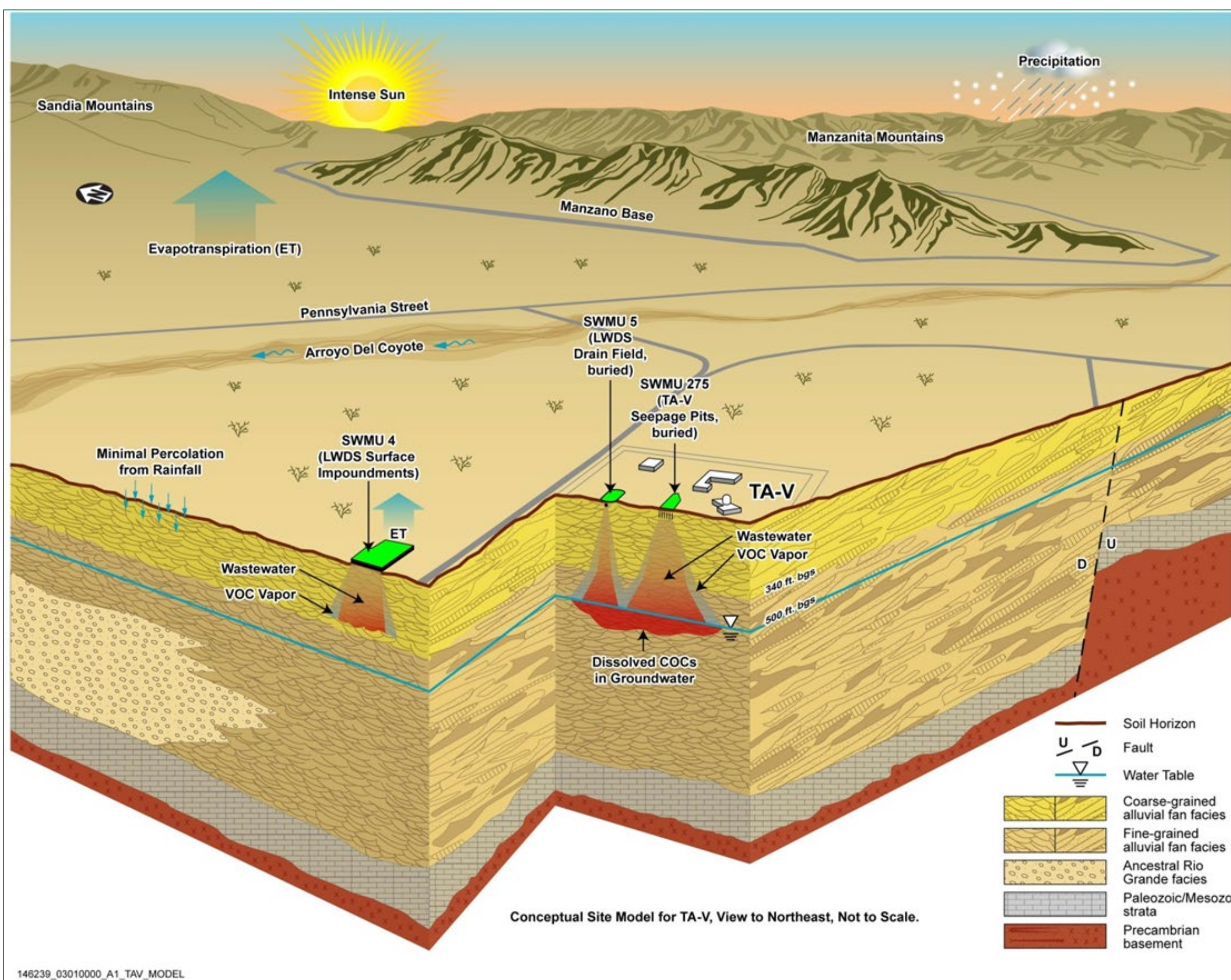
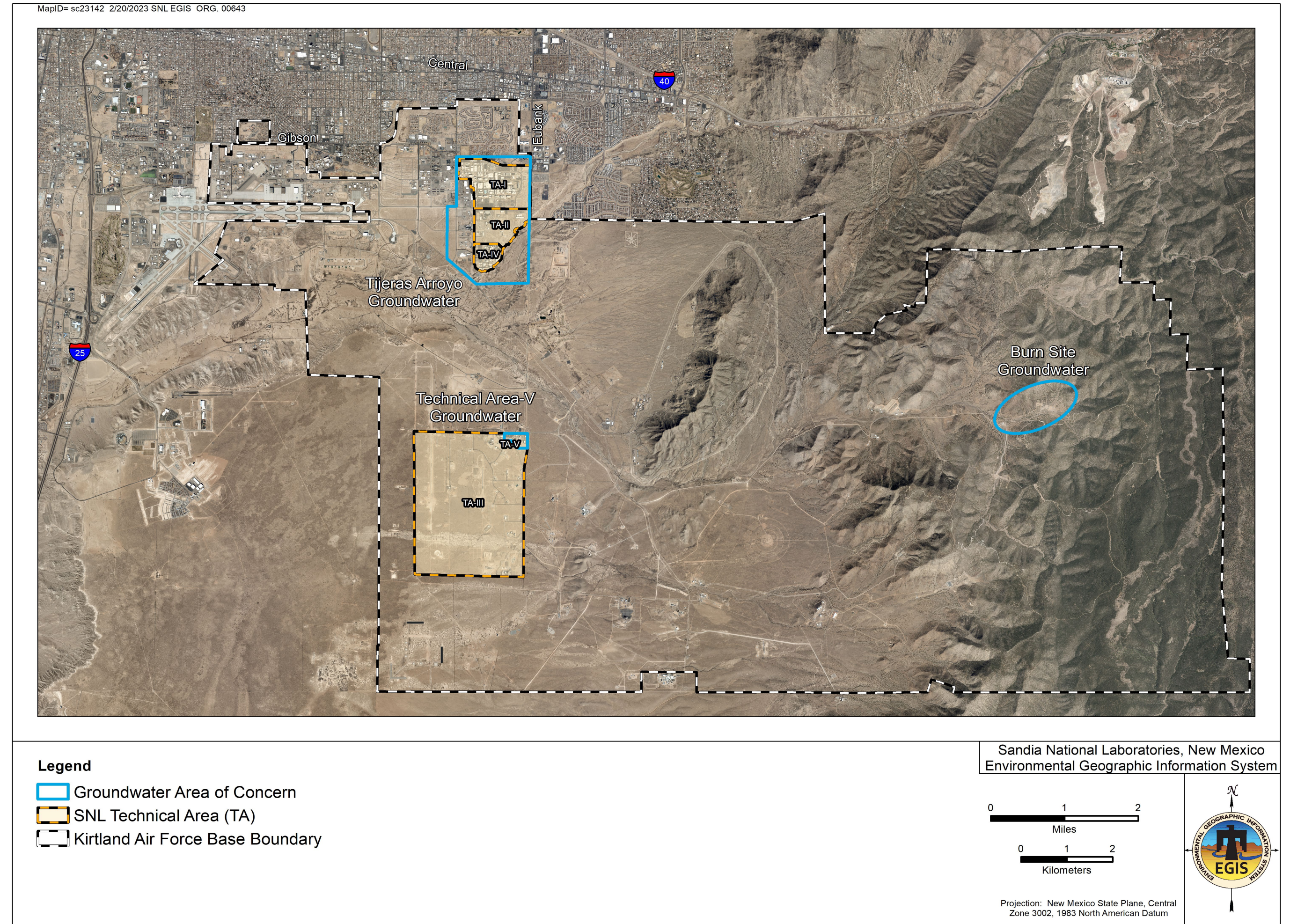




Technical Area-V Groundwater Investigation

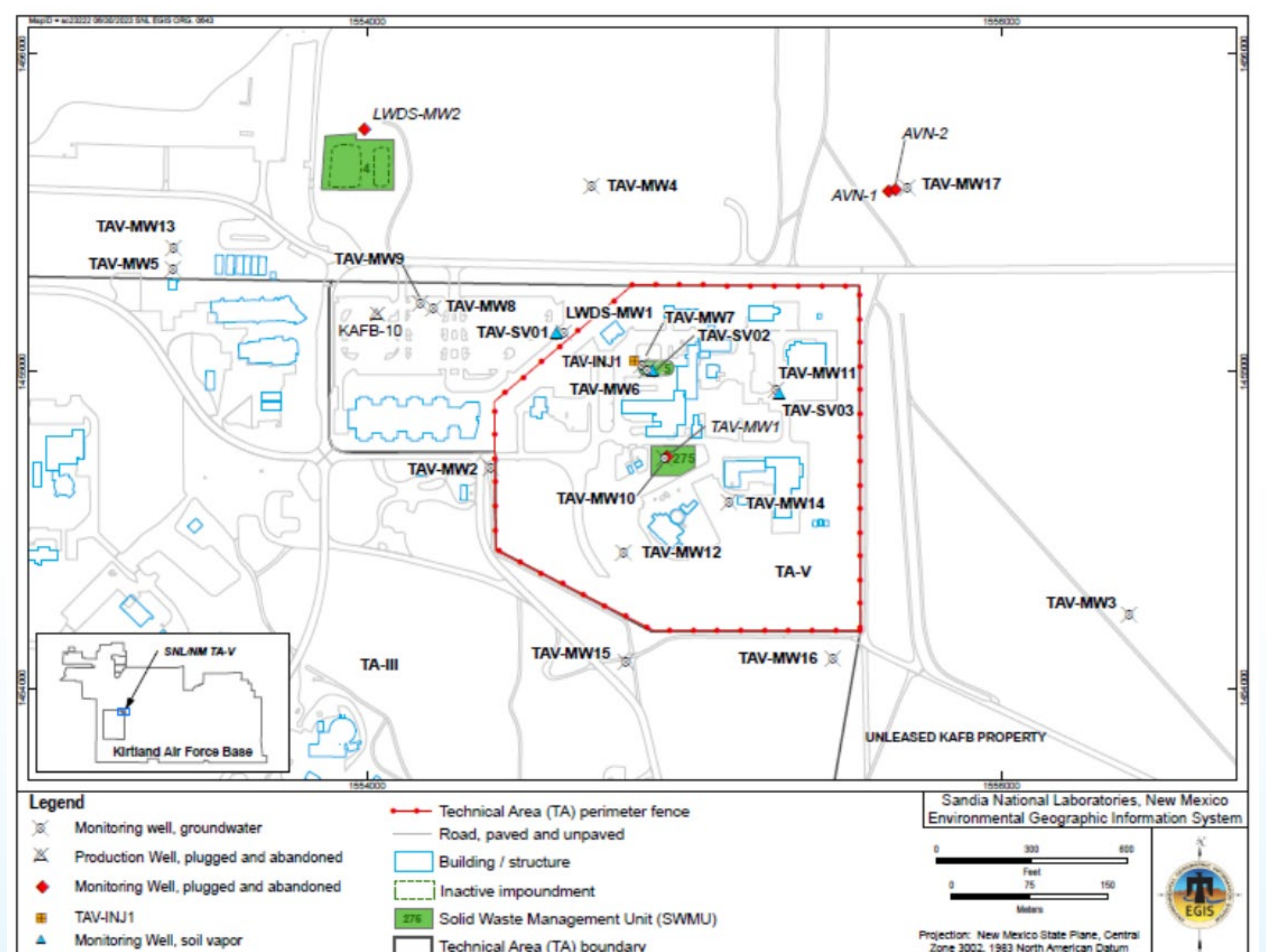
Site Description

- Technical Area-V (TA-V) covers approximately 35 acres in the west-central portion of Kirtland Air Force Base (KAFB).
- Sandia National Laboratories activities at TA-V began in 1961.
- Corrective action for all the surface and shallow subsurface contamination at TA-V is complete.
- Only the groundwater at TA-V, designated as the TA-V Groundwater (TAVG) Area of Concern (AOC), requires corrective action.



Conceptual Site Model for the TAVG AOC Vicinity

- The groundwater at TA-V occurs in the Regional Aquifer in fine-grained, clay-rich alluvial-fan sediments.
- The groundwater in the Regional Aquifer flows to the west, then turns northeast toward the production wells near KAFB's northern boundary.
- The water table at TA-V is approximately 500 – 550 feet below ground surface.



- Groundwater monitoring at TA-V began in 1992, with 21 monitoring wells installed to date.
- The current monitoring well network consists of 17 active wells.
- The newest groundwater monitoring well is TAV-MW17.
- Groundwater levels are measured quarterly.

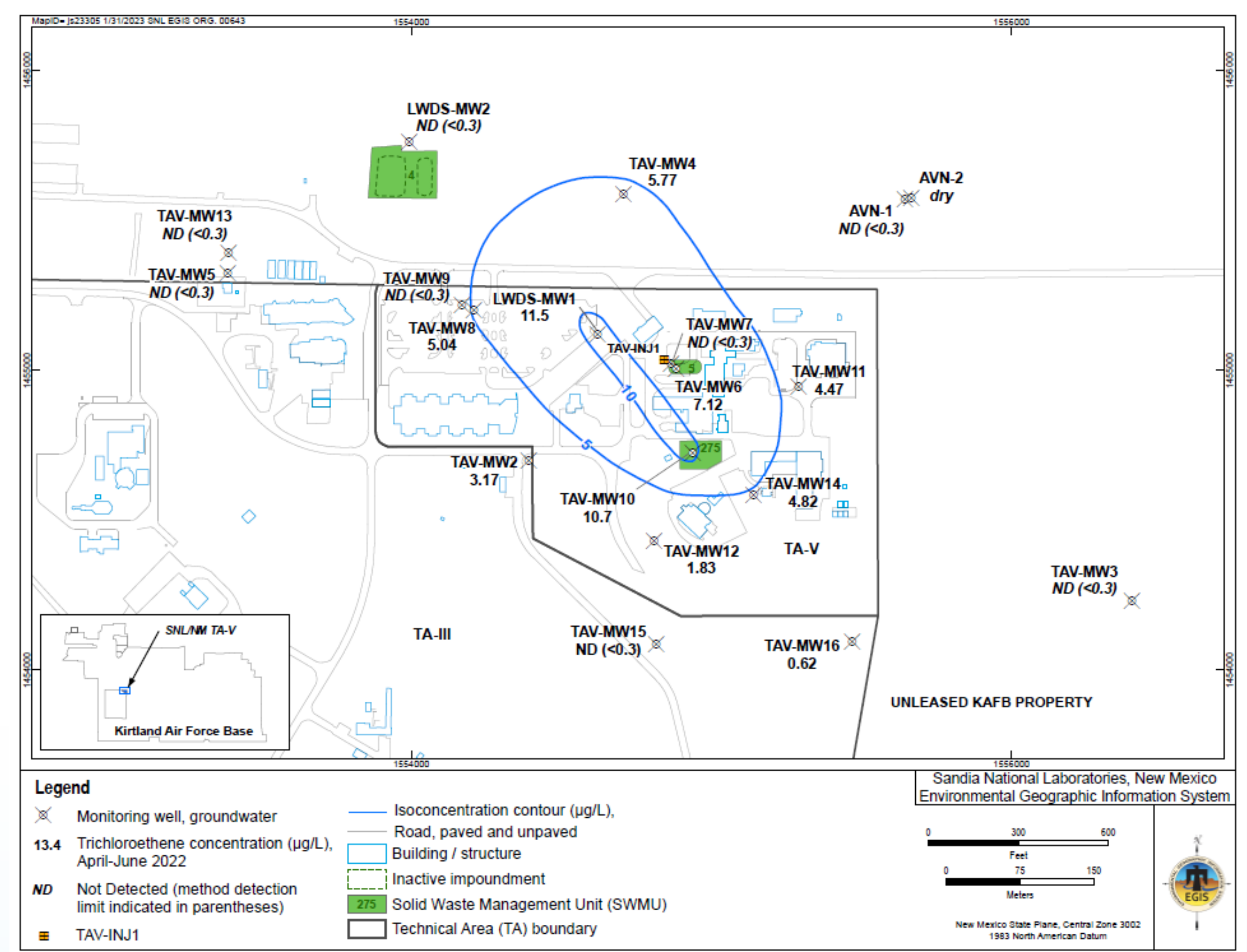
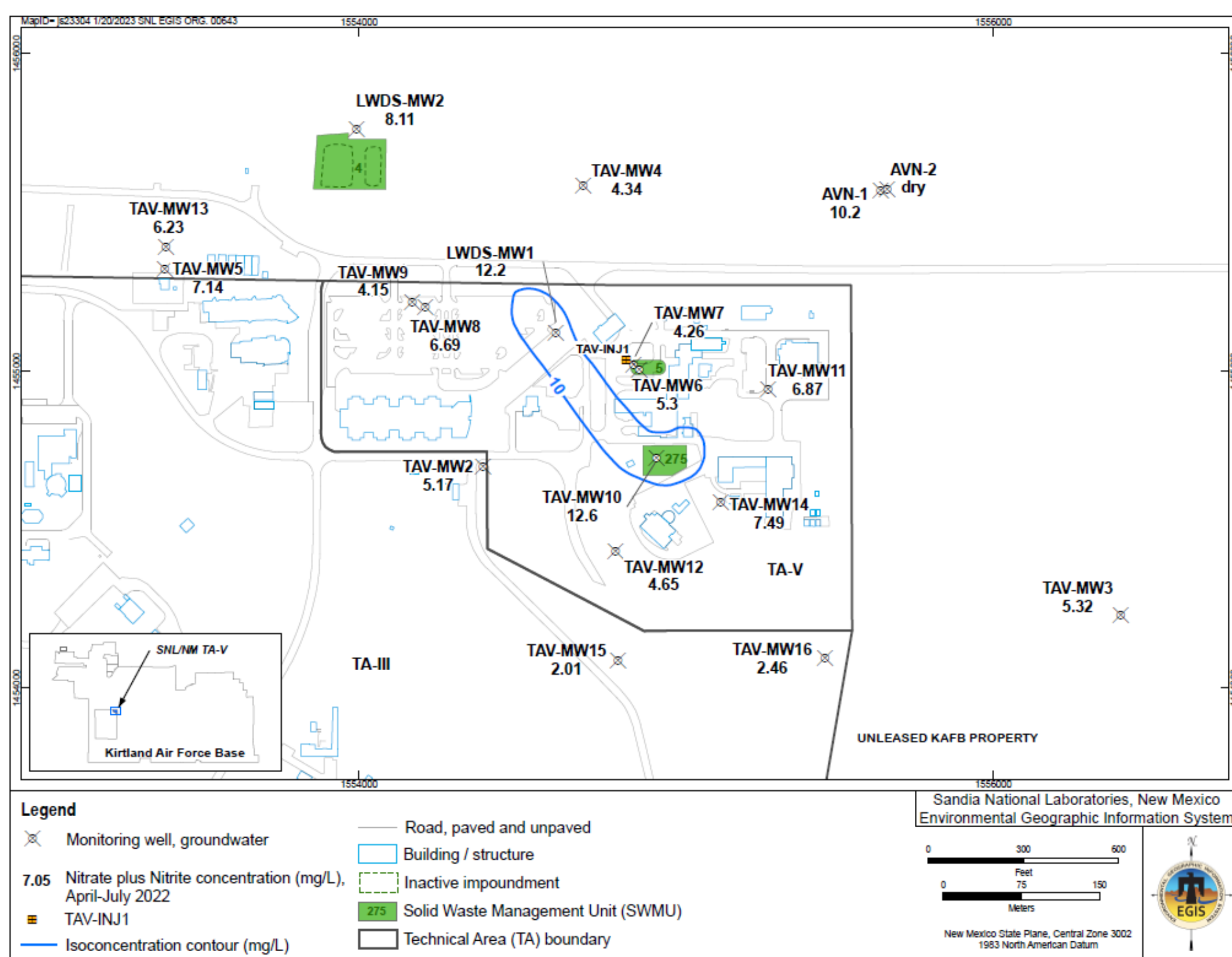


Technical Area-V Groundwater Investigation

Site Description (concluded)

- The groundwater at TA-V is contaminated with nitrate and trichloroethene (TCE) at concentrations above the U.S. Environmental Protection Agency maximum contaminant levels (MCLs) for drinking water.
- Nitrate and TCE are derived from industrial and septic wastewater discharged at TA-V from the 1960s through 1992. Nitrate could also be naturally occurring.
- Except for TAV-MW17, the monitoring wells are sampled either semiannually or annually for nitrate and TCE (the constituents of concern) and annually for waste characterization parameters.
 - The nitrate plume covers approximately 1.4 acres.
 - The TCE plume covers approximately 13 acres.
 - Both plumes are stable. They are not adversely impacting human health or the environment.
 - No other constituents in the groundwater exceed the MCLs.
- The groundwater is not used for any beneficial purpose; no one is drinking contaminated groundwater. The nearest drinking water supply well (KAFB-4) is 2.8 miles northwest of TA-V.

Constituent of Concern	Maximum Concentration in 2022	MCL
Nitrate	13.5 milligrams per liter (well TAV-MW10)	10 milligrams per liter
TCE	12.4 micrograms per liter (well LWDS-MW1)	5 micrograms per liter



Nitrate Plume (left) and TCE Plume (right)

Source: Annual Groundwater Monitoring Report, Calendar Year 2022

www.sandia.gov | Environmental Responsibility | Environmental Reports |



Technical Area-V Groundwater Investigation

Current Status and Recent Activities

New Monitoring Well TAV-MW17 — Sampling

- Installed and sampled for the first time in April 2023, then sampled quarterly in August 2023, October 2023, and January 2024.
 - Sampled for perchlorate to meet the 2004 Compliance Order on Consent requirement of having four consecutive perchlorate results below the screening level of 4 micrograms per liter. Met this requirement in January 2024.
 - Sampled for nitrate, TCE, and waste characterization parameters.
- Will be sampled semiannually for nitrate and TCE and annually for waste characterization parameters starting in the second quarter of calendar year 2024.

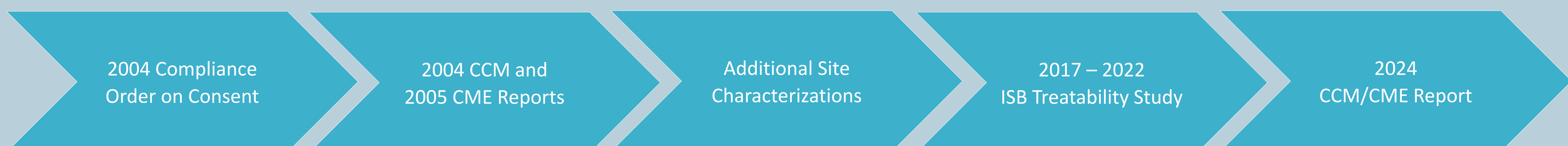
New Monitoring Well TAV-MW17 — Reporting

- Submitted the *Monitoring Well TAV-MW17 Installation and Monitoring Well AVN-1, AVN-2, and LWDS-MW2 Decommissioning Report (Revised)* to the NMED in January 2024. The NMED approved this report in March 2024.



Corrective Action at the TAVG AOC

- The TAVG AOC is in the corrective measures evaluation (CME) process.



- CCM = current conceptual model
- ISB = in-situ bioremediation
- Will submit the *Technical Area-V Groundwater Area of Concern Current Conceptual Model and Corrective Measures Evaluation Report* to the NMED by May 20, 2024.