



Update on the surface microseismic
monitoring
at Sulphur Mines Salt Dome:
Broadband Seismometer Installation
(LDNR Compliance Order No. IMD 2022-027)

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The semi-permanent surface seismic array operational since early April 2023 is being upgraded to a network of broadband seismometers to lower the frequency range capability of the seismic sensors.

Nanometrics installed five broadband Trillium Compact 20 second seismometers. The installation was completed on September 13, 2023. The sensor at station location SUL01 had technical issues and is expected to be replaced on September 20, 2023. The new broadband stations are locations are show in Figure 1, and the station locations of the new broadband network is listed in Table 2.

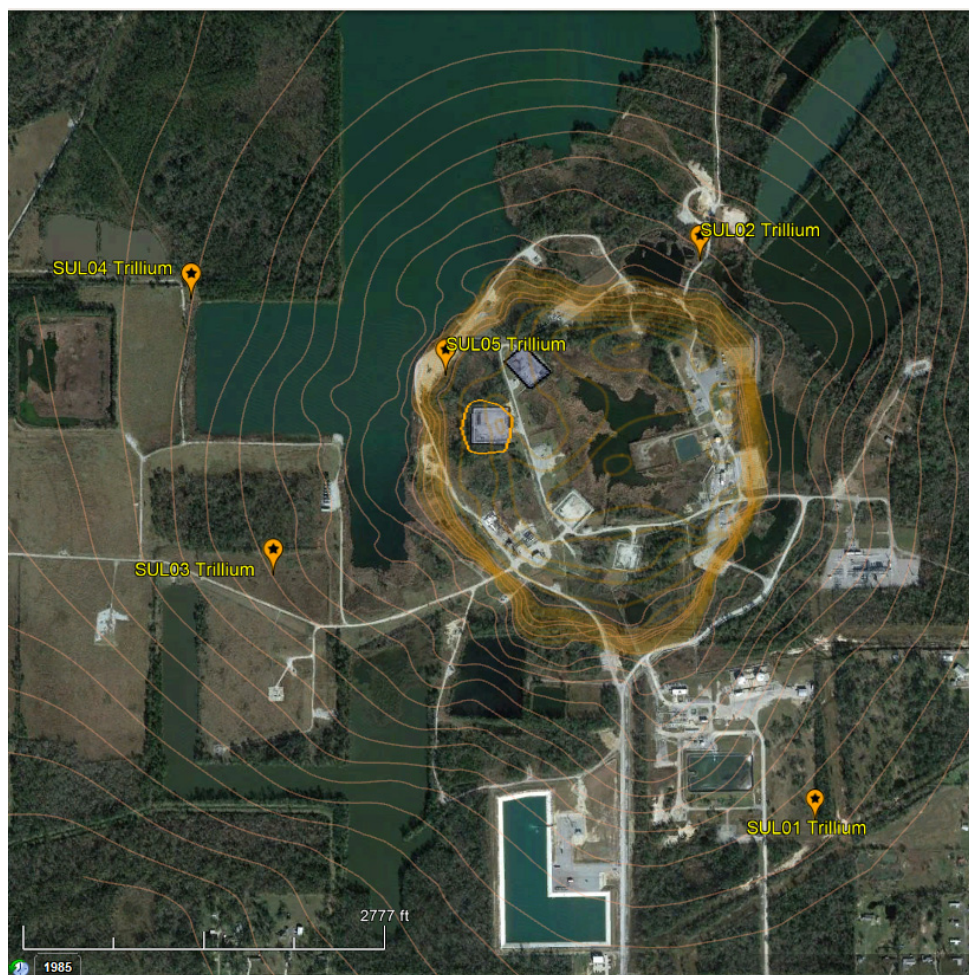


Figure 1

Nanometrics will process continuous ground motion signals from the seismometers. The operation of the array is expected to start September 20, 2023. Data processing results are available on a next day basis and seven days per week. Information about Nanometrics can found at (<https://nanometrics.ca/>).

The existing semi-permanent array will continue to operate in addition to the new array and eventually will be decommissioned, expected sometime in mid-October 2023.

Table 1. Location and installation date of Trillium Company sensors at Sulphur Mines Salt Dome. Station locations provided by Nanometrics.

Station	LAT WGS84	LON WGS84	Date start	Date end
SUL01 trillium	30.2452	-93.4071	9/13/2023	
SUL02 trillium	30.2570	-93.4099	9/13/2023	
SUL03 trillium	30.2504	-93.4203	9/12/2023	
SUL04 trillium	30.2562	-93.4223	9/12/2023	
SUL05 trillium	30.2546	-93.4161	9/13/2023	