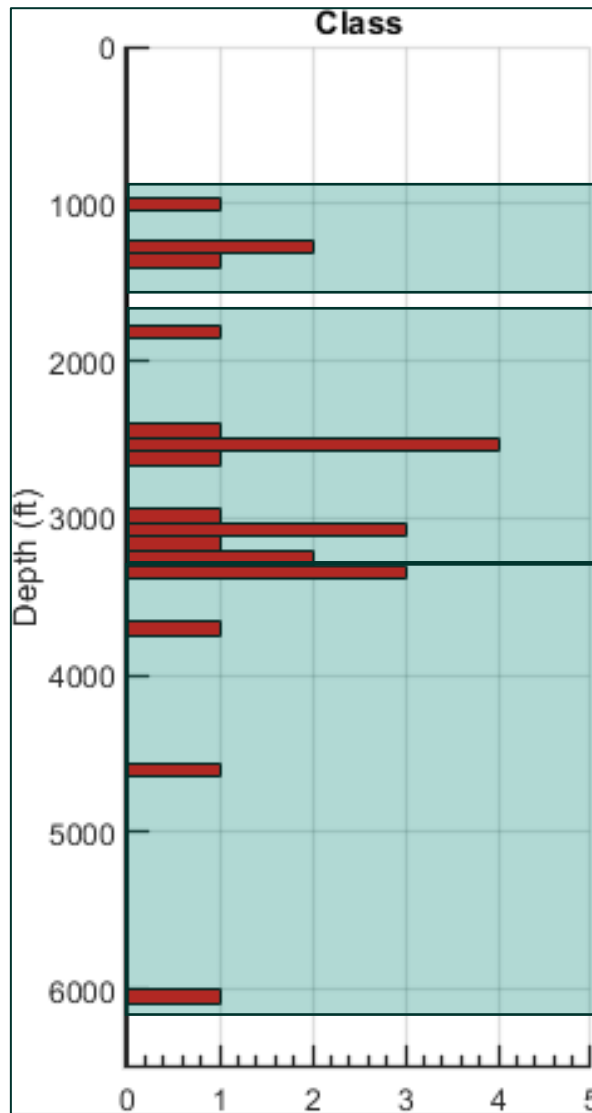


**Figure 11: Distribution of magnitudes ( $M_w$ ) for located events in February 2026.**

The figure below shows the depth distribution in February 2026 for all the located events.

Events are located between 1,050 ft and 6,050 ft. It is possible to distinguish 3 main groups:

- The first one is between 1,050 ft and 1,350 ft - above the caverns depth and associated with events located in the Cap-Rock,
- A second one between 1,838 ft and 3,350 ft - associated with events located at depth of the caverns (3 events on the flank),
- A third between 3,350 ft and 6,050 ft - associated with events located at the flank depth.



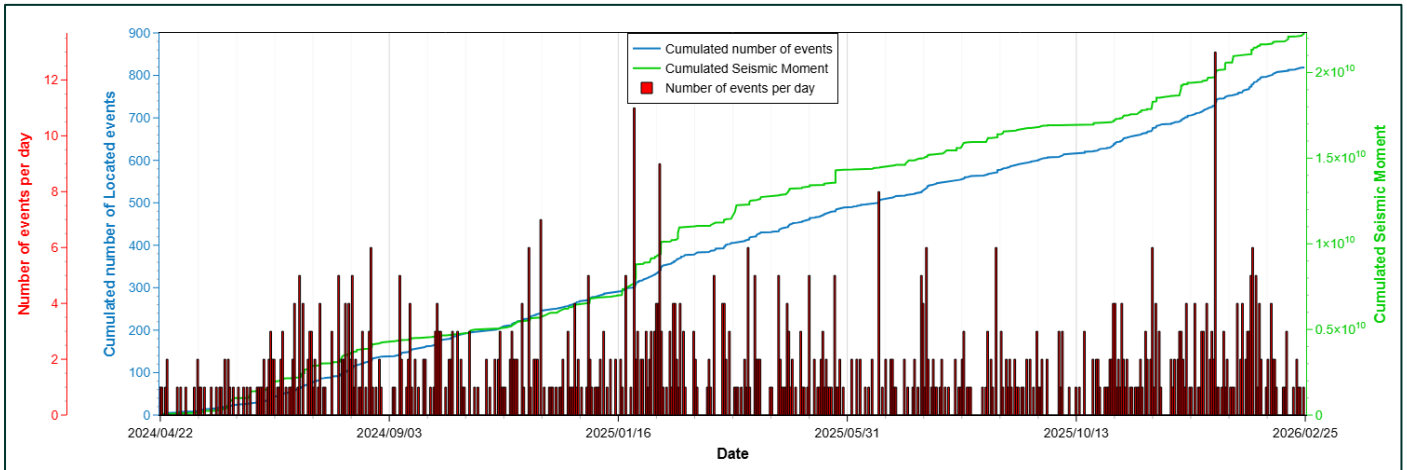
**Figure 12: Distribution of the depths for all the events located in February 2026.**

# Microseismic history from the beginning of the acquisition

## I. History of detections.

In February 2026, the total number of detections (located and not-located events) strongly decreased with respect to the previous month (59 detected events in February 2026 compared with 133 detected events in January 2026).

The number of located events was also lower in February 2026 (24 located events) with respect to January 2026 (71 located events).

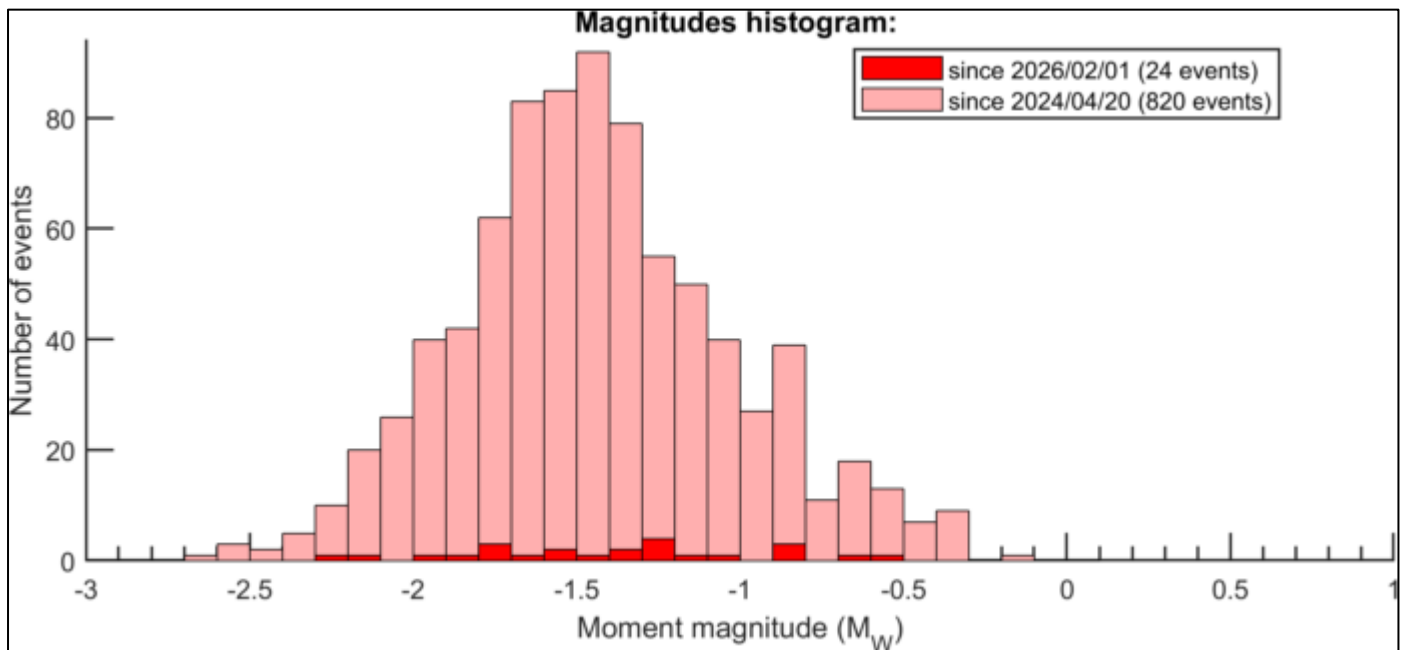


**Figure 13: Distribution of the located microseismic events since the beginning of the acquisition on 04/21/2024. Blue line represents the cumulated number of the located events. Green line represents the cumulated seismic moment.**

## II. Historical magnitude distribution.

Figure 14 shows the moment magnitude distribution from the beginning of the acquisition. Dark color bars present the current monthly period and light red color bars present the distribution from the beginning of the acquisition (April 21, 2024).

Since the beginning of the acquisition event magnitudes are between -2.7 and -0.2 (for 844 located events). The median value of the magnitude since the beginning of the acquisition is -1.5.

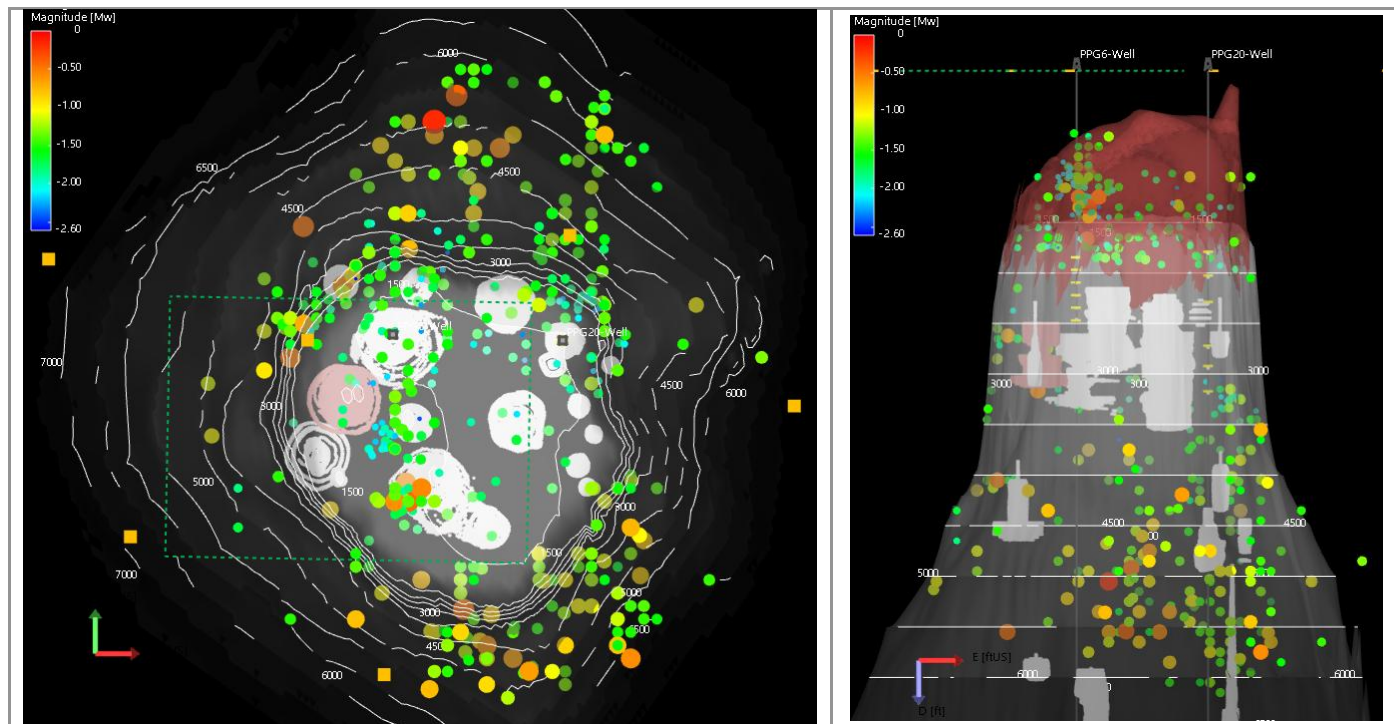


**Figure 14: Distribution of magnitude (M<sub>w</sub>) for located events. Dark color bars present the current monthly period (February 2026) and light color bars present the distribution since the beginning of the acquisition (from April 21, 2024).**

### III. History of the event locations.

#### History in Cap-Rock and on the Flank

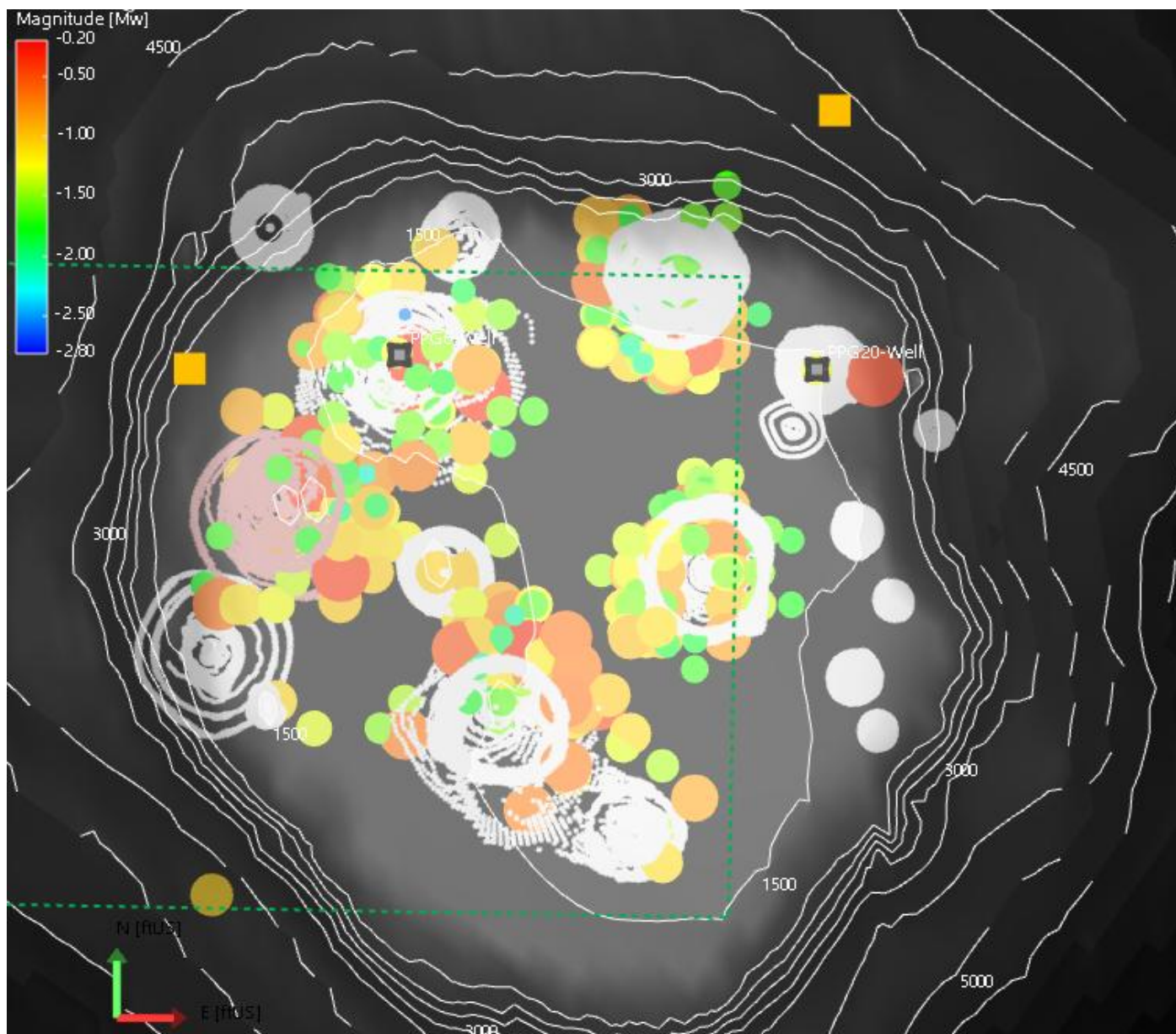
The figure below shows the map and cross section of all the events located in the cap-rock and in the salt flank since April 21, 2024.



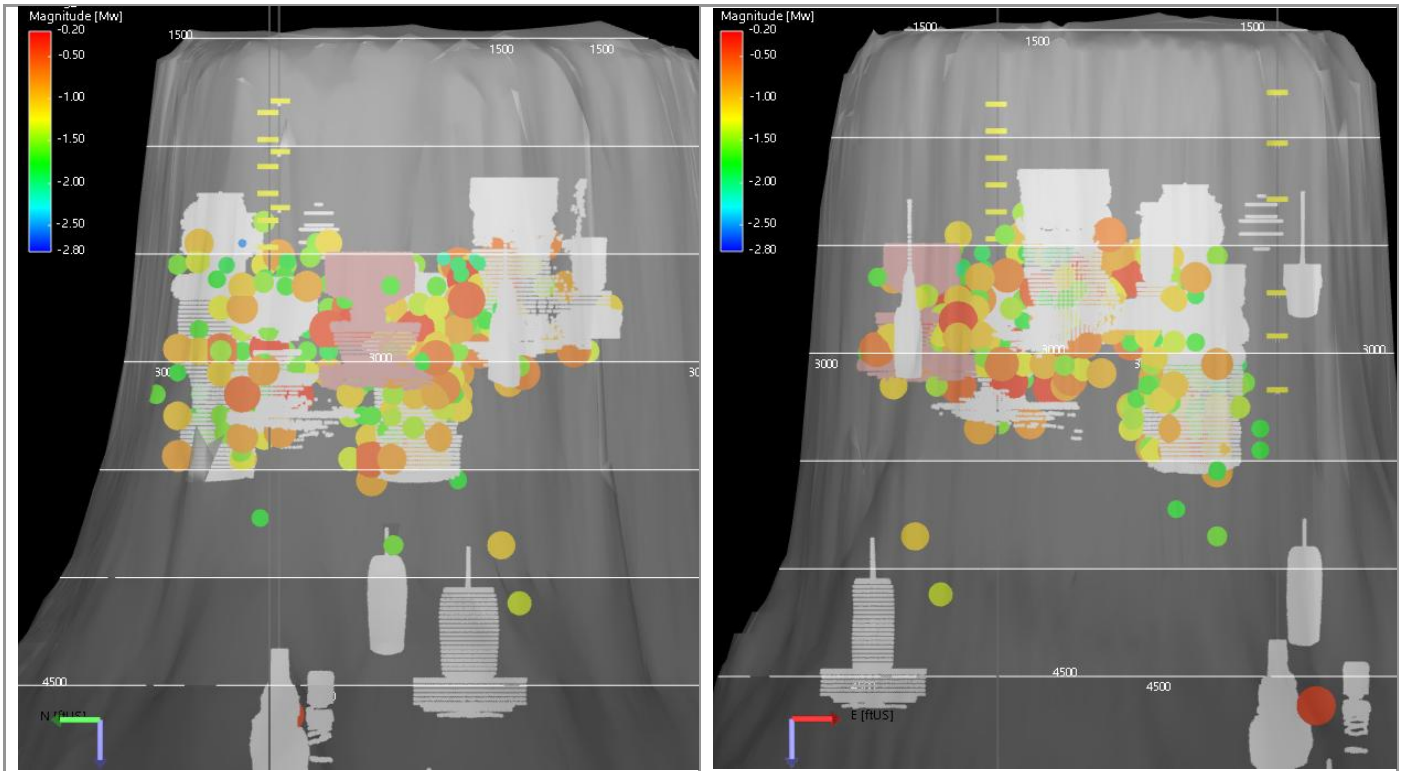
**Figure 15: Map view (left) and W-E side view (right) of the cumulative seismicity recorded since the beginning of the acquisition, located in the Cap Rock (red formation) and on the Flank. Green rectangle represents the AOI area. The events are colored, from blue to red, and sized by magnitude.**

### History around the caverns

The figures below show the history of the events associated with the caverns since the beginning of the acquisition (April 21, 2024).



**Figure 16: Map view of the events located in proximity to the caverns since the beginning of the acquisition (April 21, 2024). The events are colored, from blue to red, and sized by magnitude.**



**Figure 17: Cross sections W-E (right), looking from the South; and N-S (left), looking from the West of the events located close to the caverns since the beginning of the acquisition. The events are colored, from blue to red, and sized by magnitude.**

## APPENDIX 1 – Alert level criteria

Proposed Microseismic Alert Level Criteria and Response for Sulphur Mines Dome.

Alert Status	Criteria	Response
Low (GREEN)	No events with magnitude $\geq 0.5$ in AOI and/or Less than 30 MEQ per day in AOI with magnitudes $\geq -1$	Once per week data processing, with previous monthly microseismic activity summary in the AOI is provided by the 15th of the following month to LDNR IMD.
Advisory (YELLOW)	Event with magnitude $\geq 0.5$ and $< 1.0$ in AOI and/or Count of MEQ per day $\geq 30$ and $< 40$ in AOI with magnitudes $\geq -1$	Daily data processing M-F. Weekly reporting is provided LDNR IMD with activity summary from the previous week. Status remains active until seismic levels within the AOI reach "low"(green) level for 1 day.
Watch (ORANGE)	Event with magnitude $\geq 1$ and $< 1.5$ in AOI and/or Count of MEQ $\geq 40$ and $< 50$ with magnitudes $\geq -1$ in AOI	Seven days per week data processing, 2x week reporting with activity for the previous days is provided via email and text message notifications to IMD. Status remains active until seismic levels within the AOI reach Advisory or Low criteria for 2 consecutive days.
Warning (RED)	Event with magnitude $\geq 1.5$ in the AOI and/or Count of MEQ $\geq 50$ with magnitudes $\geq -1$ in the AOI	Seven days per week data processing, daily reporting with online meetings with stake holders as needed. The warning status level remains active until seismicity levels within the AOI reach a lower status level for 2 consecutive days.

## APPENDIX 2 – Network Coordinates

Borehole arrays coordinates:

Wellbore	Sensor	TVD SS	Easting (ft)	Northing (ft)
PPG 6x	Tool 1	1844	1343141	583425
PPG 6x	Tool 2	1969	1343141	583425
PPG 6x	Tool 3	2094	1343141	583425
PPG 6x	Tool 4	2219	1343141	583425
PPG 6x	Tool 5	2344	1343141	583425
PPG 6x	Tool 6	2469	1343141	583425
PPG 20	Tool 1	1790	1344445	583372
PPG 20	Tool 2	2025	1344445	583372
PPG 20	Tool 3	2285	1344445	583372
PPG 20	Tool 4	2720	1344445	583372
PPG 20	Tool 5	2920	1344445	583372
PPG 20	Tool 6	3170	1344445	583372

## Surface network coordinates:

Station	LAT WGS84	LON WGS84	Date start	Date end
Temp_1a	30.2575	-93.4123	1/30/2023	2/9/2023
Temp_1b	30.2534	-93.4135	2/9/2023	4/3/2023
Temp_2a	30.2570	-93.4097	1/30/2023	2/9/2023
Temp_2b	30.2555	-93.4132	2/9/2023	2/27/2023
Temp_2c	30.2547	-93.4138	2/27/2023	4/5/2023
Temp_3a	30.2533	-93.4091	1/30/2023	2/9/2023
Temp_3b	30.2563	-93.4146	2/9/2023	4/5/2023
Temp_4a	30.2486	-93.4123	1/30/2023	2/27/2023
Temp_4b	30.2507	-93.4121	2/27/2023	3/8/2023
Temp_4c	30.2506	-93.4100	3/8/2023	3/15/2023
Temp_4d	30.2503	-93.4119	3/15/2023	est 4/3/2023
Temp_5a	30.2502	-93.4156	1/30/2023	2/27/2023
Temp_5b	30.2507	-93.4153	2/27/2023	3/15/2023
Temp_5c	30.2504	-93.4140	3/15/2023	est 4/3/2023
Temp_6a	30.2532	-93.4166	1/30/2023	3/15/2023
Temp_6b	30.2529	-93.4161	3/15/2023	4/4/2023
Temp_7a	30.2547	-93.4161	1/30/2023	4/3/2023
Semi Perm S01	30.2453	-93.4073	4/4/2023	
Semi Perm S02	30.2571	-93.4098	4/6/2023	
Semi Perm S03	30.2536	-93.4091	4/6/2023	
Semi Perm S04	30.2470	-93.4213	4/5/2023	5/12/2023
Semi Perm S04_1	30.2506	-93.4204	5/12/2023	
Semi Perm S05	30.2564	-93.4224	4/5/2023	
Semi Perm S06	30.2532	-93.4167	4/5/2023	
Semi Perm S07	30.2547	-93.4162	4/5/2023	
SUL01 trillium	30.2452	-93.4071	9/20/2023	3/12/2024
	<b>LAT NAD 83</b>	<b>LON NAD 83</b>		
SUL02 trillium	30.2570	-93.4098	9/13/2023	
SUL03 trillium	30.2505	-93.4203	9/12/2023	
SUL04 trillium	30.2563	-93.4224	9/12/2023	
SUL05 trillium	30.2547	-93.4161	9/13/2023	
SUL06 trillium	30.2535	-93.4043	3/12/2024	
SUL07 trillium	30.2477	-93.4141	3/12/2024	

**Seismic Station locations and operational dates at Sulphur Mines Dome (to November 1, 2024).**

**Temporary Station locations and start and end dates provided by Westlake.**

**Trillium Station locations provided by Nanometrics and Westlake (Trillium SUL 02-07).**

## APPENDIX 3 – Located events catalogue

#	Event origin time CST (UTC-6)	Easting (ft)	Northing (ft)	Depth (ft)	$\Delta$ Easting (ft)	$\Delta$ Northing (ft)	$\Delta$ Depth (ft)	Mw	Area
1	02/01/2026 18:01:41.259	1342966	582544	1250	311	1060	536	-2.3	AOI-Cap-Rock
2	02/02/2026 22:15:30.843	1343166	582644	1050	432	1686	750	-2.2	AOI-Cap-Rock
3	02/03/2026 17:40:27.406	1342966	584087	3151	438	1571	1131	-1.9	Flank
4	02/05/2026 00:21:00.386	1343866	582244	2550	871	2349	1663	-1.1	AOI-PPG-04
5	02/05/2026 00:21:06.626	1343844	582210	2548	502	1138	1064	-1.3	AOI-PPG-04
6	02/05/2026 15:09:38.754	1343966	583444	3350	303	1163	665	-1.3	AOI-PPG-16
7	02/05/2026 15:09:59.249	1343966	583444	3250	280	861	594	-1.5	AOI-PPG-16
8	02/05/2026 20:30:50.752	1343798	584512	4603	364	1430	959	-0.9	Flank
9	02/06/2026 12:52:20.395	1344466	584444	6050	411	1439	1005	-1.3	Flank
10	02/07/2026 17:09:15.152	1343575	584101	3357	394	1410	1002	-1.8	Flank
11	02/07/2026 17:09:13.842	1343666	584144	3250	230	462	394	-1.9	Flank
12	02/07/2026 21:43:24.675	1344666	583744	1350	313	986	557	-1.8	Cap-Rock
13	02/12/2026 12:58:29.234	1343766	583544	3350	325	978	492	-1.3	AOI-PPG-16
14	02/12/2026 23:07:00.561	1343766	583444	2550	660	1325	1041	-1.2	AOI-PPG-16
15	02/14/2026 16:49:48.426	1343666	582344	2550	662	1278	1045	-0.9	AOI-PPG-02
16	02/14/2026 16:49:46.490	1343666	582344	2450	1009	3176	1627	-0.7	AOI-PPG-02
17	02/14/2026 16:49:51.921	1343640	582400	2604	681	2325	1105	-0.8	AOI-PPG-02

#	Event origin time CST (UTC-6)	Easting (ft)	Northing (ft)	Depth (ft)	$\Delta$ Easting (ft)	$\Delta$ Northing (ft)	$\Delta$ Depth (ft)	Mw	Area
18	02/18/2026 14:38:58.382	1343374	583897	1838	284	810	448	-1.5	Flank
19	02/20/2026 10:33:12.871	1343866	582744	3050	361	946	698	-1.3	AOI-LGS-02
20	02/20/2026 10:33:17.697	1343875	582641	3023	299	1530	704	-1.1	AOI-LGS-02
21	02/21/2026 05:29:50.544	1342966	581844	3750	291	1519	685	-1.7	Flank
22	02/22/2026 11:28:11.836	1343666	584144	3050	710	1445	1307	-1.8	Flank
23	02/24/2026 06:24:25.903	1343166	582144	1250	430	1332	515	-0.6	AOI-Cap-Rock
24	02/25/2026 12:53:35.900	1344066	582844	3050	640	1507	1046	-1.6	AOI-LGS-02