

Surface Seismic Monitoring Report Sulphur Mines Salt Dome Broadband Seismic Array Event Locations and Magnitudes

June 27, 2024

Report Date: June 27, 2024 Author: Julie Shemeta, MEQ Geo Using results from Nanometrics

Summary Event Locations and Magnitudes

- Date: June 26, 2024
 - o Time 07:27:22 CDT
 - Magnitude estimates -0.82 (surface array), -0.7 (borehole array)
 - Borehole Location (ft): X 1343697, Y 582448; (NAD27 LA South St Pl)
 - Depth -2555 ft msl
 - Borehole Event Uncertainties: $\Delta X \pm 300$ ft, ΔY Vertical ± 1392 ft $\Delta Z \pm 680$ ft
 - o Time 07:27:44 CDT
 - Magnitude estimates -0.68 (surface array), -0.6 (borehole array)
 - Borehole Location (ft): X 1343666, Y 582444; (NAD27 LA South St Pl)
 - Depth -2750 ft msl
 - Borehole Event Uncertainties: ΔX ±349 ft, ΔY Vertical ±1378 ft ΔZ ± 564 ft

Comments: The borehole locations for these events locate on the northern side of PPG 002 cavern (Figure 1). The surface array places the event locations west of the borehole event locations. The borehole location is considered the higher resolution location and is used for this report.

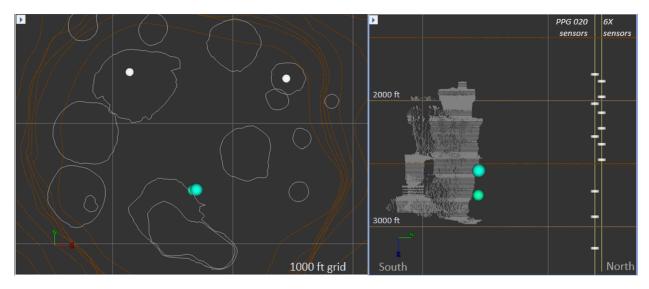


Figure 1. Map (left) and North-South vertical cross section (looking from east). The cyan sphere is the June 25 event locations. Map view shows cavern outlines. Map and cross section show salt contours in orange. Grid is 1000 ft for both figures. Cross section shows sonar for PPG 02 and PPG 04 caverns, and the borehole geophone positions in PPG 06X and PPG 020 wellbores.