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Annual Groundwater Monitoring and Corrective Measures Progress Report Calendar Year 2025

Prepared by
Sandia National Laboratories, New Mexico

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Abstract

SNL/NM is a multimission laboratory managed and operated by National Technology & Engineering Solutions of Sandia, LLC, a wholly owned subsidiary of Honeywell International Inc., under contract with the DOE/NNSA. The DOE/NNSA Sandia Field Office administers the contract and oversees contractor operations at SNL/NM.

This Report summarizes the calendar year 2025 monitoring activities and results for the Groundwater Monitoring Program (GMP) and groundwater Areas of Concern (AOCs) at SNL/NM. The monitoring results were compiled from groundwater data collected from the GMP and Technical Area-V Groundwater, Burn Site Groundwater, and Tijeras Arroyo Groundwater AOC monitoring well networks.

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Executive Summary

This document presents the Sandia National Laboratories, New Mexico (SNL/NM) *Annual Groundwater Monitoring and Corrective Measures Progress Report, Calendar Year 2025* (Report). SNL/NM is a multimission laboratory managed and operated by National Technology & Engineering Solutions of Sandia, LLC, a wholly owned subsidiary of Honeywell International Inc., under contract with the U.S. Department of Energy (DOE) National Nuclear Security Administration (NNSA). As a permitted hazardous waste facility, SNL/NM is subject to comprehensive groundwater monitoring requirements to ensure protection of human health and the environment.

This Report summarizes the calendar year (CY) 2025 monitoring activities and results for the Groundwater Monitoring Program (GMP) and groundwater Areas of Concern (AOCs) at SNL/NM. The monitoring results were compiled from groundwater data collected from the following monitoring well networks:

- GMP monitoring well network
- Technical Area-V Groundwater (TAVG) AOC monitoring well network
- Burn Site Groundwater (BSG) AOC monitoring well network
- Tijeras Arroyo Groundwater (TAG) AOC monitoring well network

Except for groundwater elevation data, this Report does not include the CY 2025 monitoring results for the Chemical Waste Landfill (CWL) or the Mixed Waste Landfill (MWL), the other groundwater-monitored sites at SNL/NM. Those results are reported in the comprehensive CWL and MWL annual reports submitted to the New Mexico Environment Department (NMED) in accordance with the *Hazardous Waste Permit, EPA ID No. NM5890110518, to United States Department of Energy and Sandia Corporation, for Sandia National Laboratories, Located in Bernalillo County, New Mexico* (NMED, October 2009, as modified) and the *Mixed Waste Landfill Long-Term Monitoring and Maintenance Plan* (SNL/NM, March 2012, as modified), the regulatory criteria that determine the monitoring and reporting requirements for the CWL and the MWL, respectively.

Prepared jointly by DOE/NNSA and SNL/NM personnel, this Report meets the annual reporting requirement for the GMP and groundwater AOCs, provides regulators and other stakeholders with updated groundwater data for SNL/NM, and informs the public about the status of the groundwater resources at SNL/NM.

Regulatory Criteria

The regulatory criteria that determine the monitoring and reporting requirements for the GMP and groundwater AOCs are the:

- *Resource Conservation and Recovery Act Facility Operating Permit for Sandia National Laboratories, EPA ID No. NM5890110518* (RCRA Permit) (NMED, January 2015, as modified).
- *Compliance Order on Consent Pursuant to the New Mexico Hazardous Waste Act 74-4-10: Sandia National Laboratories Consent Order* (Consent Order) (NMED, April 2004).
- *Tijeras Arroyo Groundwater Corrective Measures Implementation Plan (Revised)* (TAG CMI Plan) (SNL/NM, June 2023).
- Comprehensive Site-Wide Groundwater Monitoring Plan.

The regulatory authority that mandates and oversees compliance with these regulatory criteria is the NMED Hazardous Waste Bureau.

Report Overview

Chapter 1.0

Chapter 1.0 describes the regulatory criteria delineated above and the site conditions at SNL/NM, including the geologic and hydrogeologic settings.

SNL/NM is located within the boundaries of Kirtland Air Force Base (KAFB), near the east-central edge of the Albuquerque Basin. Formed during the extension of the Rio Grande Rift, the Albuquerque Basin (also known as the Middle Rio Grande Basin) contains the Regional Aquifer, which supplies groundwater to Albuquerque Bernalillo County Water Utility Authority, Veterans Affairs, and KAFB production wells. The eastern edge of the Albuquerque Basin is defined by a complicated fault system known as the Tijeras Fault Complex. The Tijeras Fault Complex creates a transition from the Albuquerque Basin to a foothills and canyon region where a thin layer of alluvium covers fractured bedrock. These three hydrogeologically distinct areas – the Albuquerque Basin, Tijeras Fault Complex, and foothills and canyon region – underlie SNL/NM and its operations, hence the importance of monitoring the groundwater at the facility. Chapter 1.0 describes how the CY 2025 groundwater data were collected and analyzed and provides an overview of the CY 2025 regulatory developments and monitoring activities.

Chapter 2.0

Chapter 2.0 summarizes the CY 2025 monitoring activities and results for the GMP. The monitoring activities were performed and documented in accordance with the Consent Order and the CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan (SNL/NM, April 2024). The monitoring results were compiled from groundwater data collected from the GMP monitoring well network. This network, which spans multiple hydrogeologically distinct areas on KAFB, consists of 16 monitoring wells and one spring (i.e., Coyote Springs). It is currently maintained to satisfy Consent Order Section IV.A, which requires a monitoring network adequate for establishing background groundwater quality and understanding the general hydrogeologic system at SNL/NM. It is not subject to corrective action.

Chapter 3.0

Chapter 3.0 summarizes the CY 2025 monitoring activities and results for the TAVG AOC. The monitoring activities were performed and documented in accordance with the Consent Order and the CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan. The monitoring results were compiled from groundwater data collected from the TAVG AOC monitoring well network. This network consists of 17 monitoring wells.

The TAVG AOC is located beneath and around Technical Area V in the west-central part of KAFB. Trichloroethene (TCE) and nitrate have been identified as constituents of concern (COCs) in the groundwater in the TAVG AOC, which occurs in the Regional Aquifer, based on detections above the U.S. Environmental Protection Agency (EPA) maximum contaminant levels (MCLs) (EPA, March 2018) and the New Mexico Water Quality Control Commission maximum allowable concentrations (MACs) (WQCC, December 2018). The groundwater contamination primarily originates from historical wastewater disposal at Solid Waste Management Units (SWMUs) 4, 5, and 275. The NMED has granted Corrective Action Complete status to all three SWMUs (NMED, January 2015, as modified), while the TAVG AOC remains in the corrective action process.

Chapter 4.0

Chapter 4.0 summarizes the CY 2025 monitoring activities and results for the BSG AOC. The monitoring activities were performed and documented in accordance with the Consent Order and the CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan. The monitoring results were compiled from

groundwater data collected from the BSG AOC monitoring well network. This network consists of 17 monitoring wells.

The BSG AOC is located beneath and around the Lurance Canyon Burn Site facility (Burn Site) in the far eastern part of KAFB. Nitrate has been identified as a COC in the groundwater in the BSG AOC, which occurs in the fractured bedrock aquifer system, based on detections above the EPA MCL and MAC. The groundwater contamination originates from both natural and anthropogenic nitrate sources. The anthropogenic nitrate sources include the historical use of ammonium nitrate explosives and burn tests involving high explosives (HEs) and rocket propellants at SWMUs 65 and 94. The NMED has granted Corrective Action Complete status to both SWMUs (NMED, January 2015, as modified), while the BSG AOC remains in the corrective action process.

Chapter 5.0

Chapter 5.0 presents the first annual corrective measures (i.e., remedy) progress report for the TAG AOC. It summarizes the CY 2025 remedy implementation activities and results, including the monitoring activities and results. The remedy implementation activities were performed and documented in accordance with the TAG CMI Plan. The monitoring results were compiled from groundwater data collected from the TAG AOC monitoring well network. This network consists of 27 monitoring wells.

The TAG AOC is located in the north-central part of KAFB, spanning Technical Areas I, II, and IV. Nitrate has been identified as a COC in the groundwater in the TAG AOC, which occurs in the Regional Aquifer and the Perched Groundwater System (PGWS) that lies above it, based on detections above the EPA MCL and MAC. The groundwater contamination primarily originates from anthropogenic nitrate sources, specifically historical wastewater and septic water discharges associated with past activities. The NMED has granted Corrective Action Complete status to all SWMUs located in the TAG AOC (NMED, January 2015, as modified), while the TAG AOC remains in the corrective action process.

The selected final remedy for the groundwater contamination in the TAG AOC is Monitored Natural Attenuation (MNA) (NMED, January 2023). MNA consists of actively monitoring the groundwater at specified intervals and tracking changes in groundwater quality and system conditions. This ongoing effort aims to verify that the nitrate concentrations are decreasing below the EPA MCL or that the PGWS is naturally dewatering, further reducing risks to human health and the environment. Remedy implementation began on January 1, 2025.

CY 2025 Monitoring Activities and Results

Groundwater Monitoring Program

The water levels in all 16 GMP monitoring wells were measured quarterly and used to determine groundwater elevations. The groundwater elevations at the monitoring wells varied based on well location, either declining slightly, remaining stable, or increasing slightly in CY 2025.

Groundwater samples were collected from all 16 GMP monitoring wells and a surface water sample was collected from Coyote Springs in April/May 2025. The samples were analyzed for volatile organic compounds (VOCs), HE compounds (select monitoring wells only), nitrate plus nitrite (NPN), alkalinity, anions, total organic halogens, total phenol, total cyanide, mercury, Target Analyte List (TAL) metals (all monitoring wells) plus uranium (select monitoring wells only), gamma spectroscopy short list, gross alpha/beta activity, isotopic uranium, radium-226, and radium-228. Except for chloride, fluoride, sulfate, total phenol, beryllium, and manganese, no analytes were detected at concentrations exceeding the EPA MCLs or MACs. Chloride exceeded the MAC of 250 mg/L at Coyote Springs, with a concentration of 466 mg/L. Fluoride exceeded the MAC of 1.6 mg/L (but was below the EPA MCL of 4.00 mg/L) at five GMP monitoring wells (OBS-MW1, SFR-2S, SFR-4T, SWTA3-MW4, and TRE-1)

and Coyote Springs, with concentrations ranging from 1.62 mg/L to 2.78 mg/L. Sulfate exceeded the MAC of 600 mg/L at one GMP monitoring well (SFR-4T), with a concentration of 2,000 mg/L. Total phenol exceeded the MAC of 0.005 mg/L at five GMP monitoring wells (CCBA-MW2, CTF-MW1, CYN-MW5, Greystone-MW2, and TRE-1), with concentrations ranging from 0.00601 mg/L to 0.0243 mg/L. Beryllium exceeded the EPA MCL and MAC of 0.004 mg/L at Coyote Springs, with a concentration of 0.00639 mg/L. Manganese exceeded the MAC of 0.200 mg/L at Coyote Springs, with a concentration of 1.36 mg/L. Except for total phenol, these results are consistent with historical results, and the chloride, fluoride, sulfate, beryllium, and manganese are likely naturally occurring.

Technical Area-V Groundwater Area of Concern

The water levels in all 17 TAVG AOC monitoring wells were measured quarterly and used to determine groundwater elevations. The groundwater elevations at all 17 monitoring wells declined in CY 2025 due to pumping of the Regional Aquifer by production wells in the region. The declines are expected to continue for as long as such pumping continues.

Groundwater samples were collected from 11 TAVG AOC monitoring wells in January/February/March and August/September 2025 and 6 TAVG AOC monitoring wells in August/September 2025. The January/February/March 2025 samples were analyzed for VOCs and NPN. The August/September 2025 samples were analyzed for VOCs, NPN, anions, alkalinity, TAL metals plus uranium, gamma spectroscopy short list, gross alpha/beta activity, and tritium. Except for TCE and NPN, no analytes were detected at concentrations exceeding the EPA MCLs. TCE exceeded the EPA MCL of 5 µg/L in the environmental/environmental duplicate samples collected from six TAVG AOC monitoring wells (LWDS-MW1, TAV-MW4, TAV-MW6, TAV-MW8, TAV-MW10, and TAV-MW11), with a maximum concentration of 9.24 µg/L in the March 2025 LWDS-MW1 environmental sample. NPN exceeded the EPA MCL of 10 mg/L in the environmental/environmental duplicate samples collected from three TAVG AOC monitoring wells (LWDS-MW1, TAV-MW10, and TAV-MW17), with a maximum concentration of 12.9 mg/L in the March 2025 LWDS-MW1 environmental sample. The TCE and NPN concentrations in the environmental samples collected from the other TAVG AOC monitoring wells were below the EPA MCLs. These results are consistent with historical results.

Burn Site Groundwater Area of Concern

The water levels in all 17 BSG AOC monitoring wells were measured quarterly and used to determine groundwater elevations. The groundwater elevations at the Burn Site Well, CYN-MW11, and CYN-MW11 increased significantly in October 2025, apparently in response to September 2025 storm events. As the groundwater elevations at all 17 monitoring wells have otherwise been declining, these increases are primarily episodic, reflecting responses to discrete storm events rather than predictable seasonal cycles.

Groundwater samples were collected from 13 BSG AOC monitoring wells in May/June and October/November 2025. The May/June 2025 samples were analyzed for NPN, diesel range organics (DRO), gasoline range organics (GRO), VOCs, HE compounds, anions, alkalinity, TAL metals, gamma spectroscopy short list, gross alpha/beta activity, isotopic uranium, and tritium. The October/November 2025 samples were analyzed for NPN, DRO, and GRO. Except for NPN, no analytes were detected at concentrations exceeding the EPA MCLs. NPN exceeded the EPA MCL of 10 mg/L in the environmental/environmental duplicate samples collected from six BSG AOC monitoring wells (CYN-MW9, CYN-MW10, CYN-MW11, CYN-MW12, CYN-MW13, and CYN-MW14A), with a maximum concentration of 39.5 mg/L in the June 2025 CYN-MW10 environmental sample. These results are consistent with historical results.

Tijeras Arroyo Groundwater Area of Concern

The water levels in 25 TAG AOC monitoring wells were measured quarterly and used to determine groundwater elevations. The water levels in the PGWS monitoring wells continued to decline in CY 2025. In contrast, the water levels in the Regional Aquifer monitoring wells continued to steadily rise. This trend is likely due to the Albuquerque Bernalillo County Water Utility Authority reducing its reliance on the production wells near the northwest corner of KAFB.

Groundwater samples were collected from 19 TAG AOC monitoring wells, specifically 11 PGWS monitoring wells in February/March and July/August 2025 and 8 Regional Aquifer monitoring wells, including Merging Zone monitoring well TJA-4, in July/August 2025. The February/March 2025 samples were analyzed for NPN. The July/August 2025 samples were analyzed for NPN, VOCs, anions, alkalinity, TAL metals plus uranium, gamma spectroscopy short list, gross alpha/beta activity, and tritium. Except for NPN, no analytes were detected at concentrations exceeding the EPA MCL. NPN exceeded the EPA MCL of 10 mg/L at five PGWS monitoring wells (TA2-W-19, TA2-W-28, TJA-2, TJA-5, and TJA-7) and the Merging Zone monitoring well (TJA-4), with a maximum concentration among the PGWS monitoring wells of 23.0 mg/L in the August 2025 TJA-7 environmental sample and a concentration at the Merging Zone monitoring well of 30.4 mg/L in the August 2025 TJA-4 environmental sample. These results are consistent with historical results.

Conclusions and Future Monitoring Activities

All monitoring requirements for the GMP and groundwater AOCs were met for CY 2025. The groundwater samples collected from the four monitoring well networks yielded analytical results consistent with historical results, indicating stable conditions. Currently, there is no foreseeable risk to human health or the environment from the groundwater contamination in the groundwater AOCs. Monitoring will continue in CY 2026 in accordance with the applicable regulatory criteria. The monitoring activities and results will be reported in the CY 2026 Annual Groundwater Monitoring and Corrective Measures Progress Report.

Remedy implementation at the TAG AOC began on January 1, 2025. While the PGWS is dewatering as anticipated, the rate has slowed, with 11 of the 14 PGWS monitoring wells now predicted to go dry by 2069. Five PGWS monitoring wells have consistently had NPN concentrations exceeding the EPA MCL; however, the NPN concentration trends at these monitoring wells have been stable or decreasing over the last five years. Based on these findings, remedy implementation will continue in accordance with the TAG CMI Plan.

References

New Mexico Environment Department. (April 2004). *Compliance Order on Consent Pursuant to the New Mexico Hazardous Waste Act 74-4-10: Sandia National Laboratories Consent Order*. https://www.env.nm.gov/wp-content/uploads/sites/12/2019/10/SNL_CONSENTORDER_April-29-2004_FINAL.pdf

New Mexico Environment Department. (October 2009, as modified). *Hazardous Waste Permit, EPA ID No. NM5890110518, to the U.S. Department of Energy and Sandia Corporation, for Sandia National Laboratories, Located in Bernalillo County New Mexico*.

New Mexico Environment Department. (January 2015, as modified). *Resource Conservation and Recovery Act Facility Operating Permit for Sandia National Laboratories, EPA ID No. NM5890110518*.

New Mexico Environment Department. (January 2023). *Approval, Final Remedy Decision and Response to Public Comment On Class 3 Permit Modification for Corrective Measures for Tijeras Arroyo Groundwater Area of Concern, Sandia National Laboratories, EPA ID# NM5890110518, HWB-SNL-16-020* [January 6, 2023 letter from R. Shean, New Mexico Environment Department, Hazardous Waste Bureau to D. Hauck, U.S. Department of Energy, National Nuclear Security Administration, Sandia Field Office and P. Shoemaker, Sandia National Laboratories, New Mexico].

New Mexico Water Quality Control Commission. (December 2018). *Environmental Protection, Water Quality, Ground and Surface Water Protection Regulations*, 20.6.2 NMAC. https://www.srca.nm.gov/parts/title20/20.006.0002.html

Sandia National Laboratories, New Mexico. (March 2012, as modified). *Long-Term Monitoring and Maintenance Plan for the Mixed Waste Landfill*.

Sandia National Laboratories, New Mexico. (April 2024). *Comprehensive Site-Wide Groundwater Monitoring Plan, Calendar Year 2025*.

Sandia National Laboratories, New Mexico. (June 2023). *Tijeras Arroyo Groundwater Corrective Measures Implementation Plan (Revised)*.

U.S. Environmental Protection Agency. (March 2018). *2018 Edition of the Drinking Water Standards and Health Advisories Tables,* EPA 822-F-18-0001.

Table of Contents

Executive Summary vii
Table of Contents xiii
Chapter Figures xvi
Chapter Tables xvii
Attachments xviii
Tables xix
Plate xix
Data Packages xix
Acronyms and Abbreviations xx
Units of Measure xxi
1.0 INTRODUCTION 1-1
1.1 Facility Description 1-1
1.2 Regulatory Criteria 1-3
1.2.1 Resource Conservation and Recovery Act Facility Operating Permit 1-3
1.2.2 Consent Order 1-3
1.2.3 Tijeras Arroyo Groundwater Corrective Measures Implementation Plan 1-3
1.2.4 Comprehensive Site-Wide Groundwater Monitoring Plan 1-4
1.3 Site Conditions 1-4
1.3.1 Climate 1-4
1.3.2 Surface Water Hydrology 1-5
1.3.3 Geologic Setting 1-5
1.3.4 Hydrogeologic Setting 1-6
1.3.5 Groundwater Recharge and Withdrawal 1-9
1.4 Field Methodology 1-10
1.4.1 Water Level Measurements 1-10
1.4.2 Well Purging and Field Water Quality Parameter Measurements 1-10
1.4.3 Pump Decontamination 1-11
1.4.4 Sample Collection 1-11
1.4.5 Sample Handling and Shipment 1-11
1.4.6 Waste Management 1-11
1.5 Analytical Methodology 1-11
1.6 Data Quality 1-13
1.6.1 Field Quality Control Samples 1-13
1.6.2 Laboratory Quality Control Samples 1-14
1.6.3 Data Verification and Validation 1-14
1.7 Overview of Calendar Year 2025 Regulatory Developments and Monitoring Activities 1-15
1.7.1 Regulatory Developments 1-15
1.7.2 Public Meetings 1-15
1.7.3 Groundwater Elevation Monitoring Activities 1-15
1.7.4 Groundwater Sampling 1-19
2.0 GROUNDWATER MONITORING PROGRAM 2-1
2.1 Introduction 2-1

Table of Contents (continued)

2.1.1 Monitoring History 2-1
2.1.2 Current Monitoring Well Network 2-1
2.2 Calendar Year 2025 Monitoring Activities 2-4
2.3 Calendar Year 2025 Monitoring Results 2-4
2.3.1 Water Level Results 2-4
2.3.2 Groundwater Sample Analytical Results 2-6
2.4 Calendar Year 2025 Quality Control Results 2-9
2.4.1 Field Quality Control Samples 2-9
2.4.2 Laboratory Quality Control Samples 2-11
2.5 Variances and Nonconformances 2-11
2.6 Summary and Conclusions 2-12
2.7 Future Activities 2-12
3.0 TECHNICAL AREA-V GROUNDWATER AREA OF CONCERN 3-1
3.1 Introduction 3-1
3.1.1 Location 3-1
3.1.2 Site History 3-1
3.1.3 Monitoring History 3-1
3.1.4 Monitoring Well Network 3-2
3.2 Conceptual Site Model 3-4
3.2.1 Site Geology and Hydrogeology 3-4
3.2.2 Sources and Nature of Contamination 3-4
3.2.3 Contaminant Fate and Transport 3-4
3.2.4 Potential Receptors and Risk 3-5
3.3 Calendar Year 2025 Monitoring Activities 3-7
3.4 Calendar Year 2025 Monitoring Results 3-7
3.4.1 Water Level Results 3-7
3.4.2 Groundwater Sample Analytical Results 3-10
3.5 Calendar Year 2025 Quality Control Results 3-16
3.5.1 Field Quality Control Samples 3-16
3.5.2 Laboratory Quality Control Samples 3-18
3.6 Variances and Nonconformances 3-18
3.7 Summary and Conclusions 3-19
3.8 Future Activities 3-20
4.0 BURN SITE GROUNDWATER AREA OF CONCERN 4-1
4.1 Introduction 4-1
4.1.1 Location 4-1
4.1.2 Site History 4-1
4.1.3 Monitoring History 4-1
4.1.4 Monitoring Well Network 4-2
4.2 Conceptual Site Model 4-4
4.2.1 Site Geology and Hydrogeology 4-4
4.2.2 Sources and Nature of Contamination 4-4
4.2.3 Contaminant Fate and Transport 4-4

Table of Contents (concluded)

4.2.4 Potential Receptors and Risk 4-5
4.3 Calendar Year 2025 Monitoring Activities 4-7
4.4 Calendar Year 2025 Monitoring Results 4-7
4.4.1 Water Level Results 4-7
4.4.2 Groundwater Sample Analytical Results 4-10
4.5 Calendar Year 2025 Quality Control Results 4-14
4.5.1 Field Quality Control Samples 4-14
4.5.2 Laboratory Quality Control Samples 4-16
4.6 Variances and Nonconformances 4-17
4.7 Summary and Conclusions 4-17
4.8 Future Activities 4-18
5.0 TIJERAS ARROYO GROUNDWATER AREA OF CONCERN 5-1
5.1 Introduction 5-1
5.1.1 Conceptual Site Model 5-2
5.1.2 Remedial Objectives 5-3
5.2 Calendar Year 2025 Remedy Implementation 5-5
5.2.1 Monitoring Well Network 5-5
5.2.2 Monitoring Activities 5-8
5.2.3 Monitoring Well Network Inspections and Maintenance 5-8
5.2.4 Land Use Control Review 5-8
5.2.5 Monitoring Well Decommissioning and Replacement 5-9
5.2.6 Deviation and Mitigation 5-9
5.3 Calendar Year 2025 Monitoring Results 5-9
5.3.1 Water Level Results 5-9
5.3.2 Groundwater Sample Analytical Results 5-17
5.4 Calendar Year 2025 Quality Control Results 5-22
5.4.1 Field Quality Control Samples 5-22
5.4.2 Laboratory Quality Control Samples 5-24
5.5 Field Notes and Observations 5-24
5.6 Waste Management 5-25
5.7 Summary of Calendar Year 2025 Results 5-25
5.8 Calendar Year 2025 Community Relations 5-26
5.9 Recommendation and Future Activities 5-26
6.0 REFERENCES 6-1

Chapter Figures

Figure 1-1 Groundwater Monitoring Wells and Areas of Concern, Kirtland Air Force Base and Vicinity....1-2
Figure 1-2 Faults and Hydrogeologically Distinct Areas, Kirtland Air Force Base and Vicinity....1-7
Figure 1-3 Albuquerque Basin, North Central New Mexico....1-8
Figure 1-4 Groundwater Elevation Trends, Aquifer Systems at Sandia National Laboratories, New Mexico....1-17
Figure 2-1 Groundwater Monitoring Program Monitoring Well Locations....2-3
Figure 3-1 Technical Area-V Groundwater Area of Concern Monitoring Well Locations....3-3
Figure 3-2 Conceptual Site Model for the Technical Area-V Groundwater Area of Concern....3-6
Figure 3-3 Potentiometric Surface of the Regional Aquifer in the Technical Area-V Groundwater Area of Concern, October 2025....3-9
Figure 3-4 Trichloroethene Distribution in the Technical Area-V Groundwater Area of Concern, August/September 2025....3-13
Figure 3-5 Nitrate Plus Nitrite Distribution in the Technical Area-V Groundwater Area of Concern, August/September 2025....3-15
Figure 4-1 Burn Site Groundwater Area of Concern Monitoring Well Locations....4-3
Figure 4-2 Conceptual Site Model for the Burn Site Groundwater Area of Concern....4-6
Figure 4-3 Potentiometric Surface of the Fractured Bedrock Aquifer System in the Burn Site Groundwater Area of Concern, October 2025....4-9
Figure 4-4 Nitrate Plus Nitrite Distribution in the Burn Site Groundwater Area of Concern, October/November 2025....4-13
Figure 5-1 Conceptual Site Model for the Tijeras Arroyo Groundwater Area of Concern....5-4
Figure 5-2 Tijeras Arroyo Groundwater Area of Concern Monitoring Well Locations....5-7
Figure-5-3 Potentiometric Surface of the Perched Groundwater System in the Tijeras Arroyo Groundwater Area of Concern, October 2025....5-12
Figure 5-4 Potentiometric Surface of the Regional Aquifer in the Tijeras Arroyo Groundwater Area of Concern, October 2025....5-13
Figure 5-5 Predicted Dewatering of Perched Groundwater System Monitoring Wells as of 2025....5-16
Figure 5-6 Nitrate Plus Nitrite Distribution in the Perched Groundwater System and Regional Aquifer in the Tijeras Arroyo Groundwater Area of Concern, July/August 2025....5-21

Chapter Tables

Table 1-1 Precipitation Data for Kirtland Air Force Base, Calendar Years 2024 and 2025 1-5
Table 1-2 Total Kirtland Air Force Base Groundwater Production, Calendar Years 2024 and 2025 . 1-9
Table 1-3 Field Water Quality Parameters Measured at Monitoring Wells 1-10
Table 1-4 Chemical Analytical Methods 1-12
Table 1-5 Radiochemical Analytical Methods 1-12
Table 1-6 Quality Control Sample Types for Groundwater Sampling and Analysis 1-13
Table 1-7 Sampling Events, Groundwater Monitoring Program and Groundwater Area of Concern Monitoring Well Networks, Sandia National Laboratories, New Mexico, Calendar Year 2025 1-19
Table 2-1 Groundwater Monitoring Program Monitoring Well Network 2-2
Table 2-2 Groundwater Elevation Data for the Groundwater Monitoring Program Monitoring Wells, October/November 2025 2-4
Table 3-1 Technical Area-V Groundwater Area of Concern Monitoring Well Network 3-2
Table 3-2 Groundwater Elevation Data for the Technical Area-V Groundwater Area of Concern Monitoring Wells, October 2025 3-7
Table 3-3 Technical Area-V Groundwater Area of Concern Monitoring Well Sampling Events, Calendar Year 2025 3-10
Table 3-4 Technical Area-V Groundwater Area of Concern Monitoring Well Sampling Parameters, Calendar Year 2025 3-11
Table 4-1 Burn Site Groundwater Area of Concern Monitoring Well Network 4-2
Table 4-2 Groundwater Elevation Data for the Burn Site Groundwater Area of Concern Monitoring Wells, October 2025 4-7
Table 4-3 Burn Site Groundwater Area of Concern Monitoring Well Sampling Events, Calendar Year 2025 4-10
Table 4-4 Burn Site Groundwater Area of Concern Monitoring Well Sampling Parameters, Calendar Year 2025 4-11
Table 5-1 Tijeras Arroyo Groundwater Area of Concern Monitoring Well Network 5-6
Table 5-2 Groundwater Elevation Data for the Tijeras Arroyo Groundwater Area of Concern Monitoring Wells, October 2025 5-10
Table 5-3 Annual Groundwater Elevation Decline Rates for Perched Groundwater System Monitoring Wells in the Tijeras Arroyo Groundwater Area of Concern 5-15
Table 5-4 Tijeras Arroyo Groundwater Area of Concern Monitoring Well Sampling Events, Calendar Year 2025 5-17
Table 5-5 Tijeras Arroyo Groundwater Area of Concern Monitoring Well Sampling Parameters, Calendar Year 2025 5-18
Table 5-6 NPN Concentration Trends and Predicted Well-Drying Years for Perched Groundwater System Monitoring Wells Exceeding the EPA MCL 5-26

Attachments

Attachment 1A	Sandia National Laboratories, New Mexico Precipitation Data	1A-1
Attachment 1B	Kirtland Air Force Base Production Well Data	
Attachment 2A	Groundwater Monitoring Program Monitoring Well Hydrographs	2A-1
Attachment 2B	Groundwater Monitoring Program Analytical Results Tables	2B-1
Attachment 2C	Groundwater Monitoring Program Concentration Trend Plots	2C-1
Attachment 3A	Technical Area-V Groundwater Area of Concern Monitoring Well Hydrographs	3A-1
Attachment 3B	Technical Area-V Groundwater Area of Concern Analytical Results Tables	3B-1
Attachment 3C	Technical Area-V Groundwater Area of Concern Concentration Trend Plots	3C-1
Attachment 4A	Burn Site Groundwater Area of Concern Monitoring Well Hydrographs	4A-1
Attachment 4B	Burn Site Groundwater Area of Concern Analytical Results Tables	4B-1
Attachment 4C	Burn Site Groundwater Area of Concern Concentration Trend Plots	4C-1
Attachment 5A	Tijeras Arroyo Groundwater Area of Concern Monitoring Well Hydrographs	5A-1
Attachment 5B	Tijeras Arroyo Groundwater Area of Concern Analytical Results Tables	5B-1
Attachment 5C	Tijeras Arroyo Groundwater Area of Concern Concentration Trend Plots	5C-1

Tables

1 Inventory of Active Groundwater Monitoring, Production, and Extraction Wells at Sandia National Laboratories, New Mexico, Kirtland Air Force Base, and Surrounding Areas

2 Groundwater Elevations for Active Monitoring Wells at Sandia National Laboratories, New Mexico and Kirtland Air Force Base Vicinity, Calendar Year 2025

Plate

1 Potentiometric Surface for the Regional Aquifer and the Fractured Bedrock System at Sandia National Laboratories, New Mexico and Kirtland Air Force Base for Calendar Year 2025

Data Packages

1 Groundwater Monitoring Program Data Packages, Calendar Year 2025

2 Technical Area-V Groundwater Area of Concern Data Packages, Calendar Year 2025

3 Burn Site Groundwater Area of Concern Data Packages, Calendar Year 2025

4 Tijeras Arroyo Groundwater Area of Concern Data Packages, Calendar Year 2025

Acronyms and Abbreviations

ABCWUA	Albuquerque Bernalillo County Water Utility Authority
AOC	Area of Concern
ARCOC	Analysis Request and Chain of Custody
ARG	ancestral Rio Grande
BSG	Burn Site Groundwater
COC	constituent of concern
CWL	Chemical Waste Landfill
CY	calendar year
DI	deionized
DO	dissolved oxygen
DOE	U.S. Department of Energy
DRO	diesel range organics
EPA	U.S. Environmental Protection Agency
GMP	Groundwater Monitoring Program
GRO	gasoline range organics
HE	high explosive
KAFB	Kirtland Air Force Base
LUC	land use control
LWDS	Liquid Waste Disposal System
MAC	maximum allowable concentration
MCL	maximum contaminant level
MDL	method detection limit
MNA	Monitored Natural Attenuation
MWL	Mixed Waste Landfill
NMED	New Mexico Environment Department
NNSA	National Nuclear Security Administration
NPN	nitrate plus nitrite
ORP	oxidation-reduction potential
PCE	tetrachloroethene
PGWS	Perched Groundwater System
pH	potential of hydrogen
PQL	practical quantitation limit
QC	quality control
RPD	relative percent difference
SC	specific conductivity
SFG	Santa Fe Group
SNL/NM	Sandia National Laboratories, New Mexico
SWMU	Solid Waste Management Unit
TAG	Tijeras Arroyo Groundwater
TAL	Target Analyte List
TAVG	Technical Area-V Groundwater
TCE	trichloroethene
TOX	total organic halogens
VA	Veterans Affairs
VOC	volatile organic compound

Units of Measure

%	percent
µg/L	micrograms per liter
µm	micron
amsl	above mean sea level
bgs	below ground surface
ft	foot, feet
ft/ft	feet per foot
ft/yr	feet per year
ft^3/yr	cubic feet per year
gal	gallon(s)
gal/min	gallons per minute
in, in.	inch(es)
in/yr	inches per year
L/min	liters per minute
Ma	mega annum (million years)
mg/L	milligrams per liter
mi^2	square mile(s)
ml	milliliter
mrem/yr	millirems per year
NTU	nephelometric turbidity units
pCi/L	picocuries per liter

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1.0 Introduction

This *Annual Groundwater Monitoring and Corrective Measures Progress Report, Calendar Year 2025* (Report) summarizes the calendar year (CY) 2025 monitoring activities and results for the Groundwater Monitoring Program (GMP) and groundwater Areas of Concern (AOCs) at Sandia National Laboratories, New Mexico (SNL/NM). The monitoring results were compiled from groundwater data collected from the following monitoring well networks:

- GMP monitoring well network
- Technical Area-V Groundwater (TAVG) AOC monitoring well network
- Burn Site Groundwater (BSG) AOC monitoring well network
- Tijeras Arroyo Groundwater (TAG) AOC monitoring well network

Except for groundwater elevation data, this Report does not include the CY 2025 monitoring results for the Chemical Waste Landfill (CWL) or the Mixed Waste Landfill (MWL), the other groundwater-monitored sites at SNL/NM. Those results are reported in the comprehensive CWL and MWL annual reports submitted to the New Mexico Environment Department (NMED) in accordance with the *Hazardous Waste Permit, EPA ID No. NM5890110518, to United States Department of Energy and Sandia Corporation, for Sandia National Laboratories, Located in Bernalillo County, New Mexico* (NMED, October 2009, as modified) and the *Mixed Waste Landfill Long-Term Monitoring and Maintenance Plan* (SNL/NM, March 2012, as modified), the regulatory criteria that determine the monitoring and reporting requirements for the CWL and the MWL, respectively.

1.1 Facility Description

SNL/NM is located within the boundaries of Kirtland Air Force Base (KAFB), a 51,588-acre (80.60 mi^2) military installation located directly southeast of Albuquerque. KAFB has an average elevation of 5,384 ft amsl and an elevation range of 5,162 to 7,986 ft amsl. SNL/NM occupies 13,766 acres on KAFB and comprises five technical areas and several large remote test areas.

Figure 1-1 is a reference map of KAFB and vicinity. It shows the locations of all the monitoring wells on and near KAFB, conveying the full extent of groundwater monitoring across the military installation. It delineates the technical areas and groundwater AOCs and denotes each U.S. Department of Energy (DOE) monitoring well by its well identifier. The DOE monitoring wells, which the DOE owns and SNL/NM manages, constitute most of the monitoring wells in the GMP and TAVG, BSG, and TAG AOC monitoring well networks.

Table 1 (located at the end of this Report) provides a comprehensive inventory of the monitoring, production, extraction, and injection wells used to prepare Plate 1, including their well IDs and construction specifications.

Plate 1 (also located at the end of this Report) is the CY 2025 potentiometric surface map of the aquifer systems at SNL/NM and KAFB. It shows the locations of the wells listed in Table 1 and includes additional features, such as topography, drainages, springs, and faults.

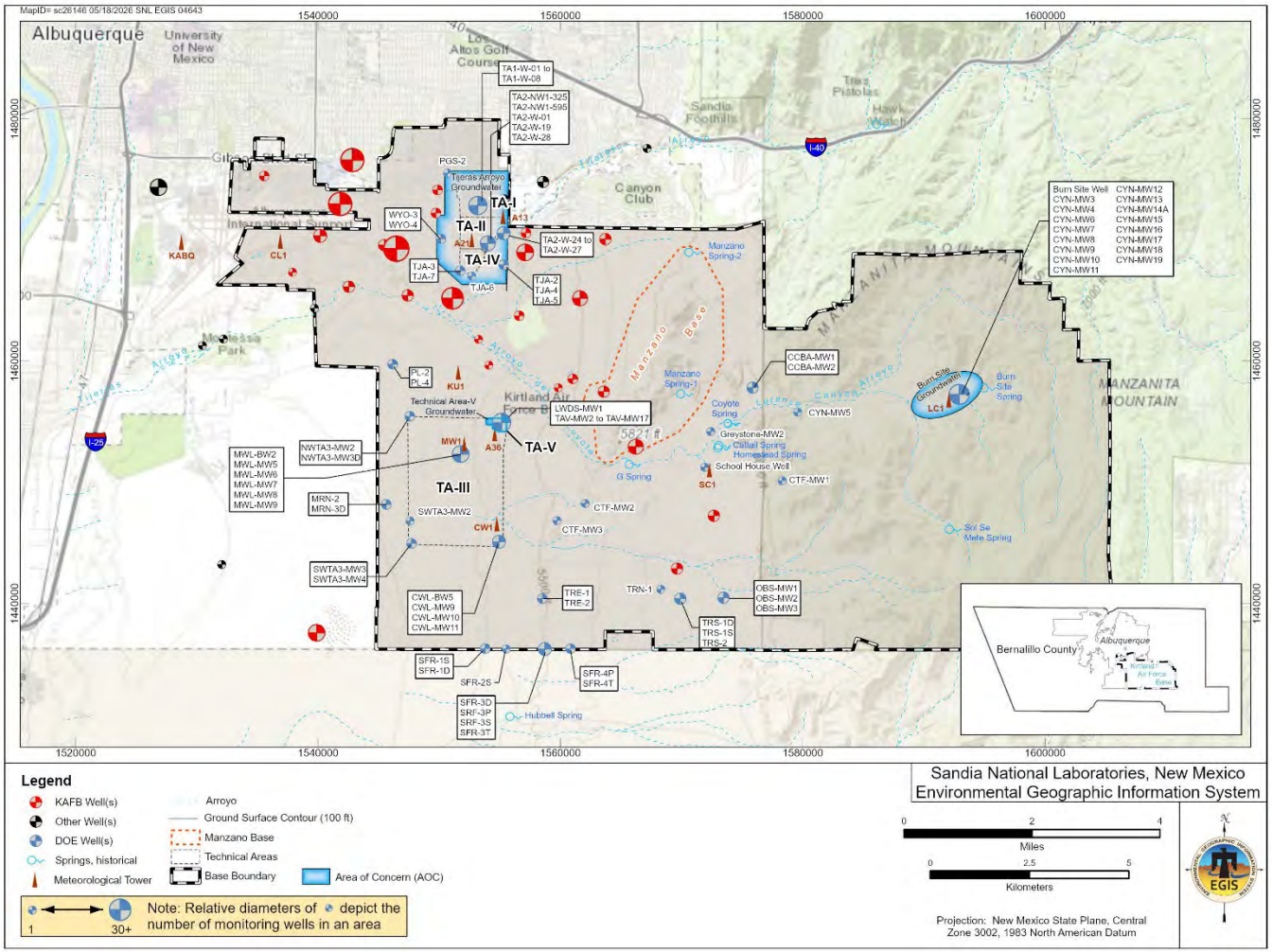


Figure 1-1
Groundwater Monitoring Wells and Areas of Concern, Kirtland Air Force Base and Vicinity

1.2 Regulatory Criteria

The regulatory criteria that determine the monitoring and reporting requirements for the GMP and groundwater AOCs are the:

- *Resource Conservation and Recovery Act Facility Operating Permit for Sandia National Laboratories, EPA ID No. NM5890110518* (RCRA Permit) (NMED, January 2015, as modified).
- *Compliance Order on Consent Pursuant to the New Mexico Hazardous Waste Act 74-4-10: Sandia National Laboratories Consent Order* (Consent Order) (NMED, April 2004).
- *Tijeras Arroyo Groundwater Corrective Measures Implementation Plan (Revised)* (TAG CMI Plan) (SNL/NM, June 2023).
- Comprehensive Site-Wide Groundwater Monitoring Plan.

The regulatory authority that mandates and oversees compliance with these regulatory criteria is the NMED Hazardous Waste Bureau.

1.2.1 Resource Conservation and Recovery Act Facility Operating Permit

The RCRA Permit sets forth the framework for managing hazardous waste at SNL/NM and includes corrective action requirements for past hazardous waste and hazardous constituent releases to the environment. Permit Attachment K, Table K-1 lists the groundwater AOCs as sites that require corrective action under the Consent Order.

1.2.2 Consent Order

The Consent Order sets forth the corrective action process for the groundwater AOCs, which it identifies as groundwater contamination sites (Consent Order, Section IV.C). It establishes that the cleanup levels for the groundwater AOCs be based on the U.S. Environmental Protection Agency (EPA) maximum contaminant levels (MCLs) for drinking water contaminants (EPA, March 2018) and the New Mexico Water Quality Control Commission maximum allowable concentrations (MACs) for groundwater contaminants (WQCC, December 2018). The required corrective actions include conducting site investigations to characterize the nature and extent of the contaminants and evaluating and implementing corrective measures (i.e., remedies) to clean up the contaminants and prevent or mitigate their migration. The site investigations and corrective measures evaluations for the groundwater AOCs have been completed.

Consent Order Section IV.A requires a monitoring network that is adequate for establishing background groundwater quality and understanding the general hydrogeologic system at SNL/NM. The GMP monitoring well network is that network. The GMP monitoring well network is not subject to corrective action.

1.2.3 Tijeras Arroyo Groundwater Corrective Measures Implementation Plan

The TAG CMI Plan sets forth the plan for implementing the selected final remedy for the TAG AOC, Monitored Natural Attenuation (MNA), beginning on January 1, 2025. The remedy implementation activities include water level measurements, groundwater sampling and analysis, monitoring well network and land use control (LUC) inspections and maintenance, public meetings, and remedy progress reporting in annual groundwater monitoring reports. Chapter 5.0 of this Report presents the first annual remedy progress report for the TAG AOC.

1.2.4 Comprehensive Site-Wide Groundwater Monitoring Plan

The Comprehensive Site-Wide Groundwater Monitoring Plan sets forth the monitoring plans for the GMP and groundwater AOCs for the coming year. Submitted to the NMED annually, it ensures that the monitoring activities align with the network-specific requirements. It includes sampling frequencies, sampling parameters, and analyses and requires reporting of the monitoring information, including the analytical results, in annual groundwater monitoring reports. Chapters 2.0 through 5.0 of this Report present the CY 2025 monitoring information.

1.3 Site Conditions

1.3.1 Climate

The Albuquerque area is characterized by the low precipitation and wide temperature extremes typical of a high-altitude, semiarid climate. The evaporation potential is high because of the low humidity and generally warm temperatures.

Long-term average precipitation ranges from 8.84 in/yr (30-year norm based on 1991-2020 data) at the Albuquerque International Sunport to 35 in/yr at Sandia Crest, located approximately 12 mi northeast of Technical Area I. In an average year, New Mexico receives most of its precipitation between July and September due to the North American Monsoon. This precipitation comes in the form of brief heavy rain. In CY 2025, the wettest months were May, June, July, and September.

Datasets from the following five meteorological towers (first four managed by SNL/NM, last one managed by the National Weather Service) were used to evaluate the precipitation pattern at KAFB:

- A21, located in Technical Area II (Figure 1-1).
- A36, located in Technical Areas III and V (Figure 1-1).
- LC1, located in Lurance Canyon, west of the Burn Site (Figure 1-1). This tower was established in 2019; therefore, no annual data from years prior to 2020 are available.
- SC1, located near the Schoolhouse Well in the Manzanita Mountain foothills (Figure 1-1).
- KABQ, located at the Albuquerque International Sunport, northwest corner of KAFB (Figure 1-1).

Table 1-1 presents the CY 2025 precipitation data, along with the CY 2024 precipitation data for comparison. The difference in precipitation totals for the five meteorological towers shows the isolated nature of rain and snow in the Albuquerque area. The 6.71 in. of precipitation measured at KABQ in CY 2025 are slightly below the 6.96 in. measured the prior year and are 2.13 in. below the 30-year (1991-2020) norm of 8.84 in. Figure 1A-1 (Attachment 1A) shows the CY 2025 monthly distribution of precipitation at the five meteorological towers, along with the 30-year average at KABQ. Figure 1A-2 (Attachment 1A) shows the annual distribution of precipitation at A21, A36, SC1, and KABQ for the last 10 years (CY 2016 through CY 2025).

Table 1-1
Precipitation Data for Kirtland Air Force Base, Calendar Years 2024 and 2025

Year	Meteorological Tower				
	A21	A36	LC1	SC1	KABQ
CY 2024	9.42	6.21	10.32	7.19	6.96
CY 2025	9.20	9.45	15.14	12.42	6.71

Notes:
Data are in inches of rainfall.
A21 = SNL/NM meteorological tower located in Technical Area II
A36 = SNL/NM meteorological tower located in Technical Area III/V
CY = calendar year
KABQ = National Weather Service meteorological tower located at the Albuquerque International Sunport
LC1 = SNL/NM meteorological tower located in Lurance Canyon, west of the Burn Site, installed in 2019
SC1 = SNL/NM meteorological tower located in the Manzanita Mountain Foothills
SNL/NM = Sandia National Laboratories, New Mexico

1.3.2 Surface Water Hydrology

The major surface water feature in the vicinity of KAFB is the Rio Grande. Located approximately 3 mi west of KAFB, the Rio Grande originates in the San Juan Mountains of Colorado and terminates at the Gulf of Mexico, near Brownsville, Texas.

Except for several springs, surface water on KAFB is found only as ephemeral streams that flow for short periods after storm events or during the spring melt of mountain snowpack. The primary surface water feature on KAFB is Tijeras Arroyo. Tijeras Arroyo drains the eastern foothills on KAFB and intersects Arroyo del Coyote just south of Technical Area IV (Figure 1-2). Both Tijeras Arroyo and Arroyo del Coyote carry significant runoff after heavy thunderstorms, which usually occur from July through September. Above the Tijeras Arroyo-Arroyo del Coyote confluence, Tijeras Arroyo drains about 80 mi^2, while Arroyo del Coyote drains about 39 mi^2 (USACE, 1979). The total watershed for Tijeras Arroyo, including the Sandia and Manzanita Mountains and parts of KAFB, is approximately 126 mi^2.

There are six springs on KAFB associated with the uplifts in the Tijeras Fault Complex (Section 1.3.3) and the foothills and canyon region (Figure 1-2): Coyote Springs, Cattail Spring, Homestead Spring, and G Spring in Arroyo del Coyote; Burn Site Spring in Lurance Canyon; and Sol se Mete Spring in the Manzanita Mountains. Coyote Springs and Sol se Mete Spring are perennial springs, while the other springs are ephemeral springs. The wetland areas created by these springs, though very limited in extent, provide a unique ecological niche in an otherwise arid habitat.

1.3.3 Geologic Setting

SNL/NM is located near the east-central edge of the Albuquerque Basin (Figure 1-3). Approximately 3,000 mi^2, the Albuquerque Basin (also known as the Middle Rio Grande Basin) is one of a series of north-south trending basins that was formed during the extension of the Rio Grande Rift. Rift formation began in the late Oligocene and continued into the early Pleistocene, with the primary period of extension occurring between 30 and 5 Ma. The tectonic activity, which uplifted the Sandia, Manzanita, and Manzano Mountains, was most prevalent from 15 to 5 Ma (Thorn et al., 1993).

The Rio Grande Rift today extends from south-central Colorado through New Mexico and into northern Mexico. The vertical displacement between the rock units at the top of Sandia Crest and the equivalent units at the bottom of the Albuquerque Basin is more than 6 mi (Lozinsky, 1994). As the Rio Grande Rift expanded, the Albuquerque Basin subsided. Over the last 30 Ma, the ancestral Rio Grande (ARG) meandered across the valley formed by the subsidence and deposited sediments in broad stream channels and floodplains derived from sources to the north. The Albuquerque Basin also filled with aeolian deposits and alluvial materials shed from surrounding uplifts (Hawley and Haase, 1992). This sequence of sediments is called the Santa Fe Group (SFG). The thickness of the SFG is up to 16,400 ft at the deepest

part of the Albuquerque Basin (Lozinsky, 1994). Units overlying the SFG include Pliocene Ortiz gravel and Rio Grande fluvial deposits, which are interbedded with Neogene and Quaternary basaltic and pyroclastic materials.

There are four primary faults (Figure 1-2) on KAFB: the Sandia Fault, the West Sandia Fault, the Hubbell Spring Fault (a fault complex that includes west, central, and east segments), and the Tijeras Fault. The Sandia Fault is thought to be the primary boundary between the Sandia Mountains and the Albuquerque Basin. The Hubbell Spring Fault extends northward from Socorro County and terminates on KAFB near the Tijeras Fault. The Sandia Fault and Hubbell Spring Fault trend north-south and bound the Albuquerque Basin on the east side. The Tijeras Fault trends southwestward from Tijeras Canyon, intersects the northeast boundary of KAFB, and crosses KAFB east and south of Manzano Base. The Sandia Fault, Hubbell Spring Fault, and Tijeras Fault converge near the southeast end of Technical Area III. This complicated fault system, known as the Tijeras Fault Complex, defines the eastern edge of the Albuquerque Basin.

The West Sandia Fault is a distinct fault that is located west of the Sandia Fault and is not considered part of the Tijeras Fault Complex.

1.3.4 Hydrogeologic Setting

There are three hydrogeologically distinct areas on KAFB (Figure 1-2): the Albuquerque Basin, the Tijeras Fault Complex, and the foothills and canyon region, which overlies a fractured bedrock aquifer system. The primary division is between the west and east sides of the Tijeras Fault Complex, which is the transitional zone. This division marks the boundary between the Regional Aquifer and the fractured bedrock aquifer system.

The Regional Aquifer is under unconfined to semiconfined conditions and is present within the SFG, which consists of fine-grained alluvial-fan lithofacies and the coarser-grained ARG lithofacies (Figure 1-2). Within and east of the Tijeras Fault Complex, the aquifer is typically under confined conditions and is primarily present within fractured Paleozoic bedrock (primarily limestone and sandstone) and Precambrian bedrock (primarily granite and metamorphic rocks)

Within the sediments of the Albuquerque Basin, the hydraulic gradient of the Regional Aquifer is relatively flat and the groundwater generally flows westward. The depth to groundwater ranges from 430 to 560 ft bgs. From the mountain front to Wyoming Boulevard, it averages approximately 0.005 ft/ft (ft of vertical change per ft of horizontal distance) in the unconsolidated sediments of the Regional Aquifer, and west of Wyoming Boulevard, it averages approximately 0.002 ft/ft in the coarser-grained facies of these unconsolidated sediments.

A Perched Groundwater System (PGWS) lies above the Regional Aquifer near Technical Areas I, II, and IV in the TAG AOC (Chapter 5.0). The depth to groundwater is 270 to 330 ft bgs. The PGWS extends southeastward from the former KAFB sewage lagoons to the KAFB Tijeras Arroyo Golf Course and crosses Technical Areas I, II, and IV, where the hydraulic gradient averages approximately 0.01 ft/ft in the sediments (SNL/NM, February 2018). The PGWS merges with the Regional Aquifer along Powerline Road.

The hydraulic gradient of the fractured bedrock aquifer system is relatively steep, approximately 0.03 ft/ft, and the groundwater generally flows west from the foothills and canyon region toward the Tijeras Fault Complex (Plate 1). The depth to groundwater ranges from 45 to 360 ft bgs and most of the non-potable production and monitoring wells are completed in fractured bedrock at relatively shallow depths and produce modest volumes of groundwater.

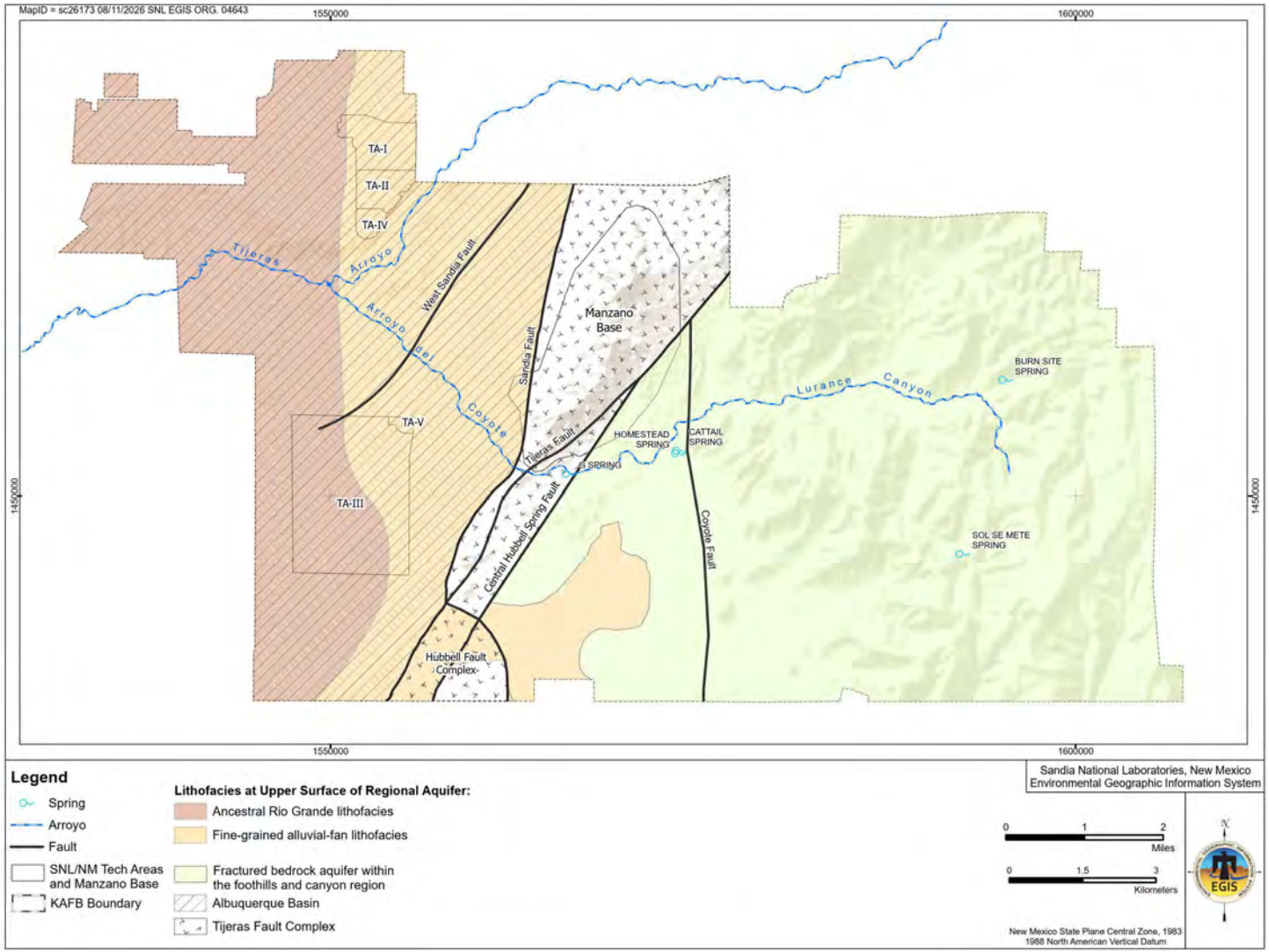


Figure 1-2
Faults and Hydrogeologically Distinct Areas, Kirtland Air Force Base and Vicinity
(Modified from GRAM and Lettis, December 1995, and Van Hart, June 2003)

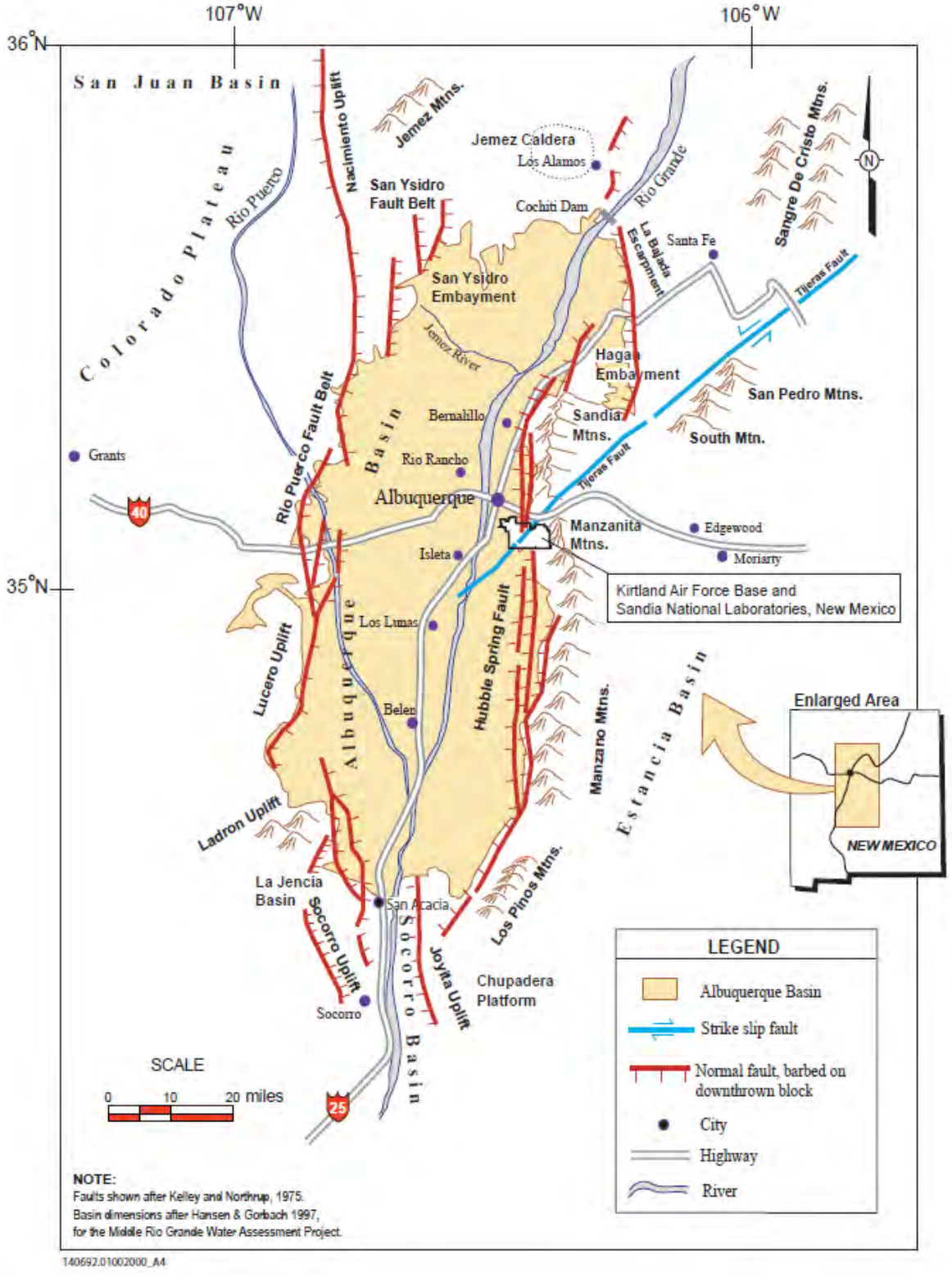


Figure 1-3
Albuquerque Basin, North Central New Mexico

1.3.5 Groundwater Recharge and Withdrawal

The primary factors that influence groundwater elevation fluctuations on KAFB are groundwater recharge from precipitation and groundwater withdrawal by production wells.

1.3.5.1 Groundwater Recharge

Groundwater recharge on KAFB is primarily derived from the eastern mountain front and the major arroyos. However, the amount of recharge in the foothills and canyon region is not well characterized. The estimated recharge for that part of Tijeras Arroyo is 2.2 million ft^3/yr (50 acre-ft/yr) (SNL/NM, February 1998). The estimated recharge for Arroyo del Coyote is 0.4 million ft^3/yr (9.2 acre-ft/yr). The Tijeras Fault Complex partially restricts groundwater underflow from the bedrock recharging the unconsolidated SFG sediments of the Albuquerque Basin. Infiltration studies conducted during the Site-Wide Hydrogeologic Characterization Project (SNL/NM, February 1998) determined that due to the high evapotranspiration rate for most areas on KAFB, recharge from direct precipitation is negligible.

Possible recharge sources for the PGWS include the former KAFB sewage lagoons, landscape watering, arroyo surface water, wastewater outfalls, buried septic systems, the KAFB Tijeras Arroyo Golf Course, and possible leakage from water distribution and sewer lines (SNL/NM, February 2018).

1.3.5.2 Groundwater Withdrawal

Historically, the regional groundwater flowed west from the mountains toward the Rio Grande. However, pumping by KAFB, Veterans Affairs (VA), and Albuquerque Bernalillo County Water Utility Authority (ABCWUA) production wells has created a trough in the Regional Aquifer near the northwest corner of KAFB, causing the groundwater to flow north toward these wells. The impact of the groundwater withdrawal has been observed as minor fluctuations in the groundwater elevations at DOE and KAFB monitoring wells as far southeast as Technical Area III.

The KAFB production wells are screened over a depth of approximately 500 to 2,000 ft bgs and extract groundwater from the Regional Aquifer. During CY 2025, KAFB pumped groundwater for potable use primarily from four production wells (KAFB-4, KAFB-15, KAFB-16, and KAFB-20) (Figure 1B-1, Attachment 1B).

KAFB supplies the potable water for SNL/NM and other facilities located on KAFB. Figure 1B-2 (Attachment 1B) shows the CY 2025 monthly totals for the KAFB production wells. The highest production occurred in July 2025 at 98 million gal; the lowest production occurred in December 2025 at 35 million gal. The variability in production is due to variability in seasonal demand. Figures 1B-1 and 1B-3 (Attachment 1B) show the CY 2025 monthly production for each KAFB production well and the trend of total annual groundwater production on KAFB since 2015, respectively. Table 1-2 compares the CY 2025 production to the prior year.

Table 1-2
Total Kirtland Air Force Base Groundwater Production, Calendar Years 2024 and 2025

Units	CY 2024	CY 2025
Million gal	792	749
Acre-ft	2,429	2,299

Notes:
acre-ft = 325,851 gal
CY = calendar year
ft = feet
gal = gallons

1.4 Field Methodology

This section describes how the CY 2025 groundwater data were collected. The procedures and methods used to collect these data are consistent with those that the *RCRA Ground-Water Monitoring Technical Enforcement Guidance Document* (EPA, 1986a) recommends. The field forms documenting the field activities were submitted to the SNL/NM records management system for retention.

1.4.1 Water Level Measurements

Water levels were measured quarterly in accordance with the applicable field procedure to determine groundwater flow directions, hydraulic gradients, and groundwater elevations. The measurements were taken with a Solinest (or equivalent) electric well sounder. The accuracy of each measurement was determined to the nearest 0.01 ft. Chapters 2.0 through 5.0 and Section 1.7.3 present the water level information. The groundwater elevation data were used to interpret the hydrologic conditions at SNL/NM and construct the CY 2025 potentiometric surface maps and monitoring well hydrographs.

1.4.2 Well Purging and Field Water Quality Parameter Measurements

A portable Bennett sampling system was used to collect the groundwater samples from the monitoring wells. The minimum purge volume requirement for each monitoring well was one saturated screen volume (including annulus). Field water quality parameters were measured to evaluate water chemistry stability and ensure the collection of representative groundwater samples. The parameters (Table 1-3) included dissolved oxygen (DO), oxidation-reduction potential (ORP), potential of hydrogen (pH), specific conductivity (SC), temperature, and turbidity. Temperature, SC, ORP, pH, and DO were measured with an In-Situ Aqua TROLL 600 multiparameter water quality sonde. Turbidity was measured with a HACH Model 2100Q turbidity meter. The measurements for each monitoring well were recorded on field measurement logs during purging. Purging continued after the minimum purge volume was removed until the parameters met the stability criteria (Table 1-3).

Table 1-3
Field Water Quality Parameters Measured at Monitoring Wells

Parameter	Comments
Dissolved Oxygen	Percentage of saturation value and/or measured in mg/L.
Oxidation-Reduction Potential	Measured in mV.
pH	Stability criterion: Four consecutive measurements within 0.1 pH units.
Sample Flow Rate	Measured in gal/min.
Specific Conductivity (µmho/cm)	Stability criterion: Four consecutive measurements within 5%.
Temperature (°C)	Stability criterion: Four consecutive measurements within 1°C.
Turbidity (NTU)	Stability criterion: Four consecutive measurements within 10% or less than 5 NTU.

Notes:

°C	= degrees Celsius	mg/L	= milligrams per liter
%	= percent	mV	= millivolts
µmho/cm	= micromhos per centimeter	NTU	= nephelometric turbidity unit
gal/min	= gallons per minute	pH	= potential of hydrogen

Due to severely low hydraulic conductivities, several monitoring wells purged dry before the minimum purge volume was removed. These monitoring wells, which are discussed in the applicable chapters, were allowed to recover overnight before sample collection to ensure collection of the most representative groundwater samples possible given the low yields. Attachments 2B through 5B present the final field water quality parameter measurements taken before sample collection.

1.4.3 Pump Decontamination

Before they were placed in each monitoring well, the sampling pump and tubing bundle associated with the portable Bennett sampling system were decontaminated with deionized (DI) water followed by a mixture of DI water and non-phosphate laboratory detergent and a final DI water rinse. Equipment blank samples (Section 1.6.1.2) were collected to verify decontamination.

1.4.4 Sample Collection

The groundwater samples were collected with a nitrogen gas-powered portable piston pump (Bennett). The laboratory-provided sample containers were filled directly from the pump discharge line and water-sampling manifold. When required, the groundwater was filtered into the sample containers through a new disposable 0.45-μm inline filter.

1.4.5 Sample Handling and Shipment

Each sample container was labeled with the sample date and time, requested analysis, and sample number and packed in a shipping cooler (on ice, when required). The sample dates and times were recorded on the Analysis Request and Chain of Custody (ARCOC) form. The shipping cooler and ARCOC form were submitted to the SNL/NM Sample Management Office for processing and shipment off site to the analytical laboratory (GEL Laboratories, LLC). Data Packages 1 through 4 include the final analytical laboratory-signed ARCOC forms.

1.4.6 Waste Management

The waste generated by the field activities was managed in accordance with the applicable waste management procedure. Approximately 5,800 gal of purge and decontamination wastewater were generated in CY 2025. The purge and decontamination wastewater was placed in 55-gal polyethylene drums and stored in the nonhazardous waste storage area at SNL/NM Building 9925. It was discharged to the sanitary sewer in accordance with SNL/NM and ABCWUA requirements after the waste characterization data were compared to the ABCWUA discharge limits and a discharge approval was issued in accordance with corporate policy. The solid waste, including expended personal protective equipment and wipes, was confirmed as nonhazardous by comparison to an approved commercial waste profile, placed in transparent polyethylene bags or equivalent, and transferred to the SNL/NM Solid Waste Collection and Recycling Center for disposal in a permitted landfill.

1.5 Analytical Methodology

The methods used to analyze the groundwater samples are consistent with those that the *RCRA Ground-Water Monitoring Technical Enforcement Guidance Document* (EPA, 1986a) recommends. Tables 1-4 and 1-5 list the analytical methods used.

The analytical laboratory established the method detection limits (MDLs) and practical quantitation limits (PQLs) for each analytical method, matrix (groundwater), and analyte. Analytes with results above the MDL were reported as detected, while analytes with results below the MDL were reported as not detected. Results qualified by the analytical laboratory and/or during data validation are discussed in Chapters 2.0 through 5.0. The analytical results tables (Attachments 2B through 5B) include the MDLs, PQLs, laboratory qualifiers, and validation qualifiers.

Nitrate concentrations were measured by a nitrate plus nitrite (NPN) as nitrogen analytical method. Historical SNL/NM groundwater analyses have demonstrated that nitrite concentrations are below the MDL and do not contribute to the results of NPN analyses. Therefore, NPN results in this Report represent nitrate concentrations, which are also referred to as NPN concentrations.

Table 1-4
Chemical Analytical Methods

Analyte	Analytical Method[a]
Alkalinity (total, bicarbonate, and carbonate)	SM 2320B
Anions	SW846-9056A
Filtered Metals (including cations)	SW846-6020B/7470A
HE Compounds	SW846-8330B
Mercury	SW846-7470A
NPN	EPA 353.2
Perchlorate	SW846-6850M
TAL Metals plus Uranium	SW846-6020B/7470A
Total Cyanide	SW846-9012B
Total Organic Halogens	SW846-9020B
TPH Diesel Range Organics	SW846-8015D
TPH Gasoline Range Organics	SW846-8015D GRO
Total Phenols	SW846-9066
VOCs	SW846-8260D

Notes:

[a] **Analytical Method References**

Rice, E.W.,Baird, R.B., Eaton, A.D., and Clesceri. L.S. (2012). *Standard Methods for the Examination of Water and Wastewater*, 23rd ed. American Public Health Association, American Water Works Association, and Water Environment Federation.

U.S. Environmental Protection Agency. (1984). *Methods for Chemical Analysis of Water and Wastes,* EPA 600-4-79-020.

U.S. Environmental Protection Agency. (1986b, as updated). *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, 3rd ed., Rev. 1.

EPA = U.S. Environmental Protection Agency
GRO = Gasoline Range Organics
HE = high explosive
NPN = nitrate plus nitrite
SM = Standard Method
SW = Solid Waste
TAL = Target Analyte List
TPH = total petroleum hydrocarbons
VOC = volatile organic compound

Table 1-5
Radiochemical Analytical Methods

Analyte[a]	Analytical Method[b]
Gamma Spectroscopy (short list[c])	EPA 901.1
Gross Alpha/Beta Activity	EPA 901.0
Isotopic Uranium	HASL-300
Radon-222	SM7500 Rn B
Radium-226	EPA 903.1M
Radium-228	EPA 904.0
Tritium	EPA 906.0M

Notes:

[a] Although radionuclides are being monitored, the information related to radionuclides is provided voluntarily by DOE/NNSA and SNL/NM personnel. The voluntary inclusion of such radionuclide information shall not be enforceable and shall not constitute the bases for any enforcement, because such information falls wholly outside the requirements imposed by the NMED, as Consent Order Section III.A specifies.

[b] **Analytical Method References**

Rice, E.W., Baird, R.B., Eaton, A.D., and Clesceri, L.S. (2012). *Standard Methods for the Examination of Water and Wastewater*, 23rd ed. American Public Health Association, American Water Works Association, and Water Environment Federation.

U.S. Department of Energy. (1997). *EML Procedures Manual,* 28th ed., Vol. 1, Rev. 0, HASL-300.

U.S. Environmental Protection Agency. (1980). *Prescribed Procedures for Measurement of Radioactivity in Drinking Water*, EPA-600/4-80-032.

[c] Gamma spectroscopy short list (americium-241, cesium-137, cobalt-60, and potassium-40)

DOE = U.S. Department of Energy
EPA = U.S. Environmental Protection Agency
HASL = Health and Safety Laboratory
NMED = New Mexico Environment Department
NNSA = National Nuclear Security Administration
SM = Standard Method
SNL/NM = Sandia National Laboratories, New Mexico

1.6 Data Quality

Field and laboratory quality control (QC) samples were prepared and analyzed along with the groundwater samples to evaluate accuracy and precision and detect inadvertent sample contamination that may have occurred. Table 1-6 lists the types of QC samples that accompanied the groundwater samples in the sampling and analysis process.

Table 1-6
Quality Control Sample Types for Groundwater Sampling and Analysis

QC Sample Type	Purpose
Field QC	
Environmental duplicate samples	Evaluate the precision of the sampling and analysis process.
Equipment blanks	Verify sampling pump and tubing bundle decontamination to ensure that cross-contamination between monitoring wells did not occur.
Field blanks	Determine whether VOC, DRO, or GRO contamination from ambient field conditions occurred.
Trip blanks	Determine whether VOC, DRO, or GRO contamination occurred during sample collection, handling, shipment, storage, or analysis.
Laboratory QC	
Batch matrix spike and matrix spike duplicate samples	Measure the percent recovery and RPD of chemical spikes added to an existing sample to determine the sample matrix effect. The matrix is groundwater.
Laboratory control samples	Evaluate the accuracy and precision of the analytical method using laboratory-prepared samples spiked with a known concentration of an analyte. These samples and the groundwater samples are analyzed in the same batch. LCS results are reported as a percent recovery.
Method blanks	Determine whether contaminants were inadvertently introduced during the sample preparation and handling process in the analytical laboratory.
Sample replicate	Evaluate the precision of non-organic analyses.
Surrogate spike	Demonstrate matrix compatibility with the chosen method of organic compound analysis.

Notes:
DRO = diesel range organics
GRO = gasoline range organics
LCS = laboratory control sample
QC = quality control
RPD = relative percent difference
VOC = volatile organic compound

1.6.1 Field Quality Control Samples

The field QC samples included environmental duplicate, equipment blank, field blank, and trip blank samples. Chapters 2.0 through 5.0 summarize the CY 2025 field QC sample results and relative percent differences (RPDs), when calculated.

1.6.1.1 Environmental Duplicate Samples

Environmental duplicate samples were collected to evaluate the precision of the sampling and analysis process. The duplicate sample was collected immediately after the original environmental sample to reduce variability caused by time and/or sampling mechanics. RPDs were calculated for the analytes detected in both the duplicate and original samples.

1.6.1.2 Equipment Blank Samples

Equipment blank samples were collected periodically to verify sampling pump and tubing bundle decontamination (Section 1.4.3).

1.6.1.3 Field Blank Samples

Field blank samples were collected to determine whether sample contamination from ambient field conditions occurred. They were prepared by pouring DI water into sample containers at the sampling point (inside the sampling truck at each monitoring well location) to simulate the transfer of groundwater from the sampling system to the sample containers.

Field blank samples are contained in 40-ml glass vials and are commonly analyzed for volatile organic compounds (VOCs), diesel range organics (DRO), and/or gasoline range organics (GRO).

Additionally, field blank samples were collected from the DI water used for decontamination and equipment blank sample collection. The field blank sample results were used to internally verify the quality of the DI water.

1.6.1.4 Trip Blank Samples

Trip blank samples were submitted to determine whether sample contamination occurred during sample collection, transport, storage, or analysis.

Trip blank samples are submitted whenever groundwater samples are submitted for VOC, DRO, and/or GRO analyses. They consist of laboratory reagent-grade water with hydrochloric acid preservative contained in 40-ml glass vials. They are prepared by the analytical laboratory and accompany the laboratory-supplied sample containers to the field and back.

1.6.2 Laboratory Quality Control Samples

Laboratory QC samples were prepared to determine whether sample contamination from laboratory processes occurred. They were used to assist with data validation and defensibility and included laboratory control, method blank, matrix spike and matrix spike duplicate, surrogate spike, and replicate samples. They were analyzed concurrently with the groundwater and field QC samples in accordance with laboratory procedures and EPA methods.

1.6.3 Data Verification and Validation

Upon receiving the analytical laboratory data packages from the analytical laboratory, SNL/NM personnel performed data verification to check the following:

- Completeness and compliance of the sample custody and analytical laboratory data package documentation
- Management of samples and custody
- Adherence to the technical, QC, and reporting requirements imposed on the analytical laboratory through the contract
- Correctness of the electronic data deliverable file supplied by the analytical laboratory

An independent third-party subcontractor performed data validation on 100% of the groundwater, field QC, and laboratory QC sample results. The purpose of the data validation was to determine the usability and establish the defensibility of the results. The third-party subcontractor performed the data validation and provided data validation reports for each analytical laboratory data package. Each data validation report provides information regarding the overall quality of the data and the resulting data qualifiers. The analytical results tables (Attachments 2B through 5B) include the laboratory and data validation qualifiers, and the qualified data are discussed in Chapters 2.0 through 5.0.

Data Packages 1 through 4 contain the data validation reports and Level-C or higher analytical laboratory data packages. They were submitted along with the analytical results to the SNL/NM records management system for retention.

1.7 Overview of Calendar Year 2025 Regulatory Developments and Monitoring Activities

1.7.1 Regulatory Developments

The TAG AOC entered its remedy phase on January 1, 2025, prompting a change in the title of this Report and the scope of the TAG AOC reporting herein.

The BSG AOC received approval to enter its remedy phase (NMED, August 2025), with the NMED selecting Long-Term Monitoring as the final remedy. Remedy implementation will begin on January 1, 2026.

The TAVG AOC remained in the corrective action process, with the *Technical Area-V Groundwater Area of Concern Current Conceptual Model and Corrective Measures Evaluation Report* (SNL/NM, May 2024) still under NMED review.

The NMED approved the *Well TAV-INJ1 Decommissioning Report* (SNL/NM, May 2025) (NMED, July 2025a) and the CY 2026 Comprehensive Site-Wide Groundwater Monitoring Plan (SNL/NM, April 2025) (NMED, July 2025b). The NMED also verbally approved the decision to rename the Comprehensive Site-Wide Groundwater Monitoring Plan the Annual Groundwater Monitoring Plan effective April 2027; however, the plan's purpose will not change.

1.7.2 Public Meetings

In accordance with Consent Order Section VII.D.4 and the TAG CMI Plan, a public meeting providing information on the groundwater AOCs was held on April 29, 2025. However, the second public meeting scheduled for October 21, 2025 was not held due to federal employee furloughs.

1.7.3 Groundwater Elevation Monitoring Activities

The water levels in 104 DOE monitoring wells were measured quarterly and used to determine groundwater elevations. Table 2 (located at the end of this Report) presents the CY 2025 groundwater elevation data for the 104 DOE monitoring wells and 146 additional monitoring wells owned and managed by other agencies. The groundwater elevation data were used to construct the CY 2025 potentiometric surface maps and monitoring well hydrographs, including Plate 1 and the monitoring well hydrographs discussed below.

1.7.3.1 Plate 1

Plate 1 (located at the end of this Report) is the CY 2025 potentiometric surface map of the aquifer systems at SNL/NM and KAFB. Water level measurements from February through November 2025 were used to interpret the groundwater elevation data and construct the contours on the plate. Even though the various monitoring well owners (DOE, KAFB, City of Albuquerque, and New Mexico Office of the State Engineer) measure water levels on differing schedules throughout the year, the use of several months of data is considered temporally concordant because the water levels in the monitoring wells across KAFB are typically not seasonally affected.

Plate 1 incorporates monitoring wells completed at the water table west of the Tijeras Fault Complex and in the fractured bedrock aquifer system east of the Tijeras Fault Complex (Figure 1-2). Conclusions drawn from Plate 1 include the following:

- The groundwater in the western part of KAFB continues to flow west from the Manzanita Mountains toward the Rio Grande.
- An extensive north-south trending water table trough is present along the western edge of KAFB due to cumulative drawdown caused by production wells near the western and northern boundaries of KAFB. As a result, groundwater elevations across much of KAFB declined steadily until 2008. Since 2008, hydrographs for Regional Aquifer wells in the northern part of KAFB have shown increasing groundwater elevations. Presumably, this is in response to the ABCWUA's transition to surface water withdrawals from the Rio Grande for potable water supplies and decreasing dependence on ABCWUA production wells.
- The water table trough extends as far south as the Pueblo of Isleta. The flat gradient in the middle of the trough indicates flow through the highly permeable sediments of the ARG fluvial deposits, which are the most productive aquifer material in the Albuquerque Basin.
- The relatively steeper hydraulic gradients in the eastern part of KAFB are due to less permeable materials in the fractured bedrock aquifer system, higher ground surface elevations along the eastern mountain front of the Albuquerque Basin, and the presence of several basin-bounding faults.

1.7.3.2 Hydrographs for Select Monitoring Wells

DOE monitoring wells are located throughout KAFB in different geographic areas that exhibit different hydrologic conditions. Figure 1-4 shows the groundwater elevation trends over time in the context of these different geographic areas by superimposing hydrographs for DOE monitoring wells on a physical relief map of KAFB. Conclusions drawn from these hydrographs include the following:

- The monitoring wells furthest east in the fractured bedrock aquifer system (e.g., CYN-MW4) exhibit the greatest variability, with notable responses to long-term precipitation trends and steeply declining groundwater elevations possibly due to long-term regional drought conditions.
- Other monitoring wells in the fractured bedrock aquifer system (e.g., CTF-MW1) exhibit less variability and only slightly to moderately declining groundwater elevations.
- The monitoring wells in the fine-grained alluvial-fan lithofacies of the Regional Aquifer (e.g., CWL monitoring wells) exhibit slightly to moderately declining groundwater elevations.
- The monitoring wells in the ARG lithofacies of the Regional Aquifer in the southwestern part of KAFB (e.g., SWTA3-series monitoring wells) exhibit moderately declining groundwater elevations until 2010 and then moderately increasing groundwater elevations.
- The monitoring wells in the coarser-grained lithofacies of the Regional Aquifer in the northwestern part of KAFB (e.g., TA1-W-05) exhibit slightly declining groundwater elevations until 2010 and then moderately increasing groundwater elevations with a strong overprinting of seasonal fluctuations from nearby production wells.

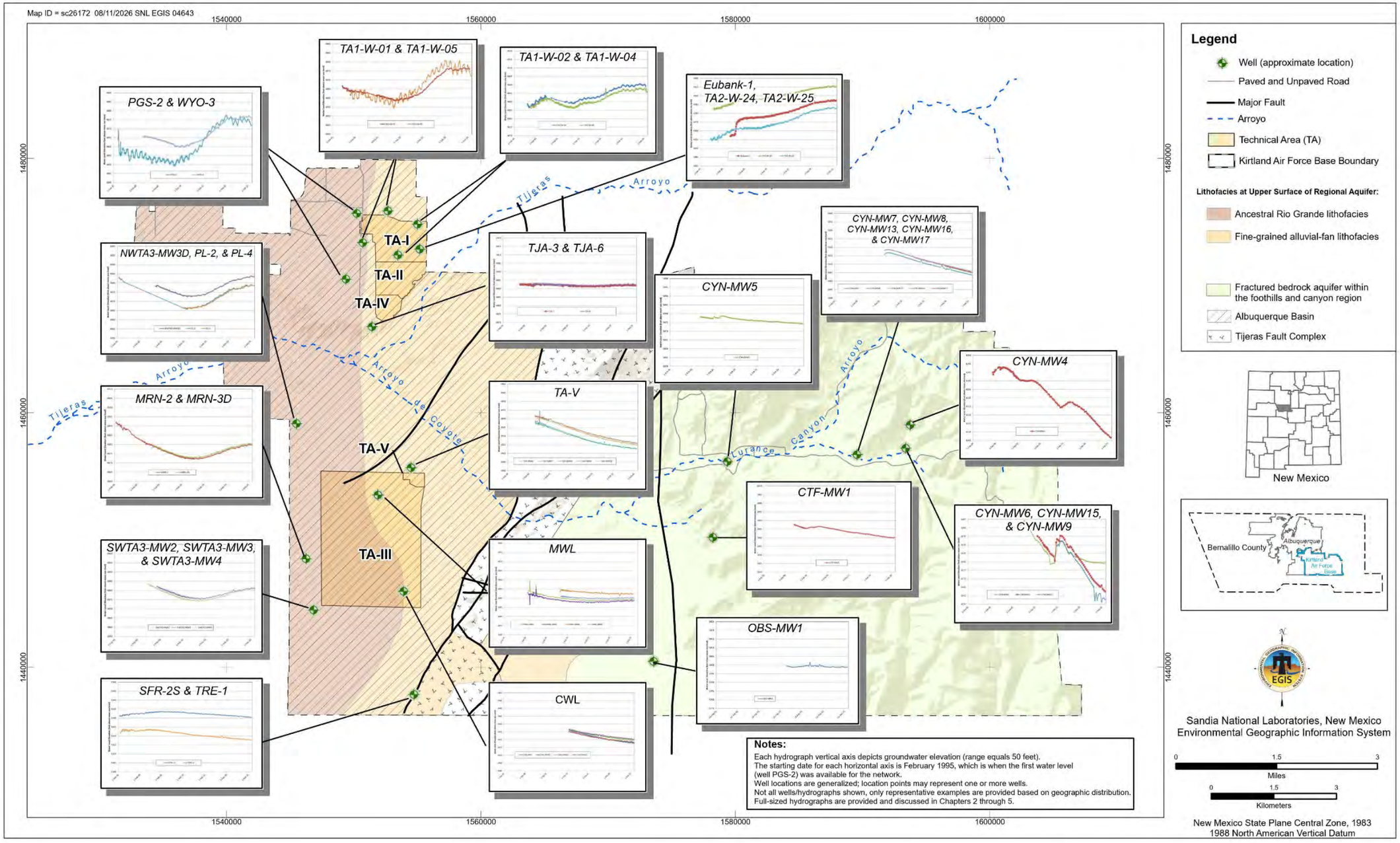


Figure 1-4
Groundwater Elevation Trends, Aquifer Systems at Sandia National Laboratories, New Mexico

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1.7.4 Groundwater Sampling

Groundwater sampling was performed at the GMP and TAVG, BSG, and TAG AOC monitoring well networks throughout CY 2025. Table 1-7 lists the sampling events, including the number of monitoring wells sampled during each event; Chapters 2.0 through 5.0 summarize the analytical results.

Table 1-7
Sampling Events, Groundwater Monitoring Program and Groundwater Area of Concern Monitoring Well Networks, Sandia National Laboratories, New Mexico, Calendar Year 2025

2025 Sampling Event	GMP	TAVG AOC	BSG AOC	TAG AOC
January		4		
February		7		6
March		1		5
April	16			
May	1		9	
June			4	
July				10
August		6		9
September		12		
October			6	
November			8	
December				

Notes:
AOC = Area of Concern
BSG = Burn Site Groundwater
GMP = Groundwater Monitoring Program
TAG = Tijeras Arroyo Groundwater
TAVG = Technical Area-V Groundwater

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2.0 Groundwater Monitoring Program

2.1 Introduction

This chapter summarizes the CY 2025 monitoring activities and results for the GMP. The monitoring activities were performed and documented in accordance with the Consent Order (NMED, April 2004) (Chapter 1.0, Section 1.2.2) and the CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan (SNL/NM, April 2024) (Chapter 1.0, Section 1.2.4). The monitoring results were compiled from groundwater data collected from the GMP monitoring well network.

The GMP monitoring well network is a site-wide surveillance network originally instituted to monitor the potential impacts of SNL/NM operations on the environment. It is currently maintained to satisfy Consent Order Section IV.A, which requires a monitoring network adequate for establishing background groundwater quality and understanding the general hydrogeologic system at SNL/NM.

The monitoring wells in the current GMP monitoring well network (Section 2.1.2) are located in areas with no known contamination from SNL/NM activities or in Solid Waste Management Units (SWMUs) that have been granted Corrective Action Complete without Controls status. The GMP monitoring well network is not subject to corrective action.

2.1.1 Monitoring History

Instituted in the 1990s, the GMP monitoring well network spans multiple hydrogeologically distinct areas on KAFB. Over the years, it has expanded, reaching a total of 16 monitoring wells and one spring by 2019. The last expansion added four new monitoring wells (CCBA-MW2, CTF-MW1, CYN-MW5, and OBS-MW1) that were part of investigations related to SWMUs ultimately granted Corrective Action Complete status. These four monitoring wells facilitate monitoring of the fractured bedrock aquifer system (Chapter 1.0, Section 1.3.4).

2.1.2 Current Monitoring Well Network

The current GMP monitoring well network consists of 16 monitoring wells used to monitor water levels and groundwater quality and one spring used to monitor surface water quality. Table 2-1 lists the monitoring wells and spring; Figure 2-1 shows their locations on KAFB.

Table 2-1
Groundwater Monitoring Program Monitoring Well Network

Well ID	Installation Year	WQ	WL	Comments
Coyote Springs	NA	✓		Surface water spring
CCBA-MW2	2011	✓	✓	Bedrock groundwater well
CTF-MW1	2001	✓	✓	Bedrock groundwater well
CYN-MW5	2001	✓	✓	Bedrock groundwater well
Greystone-MW2	2002	✓	✓	Installed in arroyo alluvium
MRN-2	1995	✓	✓	Regional Aquifer groundwater well
MRN-3D	2003	✓	✓	Regional Aquifer groundwater well
NWTA3-MW3D	2003	✓	✓	Regional Aquifer groundwater well
OBS-MW1	2011	✓	✓	Bedrock groundwater well
PL-2	1994	✓	✓	Regional Aquifer groundwater well
PL-4	2009	✓	✓	Regional Aquifer groundwater well
SFR-2S	1992	✓	✓	Regional Aquifer groundwater well
SFR-4T	1993	✓	✓	Bedrock groundwater well
SWTA3-MW2	2002	✓	✓	Regional Aquifer groundwater well
SWTA3-MW3	2004	✓	✓	Regional Aquifer groundwater well
SWTA3-MW4	2005	✓	✓	Regional Aquifer groundwater well
TRE-1	1995	✓	✓	Regional Aquifer groundwater well
Total	--	17	16	Total for this reporting period

Notes:
ID = identifier
MW = Monitoring Well
NA = not applicable
WL = water level
WQ = water quality

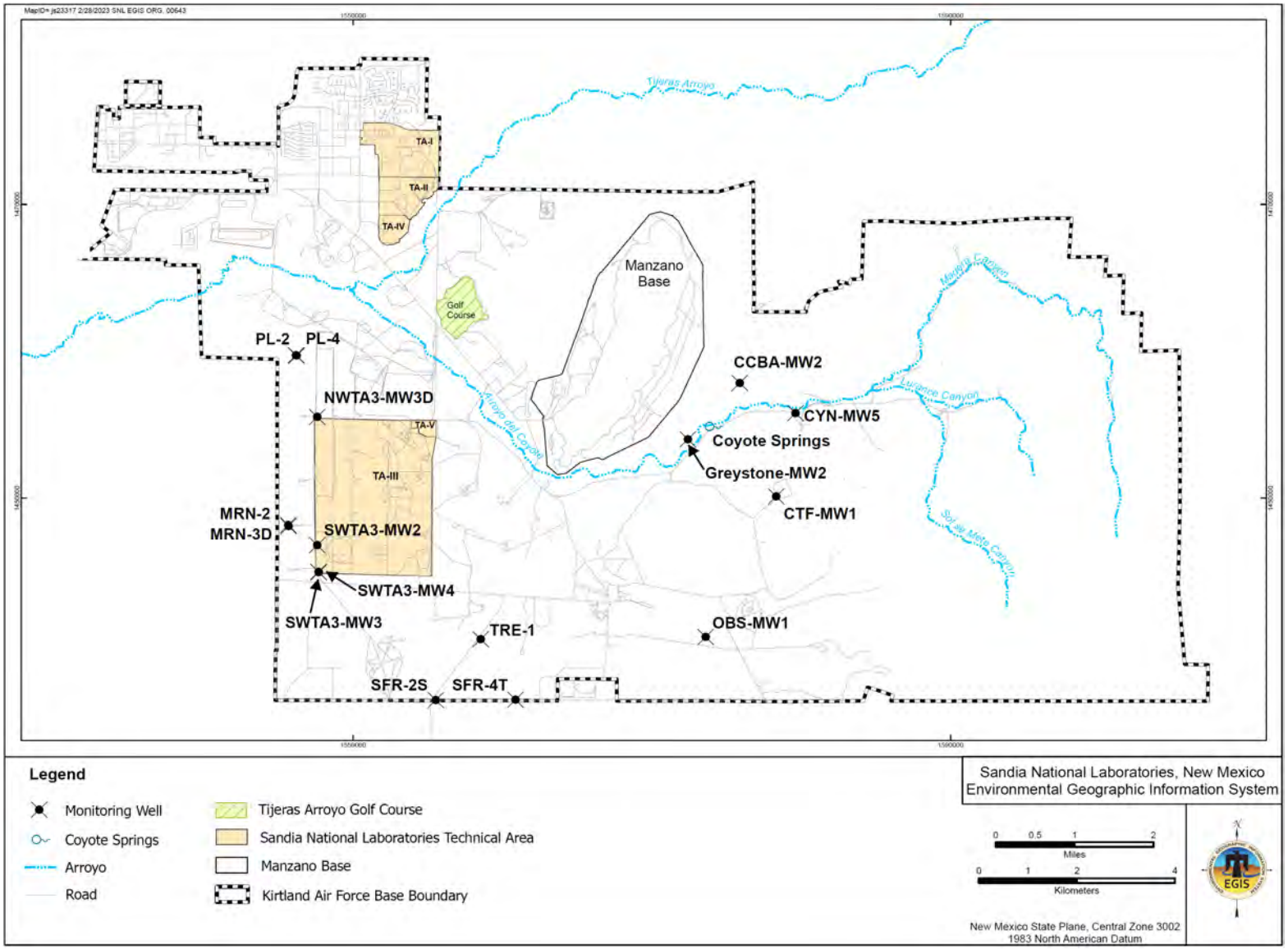


Figure 2-1
Groundwater Monitoring Program Monitoring Well Locations

2.2 Calendar Year 2025 Monitoring Activities

The CY 2025 GMP monitoring activities included:

- Quarterly water level measurements (Chapter 1.0, Section 1.4.1) and groundwater elevation calculations for all 16 GMP monitoring wells.
- Annual collection and analysis of groundwater samples (Chapter 1.0, Sections 1.4.2 through 1.5) from all 16 GMP monitoring wells and a surface water sample from Coyote Springs in April/May 2025.
- Preparation of monitoring well hydrographs (Attachment 2A), analytical results tables (Attachment 2B), and concentration trend plots (Attachment 2C).
- Submittal of the CY 2026 Comprehensive Site-Wide Groundwater Monitoring Plan (SNL/NM, April 2025) to the NMED.

2.3 Calendar Year 2025 Monitoring Results

Sections 2.3.1 through 2.3.2 summarize the CY 2025 GMP monitoring results.

2.3.1 Water Level Results

The water levels in all 16 GMP monitoring wells were measured quarterly and used to determine groundwater elevations. Table 2-2 presents the October/November 2025 groundwater elevation data.

Table 2-2
Groundwater Elevation Data for the Groundwater Monitoring Program Monitoring Wells, October/November 2025

Well ID	Top of Casing (ft amsl) NAVD 88	Date Measured	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)
CCBA-MW2	5939.28	10/08/2025	73.17	5866.11
CTF-MW1	6082.63	10/01/2025	242.48	5840.15
CYN-MW5	5984.23	10/08/2025	109.91	5874.32
Greystone-MW2	5814.20	10/08/2025	55.70	5758.50
MRN-2	5308.18	11/07/2025	428.36	4879.82
MRN-3D	5309.34	11/07/2025	428.93	4880.41
NWTA3-MW3D	5340.80	11/07/2025	457.26	4883.54
OBS-MW1	5871.42	10/08/2025	72.71	5798.71
PL-2	5336.01	11/07/2025	457.43	4878.58
PL-4	5334.98	11/07/2025	456.41	4878.57
SFR-2S	5432.77	10/08/2025	102.43	5330.34
SFR-4T	5573.95	10/08/2025	153.08	5420.87
SWTA3-MW2	5325.60	11/07/2025	444.69	4880.91
SWTA3-MW3	5323.94	11/07/2025	442.70	4881.24
SWTA3-MW4	5324.81	11/07/2025	443.42	4881.39
TRE-1	5497.25	10/08/2025	179.52	5317.73

Notes:
amsl = above mean sea level
btoc = below top of casing (the measuring point)
ft = feet
ID = identifier
MW = Monitoring Well
NAVD 88 = North American Vertical Datum of 1988

2.3.1.1 Potentiometric Surface Map

The October/November 2025 groundwater elevation data (Table 2-2) were not used to construct a potentiometric surface map of the GMP monitoring well network because of the network's widespread geographic distribution across multiple hydrogeologically distinct areas on KAFB. These data were, however, used to help construct Plate 1, the CY 2025 potentiometric surface map of the aquifer systems at SNL/NM and KAFB.

2.3.1.2 Hydrographs

Historical groundwater elevation data through CY 2025 were used to construct the CY 2025 GMP monitoring well hydrographs (Attachment 2A, Figures 2A-1 through 2A-10). These hydrographs show the following groundwater elevation trends:

- Greystone-MW2 (Figure 2A-1): Declining trend of approximately 0.25 ft/yr with superimposed seasonal effects of 1 to 2 ft that have a maximum water table elevation in the spring. There are no production wells in the area; however, this monitoring well is located 1,600 ft downgradient of the heavily vegetated Coyote Springs, and the seasonal effects may reflect evapotranspiration impacts from the cottonwood trees at the spring.
- MRN-2 and MRN-3D (Figure 2A-2): Declining trend until early 2011; stable trend between 2011 and 2014; increasing trend of approximately 0.5 ft/yr from 2014 to 2020; stable to slightly increasing trend since 2020.
- NWTA3-MW3D, PL-2, and PL-4 (Figure 2A-3): Declining trend until late 2010/early 2011; stable trend between 2011 and 2014; increasing trend of approximately 1 ft/yr from 2014 to 2020; stable to slightly increasing trend since 2020.
- SFR-2S and TRE-1 (Figure 2A-4): Slightly declining trend of approximately 0.15 to 0.25 ft/yr since 2004.
- SFR-4T (Figure 2A-5): Cyclical pattern with artificial yearly fluctuations of 20 to 30 ft since 2001; yearly minimums are associated with sampling events and three to nine subsequent months of water level recovery; declining trend of peaks of approximately 0.25 ft/yr.
- SWTA3-MW2, SWTA3-MW3, and SWTA3-MW4 (Figure 2A-6): Moderately declining trend until late 2011; stable trend between late 2011 and 2014; increasing trend of approximately 0.6 ft/yr since 2014.
- OBS-MW1 (Figure 2A-7): Stable trend since 2011.
- CCBA-MW2 (Figure 2A-8): Slightly declining trend of approximately 0.14 ft/yr since 2011.
- CTF-MW1 (Figure 2A-9): Slightly declining trend of approximately 0.31 ft/yr over the life of this monitoring well.
- CYN-MW5 (Figure 2A-10): Slightly declining trend of approximately 0.14 ft/yr over the life of this monitoring well.

The GMP monitoring wells are located throughout KAFB in different geographic areas that exhibit different hydrologic conditions. Groundwater elevation trends in the context of these different geographic areas are as follows:

- Greystone-MW2 is located in the shallow unconsolidated alluvium associated with the Arroyo del Coyote drainage and therefore is not completed in either the Regional Aquifer or the fractured bedrock aquifer system (Chapter 1.0, Section 1.3.4). From October 2024 to October 2025, the groundwater elevations at this monitoring well declined 0.06 ft.
- The monitoring wells located in the fractured bedrock aquifer system (CCBA-MW2, CTF-MW1, CYN-MW5, OBS-MW1, and SFR-4T) have exhibited overall stable to slightly declining groundwater elevations over time, with no notable responses to long-term precipitation trends (unlike the monitoring wells located furthest east in the fractured bedrock aquifer system). From October 2024 to October 2025, the groundwater elevations at CCBA-MW2, CYN-MW5, and OBS-MW1 declined, ranging from 0.14 to 0.17 ft, while the groundwater elevations at CTF-MW1 and SFR-4T increased, ranging from 0.01 to 0.24 ft.
- The monitoring wells located in the fine-grained alluvial-fan lithofacies of the Regional Aquifer (SFR-2S and TRE-1) exhibit slightly declining groundwater elevations. From October 2024 to October 2025, the groundwater elevations at these two monitoring wells declined, ranging from 0.13 to 0.14 ft.
- The monitoring wells located in the ARG lithofacies of the Regional Aquifer (MRN-2, MRN-3D, NWTA3-MW3D, PL-2, PL-4, SWTA3-MW2, SWTA3-MW3, and SWTA3-MW4) have exhibited moderately declining groundwater elevations (until 2010) and then stable to moderately increasing groundwater elevations (since 2014). From October 2024 to October 2025, the groundwater elevations at these eight monitoring wells increased, ranging from 0.43 to 0.61 ft.

2.3.2 Groundwater Sample Analytical Results

The CY 2025 sampling event was conducted from April 8 to May 1, 2025. Groundwater samples were collected from all 16 GMP monitoring wells with a submersible piston pump. A surface water sample was collected from Coyote Springs with a portable peristaltic pump. The samples were analyzed for:

- The Safe Drinking Water Act list of VOCs.
- High explosive (HE) compounds (select monitoring wells only).
- NPN.
- Alkalinity, anions (bromide, chloride, fluoride, sulfate), total organic halogens (TOX), total phenol, and total cyanide.
- Mercury.
- Target Analyte List (TAL) metals (all monitoring wells) plus uranium (as mass) (select monitoring wells only).
- Gamma spectroscopy short list (americium-241, cesium-137, cobalt-60, potassium-40), gross alpha/beta activity, isotopic uranium (uranium-233/234, uranium-235/236, uranium-238) (select monitoring wells only), radium-226, and radium-228.

Excluding those for VOCs, HE compounds, and total mercury fractions, the samples were filtered at the sampling locations with 0.45-µm inline filters. Mercury was analyzed for both dissolved (filtered) and total (unfiltered) fractions.

The samples collected from the six GMP monitoring wells located downgradient of the Coyote Canyon Test Field and the Dynamic Explosives Test Site (SFR-2S, SFR-4T, SWTA3-MW2, SWTA3-MW3, SWTA3-MW4, and TRE-1) were analyzed for HE compounds.

The samples collected from Coyote Springs and eight GMP monitoring wells (CCBA-MW2, CTF-MW1, CYN-MW5, Greystone-MW2, OBS-MW1, SFR-2S, SFR-4T, and TRE-1) were analyzed for isotopic uranium.

The samples collected from seven GMP monitoring wells (MRN-3D, NWTA3-MW3D, PL-2, PL-4, SWTA3-MW2, SWTA3-MW3, and SWTA3-MW4) were analyzed for uranium (as mass).

Sections 2.3.2.1 through 2.3.2.5 summarize the analytical results. Attachment 2B presents the analytical results tables (Tables 2B-1 through 2B-7) and the final field water quality parameter measurements (Table 2B-8). The analytical results are compared to the EPA MCLs and MACs (Chapter 1.0, Section 1.2.2), where established. However, the EPA MCLs and MACs are not used as cleanup levels for the GMP monitoring well network because elevated concentrations there are not attributable to SNL/NM activities. Attachment 2C (Figures 2C-1 through 2C-10) presents concentration trend plots for the monitoring locations where analyte concentrations exceeded the EPA MCLs and/or MACs. Data Package 1 contains the data validation reports and analytical laboratory data packages.

2.3.2.1 Volatile Organic Compounds and High Explosive Compounds

Table 2B-1 presents the detected VOC and HE compound results; Table 2B-2 lists the corresponding MDLs.

No HE compounds were detected.

Four VOCs – chloroform, methylene chloride, naphthalene, and 1,2,3-trichlorobenzene – were detected in the samples.

- Chloroform was reported for TRE-1 at a concentration of 0.680 μg/L, which is below the EPA MCL and MAC for total trihalomethane compounds (which include chloroform) of 80.0 μg/L and 100 μg/L, respectively.
- Methylene chloride was detected in 19 environmental/environmental duplicate samples but was qualified during data validation as not detected due to the associated method blank or trip blank sample results (Section 2.4).
- Naphthalene was reported for SWTA3-MW2 at an estimated (J-qualified) concentration of 0.390 μg/L, which is below the MAC for polyaromatic hydrocarbons of 30 μg/L.
- 1,2,3-trichlorobenzene was reported for PL-2 and SWTA3-MW2 at estimated (J-qualified) concentrations of 0.340 μg/L and 0.350 μg/L, respectively; there is no EPA MCL or MAC for 1,2,3-trichlorobenzene.

2.3.2.2 Nitrate plus Nitrite

Table 2B-3 presents the NPN results. NPN was detected in all samples, with concentrations ranging from 0.253 mg/L (SFR-4T) to 8.25 mg/L (CTF-MW1). These results are below the EPA MCL and MAC of 10 mg/L.

2.3.2.3 Alkalinity, Anions, Total Organic Halogens, Total Phenol, and Total Cyanide

Table 2B-4 presents the alkalinity, major anion, TOX, total phenol, and total cyanide results.

Chloride, fluoride, sulfate, and total phenol were detected at concentrations exceeding the EPA MCLs or MACs.

- Chloride exceeded the MAC of 250 mg/L at Coyote Springs, with a concentration of 466 mg/L. Figure 2C-1 presents the chloride concentration trend plot for Coyote Springs.
- Fluoride exceeded the MAC of 1.60 mg/L at five GMP monitoring wells (OBS-MW1, SFR-2S, SFR-4T, SWTA3-MW4, and TRE-1) and Coyote Springs, with concentrations ranging from 1.62 mg/L (SWTA3-MW4) to 2.78 mg/L (SFR-4T). These results are below the EPA MCL of 4.00 mg/L. Figures 2C-2 through 2C-7 present the fluoride concentration trend plots for Coyote Springs, OBS-MW1, SFR-2S, SFR-4T, SWTA3-MW4, and TRE-1, respectively.
- Sulfate exceeded the MAC of 600 mg/L at one GMP monitoring well (SFR-4T), with a concentration of 2,000 mg/L. Figure 2C-8 presents the sulfate concentration trend plot for SFR-4T.
- The chloride, fluoride, and sulfate are likely naturally occurring.
- Total phenol exceeded the MAC of 0.005 mg/L at five GMP monitoring wells (CCBA-MW2, CTF-MW1, CYN-MW5, Greystone-MW2, and TRE-1), with concentrations ranging from 0.00601 mg/L (TRE-1) to 0.0243 mg/L (Greystone-MW2 environmental sample). Total phenol has not historically exceeded the MAC; therefore, no phenol concentration trend plots are provided.

The alkalinity, anion, TOX, and total cyanide results are consistent with historical results.

- TOX in the CYN-MW5 environmental duplicate sample, NWTA3-MW3D environmental sample, and OBS-MW1 environmental duplicate sample was qualified during data validation as not detected due to the associated equipment blank or method blank sample results (Section 2.4).

2.3.2.4 Metals

Table 2B-5 presents the mercury results for the total fraction. Mercury was not detected in any samples.

Table 2B-6 presents the TAL metals and uranium results for the dissolved fraction. Except for beryllium and manganese, no metals were detected at concentrations exceeding the EPA MCLs or MACs.

- Beryllium exceeded the EPA MCL and MAC of 0.004 mg/L in the Coyote Springs surface water sample at a concentration of 0.00639 mg/L. Figure 2C-9 presents the beryllium concentration trend plot for Coyote Springs.
- Manganese exceeded the MAC of 0.200 mg/L in the Coyote Springs surface water sample at a concentration of 1.36 mg/L. Figure 2C-10 presents the manganese concentration trend plot for Coyote Springs.
- The beryllium and manganese are likely naturally occurring, and both results are consistent with historical results from Coyote Springs.

2.3.2.5 Radiological Parameters

Table 2B-7 presents the gamma spectroscopy short list, gross alpha/beta activity, isotopic uranium, radium-226, and radium-228 results. The results are below the EPA MCLs and MACs, where established.

Isotopic uranium analyses were performed for Coyote Springs, CCBA-MW2, CTF-MW1, CYN- MW5, Greystone-MW2, OBS-MW1, SFR-2S, SFR-4T, and TRE-1 because they previously had high gross alpha activity or are located where the groundwater contacts bedrock that contains minerals high in naturally occurring radioisotopes. There is no EPA MCL or MAC for isotopic uranium.

Gross alpha activity was measured in accordance with 40 CFR Part 141 and used as a radiological screening tool. Naturally occurring uranium was measured independently (uranium [as mass] concentration determined by metals analysis), and the gross alpha activity measurements were corrected by subtracting the total uranium activity from the uncorrected gross alpha activity results. An SNL/NM health physicist reviewed the results to screen for radiological anomalies and verify that levels were within acceptable limits. The corrected gross alpha activity results were below the EPA MCL of 15 pCi/L. The gross beta activity results were used as a radiological screening tool and did not indicate the presence of a beta-emitting radionuclide that would exceed the EPA MCL of 4 mrem/yr. There were no indications of radiological contamination in any samples.

2.4 Calendar Year 2025 Quality Control Results

Sections 2.4.1 through 2.4.2 summarize the CY 2025 GMP field and laboratory QC sample results and their impact on the environmental/environmental duplicate sample results (Chapter 1.0, Section 1.6).

2.4.1 Field Quality Control Samples

The field QC samples (Chapter 1.0, Section 1.6.1) included environmental duplicate, equipment blank, field blank, and trip blank samples.

2.4.1.1 Environmental Duplicate Samples

Environmental duplicate samples (Chapter 1.0, Section 1.6.1.1) were collected from CYN-MW5, Greystone-MW2, MRN-2, and OBS-MW1 and were analyzed for all analytes (Section 2.3.2). RPDs were calculated for the analytes detected (validated detections) in both the environmental and environmental duplicate samples.

The sample pairs showed good agreement based on RPDs less than or equal to 35 for all analytes except copper (CYN-MW5) and total cyanide (Greystone-MW2). The RPD was calculated at 120% for copper and 50% for total cyanide. However, these values are considered estimated since the reported concentrations in the sample pairs were below the PQL.

2.4.1.2 Equipment Blank Samples

Equipment blank samples (Chapter 1.0, Section 1.6.1.2) associated with CYN-MW5, Greystone-MW2, MRN-2, and OBS-MW1 were collected before sampling began and were analyzed for all analytes (Section 2.3.2).

Alkalinity, bromodichloromethane, calcium, chloroform, chloride, copper, total cyanide, dibromochloromethane, magnesium, methylene chloride, total phenols, sodium, sulfate, and TOX were detected in one or more of the equipment blank samples.

- Methylene chloride in all equipment blank samples was qualified during data validation as not detected due to the associated method blank or trip blank sample results and therefore was not applied to the associated environmental samples.
- Copper in the equipment blank sample associated with MRN-2 was qualified during data validation as not detected due to the associated method blank sample result and therefore was not applied to the MRN-2 environmental sample.
- Magnesium in the equipment blank sample associated with Greystone-MW2 was qualified during data validation as not detected due to calibration blank contamination and therefore was not applied to the Greystone-MW2 environmental/environmental duplicate samples.
- No corrective action was necessary for alkalinity, bromodichloromethane, calcium, chloroform, chloride, total cyanide, dibromochloromethane, magnesium, methylene chloride, total phenols, sodium, or sulfate because they were not detected in the associated environmental samples, or were detected in such samples at concentrations greater than five times the equipment blank sample results, or the equipment blank sample results were qualified during data validation as not detected and were not applied to the associated environmental samples.
- TOX in the CYN-MW5 environmental sample and OBS-MW1 environmental duplicate sample was qualified during data validation as not detected because it was detected below the PQL at concentrations less than five times the associated equipment blank sample results.
- The copper result for the Greystone-MW2 environmental sample was qualified during data validation as not detected because copper was detected below the PQL in both the environmental and equipment blank samples.

2.4.1.3 Field Blank Samples

Four field blank samples (Chapter 1.0, Section 1.6.1.3) were collected at CYN-MW5, OBS-MW1, MRN-2, and SWTA3-MW3 and were analyzed for VOCs. Bromodichloromethane, bromoform, chloroform, dibromochloromethane, and methylene chloride were detected in one or more of the field blank samples.

- No corrective action was necessary for bromodichloromethane, bromoform, chloroform, or dibromochloromethane because they were not detected in the associated environmental samples.
- Methylene chloride in the field blank samples was qualified during data validation as not detected due to the associated method blank or trip blank sample results and therefore was not applied to the associated environmental samples.

One additional field blank sample was collected from the DI water used for decontamination and equipment blank sample collection and was analyzed for all analytes (Section 2.3.2). The field blank sample results were used to internally verify the quality of the DI water but were not used during data validation to qualify environmental or field QC sample results.

2.4.1.4 Trip Blank Samples

A total of 22 trip blank samples (Chapter 1.0, Section 1.6.1.4) were submitted and analyzed for VOCs. Methylene chloride was detected in all trip blank samples.

- Methylene chloride was qualified during data validation as not detected in 19 of the trip blank samples due to the associated method blank sample results.
- The methylene chloride results for the OBS-MW1 environmental/environmental duplicate samples and the SFR-2S environmental sample were qualified during data validation as not detected due to the associated trip blank sample results.

2.4.2 Laboratory Quality Control Samples

The laboratory QC samples (Chapter 1.0, Section 1.6.2) included laboratory control, method blank, matrix spike and matrix spike duplicate, surrogate spike, and replicate samples.

Although some results were qualified during data validation, the data were deemed acceptable, except for potassium-40 and cesium-137. The potassium-40 activity for the CYN-MW5 environmental duplicate sample and the cesium-137 activity for the MNR-2 environmental sample were rejected due to the peak not meeting identification criteria.

As discussed in previous sections, methylene chloride was qualified during data validation as not detected in numerous environmental and field QC samples due to the associated method blank sample results.

2.5 Variances and Nonconformances

All CY 2025 GMP monitoring activities were performed and documented in accordance with the Consent Order and the CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan, with no variances or nonconformances identified.

2.6 Summary and Conclusions

The CY 2025 sampling event was conducted from April 8 to May 1, 2025. Groundwater samples were collected from all 16 GMP monitoring wells and a surface water sample was collected from Coyote Springs. Except for total phenol, the samples yielded analytical results consistent with historical results.

- No VOCs or HE compounds were detected at concentrations exceeding the EPA MCLs or MACs in any samples.
- NPN was detected in all samples, with concentrations ranging from 0.253 mg/L to 8.25 mg/L. These results are below the EPA MCL and MAC of 10 mg/L.
- Chloride, fluoride, sulfate, and total phenol were detected at concentrations exceeding the EPA MCLs or MACs.
  - Chloride exceeded the MAC of 250 mg/L at Coyote Springs, with a concentration of 466 mg/L.
  - Fluoride exceeded the MAC of 1.60 mg/L at five GMP monitoring wells (OBS-MW1, SFR-2S, SFR-4T, SWTA3-MW4, and TRE-1) and Coyote Springs, with concentrations ranging from 1.62 mg/L to 2.78 mg/L. These results are below the EPA MCL of 4.00 mg/L.
  - Sulfate exceeded the MAC of 600 mg/L at one GMP monitoring well (SFR-4T), with a concentration of 2,000 mg/L.
  - The chloride, fluoride, and sulfate are likely naturally occurring.
  - Total phenol exceeded the MAC of 0.005 mg/L at five GMP monitoring wells (CCBA-MW2, CTF-MW1, CYN-MW5, Greystone-MW2, and TRE-1), with concentrations ranging from 0.00601 mg/L to 0.0243 mg/L.
- Except for beryllium and manganese, no metals were detected at concentrations exceeding the EPA MCLs or MACs in any samples.
  - Beryllium exceeded the EPA MCL and MAC of 0.004 mg/L in the Coyote Springs surface water sample at a concentration of 0.00639 mg/L.
  - Manganese exceeded the MAC of 0.200 mg/L in the Coyote Springs surface water sample at a concentration of 1.36 mg/L.
  - The beryllium and manganese are likely naturally occurring, and both results are consistent with historical results from Coyote Springs.

2.7 Future Activities

The CY 2026 GMP monitoring activities will include:

- Quarterly water level measurements and annual groundwater sample collection and analysis in accordance with the CY 2026 Comprehensive Site-Wide Groundwater Monitoring Plan.
- Submittal of the CY 2027 Annual Groundwater Monitoring Plan (Chapter 1.0, Section 1.7.1) to the NMED in April 2026.
- Monitoring results reporting in the CY 2026 Annual Groundwater Monitoring and Corrective Measures Progress Report.

3.0 Technical Area-V Groundwater Area of Concern

3.1 Introduction

This chapter summarizes the CY 2025 monitoring activities and results for the TAVG AOC. The monitoring activities were performed and documented in accordance with the Consent Order (NMED, April 2004) (Chapter 1.0, Section 1.2.2) and the CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan (SNL/NM, April 2024) (Chapter 1.0, Section 1.2.4). The monitoring results were compiled from groundwater data collected from the TAVG AOC monitoring well network.

Trichloroethene (TCE) and nitrate have been identified as constituents of concern (COCs) in the groundwater in the TAVG AOC based on detections above the EPA MCLs and MACs (Chapter 1.0, Section 1.2.2). Low concentrations of TCE and nitrate have consistently been detected in the groundwater, which occurs in the Regional Aquifer (Chapter 1.0, Section 1.3.4). The EPA MCLs and MACs for TCE and nitrate are 5 µg/L and 10 mg/L, respectively. Since 1992, the maximum concentrations detected in the groundwater have been 22.4 µg/L for TCE and 15.3 mg/L for nitrate.

Because the EPA MCLs and MACs for TCE and nitrate are the same, the term EPA MCL is used in this chapter and its attachments for both regulatory standards.

3.1.1 Location

The TAVG AOC is located beneath and around Technical Area V in the west-central part of KAFB (Figure 1-1). Technical Area V occupies approximately 35 acres in the northeast corner of Technical Area III.

3.1.2 Site History

Technical Area V was established in 1961 to test radiation effects on weapon components. It has hosted multiple generations of research reactors, including the Sandia Engineering Reactor Facility, the Sandia Pulsed Reactor, the High Energy Radiation Megavolt Electron Source, and the PROTO I Facility. Active nuclear facilities include the Annular Core Research Reactor, the Sandia Pulsed Reactor, and the Auxiliary Hot Cell Facility. Active radiological facilities include the Gamma Irradiation Facility and the Low Dose Rate Irradiation Facility.

3.1.3 Monitoring History

Groundwater investigations at the TAVG AOC began in 1992. TCE above the EPA MCL of 5 µg/L was first detected at monitoring well LWDS-MW1 in November 1993 at a concentration of 6 µg/L. Nitrate above the EPA MCL of 10 mg/L was first detected at LWDS-MW1 in December 1995 at a concentration of 10.1 mg/L. Since 1992, 21 monitoring wells and 1 injection well have been installed in the TAVG AOC; 4 of the 21 monitoring wells and the injection well have been plugged and abandoned (Table 3-1).

Three soil-vapor wells were installed in the TAVG AOC in 2011. Soil-vapor samples were collected for eight consecutive quarters from April 2011 through March 2013. The samples were analyzed for VOCs, including TCE. The analytical results were reported in the *Annual Groundwater Monitoring Report, Calendar Year 2013* (SNL/NM, June 2014).

3.1.4 Monitoring Well Network

Table 3-1 lists the monitoring and injection wells installed in the TAVG AOC to date; Figure 3-1 shows their locations. The current TAVG AOC monitoring well network consists of 17 monitoring wells. As Table 3-1 indicates, 14 are screened across the water table and 3 are screened deeper in the Regional Aquifer. The three deeper-completion monitoring wells, TAV-MW7, TAV-MW9, and TAV-MW13, are located near TAV-MW6, TAV-MW8, and TAV-MW5 respectively.

Table 3-1
Technical Area-V Groundwater Area of Concern Monitoring Well Network

Well ID	Installation Year	WQ	WL	Comments
AVN-1	1995	NA	NA	Deeper completion (570–590 ft bgs), P&A in February 2023
AVN-2	1995	NA	NA	Water table completion (492–515 ft bgs), P&A in February 2023
LWDS-MW1	1993	✓	✓	Water table completion (495–515 ft bgs)
LWDS-MW2	1992	NA	NA	Deeper completion (506–526 ft bgs), P&A in February 2023
TAV-INJ1	2017	NA	NA	Water table completion (509–539 ft bgs), P&A in February 2025
TAV-MW1	1995	NA	NA	Water table completion (489.5–509.5 ft bgs), P&A in February 2008
TAV-MW2	1995	✓	✓	Water table completion (497–513.5 ft bgs)
TAV-MW3	1997	✓	✓	Water table completion (532–552 ft bgs)
TAV-MW4	1997	✓	✓	Water table completion (495–515 ft bgs)
TAV-MW5	1997	✓	✓	Water table completion (487–507 ft bgs)
TAV-MW6	2001	✓	✓	Water table completion (507–527 ft bgs)
TAV-MW7	2001	✓	✓	Deeper completion (597–617 ft bgs)
TAV-MW8	2001	✓	✓	Water table completion (491–511 ft bgs)
TAV-MW9	2001	✓	✓	Deeper completion (582–602 ft bgs)
TAV-MW10	2008	✓	✓	Water table completion (508–528 ft bgs), replaced TAV-MW1
TAV-MW11	2010	✓	✓	Water table completion (512–532 ft bgs)
TAV-MW12	2010	✓	✓	Water table completion (507–527 ft bgs)
TAV-MW13	2010	✓	✓	Deeper completion (525–545 ft bgs)
TAV-MW14	2010	✓	✓	Water table completion (512–532 ft bgs)
TAV-MW15	2017	✓	✓	Water table completion (516–541ft bgs)
TAV-MW16	2017	✓	✓	Water table completion (527–552 ft bgs)
TAV-MW17	2023	✓	✓	Water table completion (523–543 ft bgs)
Total	----	17	17	Total for this reporting period

Notes:
Check marks (✓) indicate that WQ sampling and WL measurements were performed in CY 2025.
AVN = Area-V North
bgs = below ground surface
CY = calendar year
ft = foot (feet)
ID = identifier
INJ = Injection Well
LWDS = Liquid Waste Disposal System
MW = Monitoring Well
NA = not applicable
P&A = plugged and abandoned (decommissioned)
TAV = Technical Area V
WL = water level
WQ = water quality

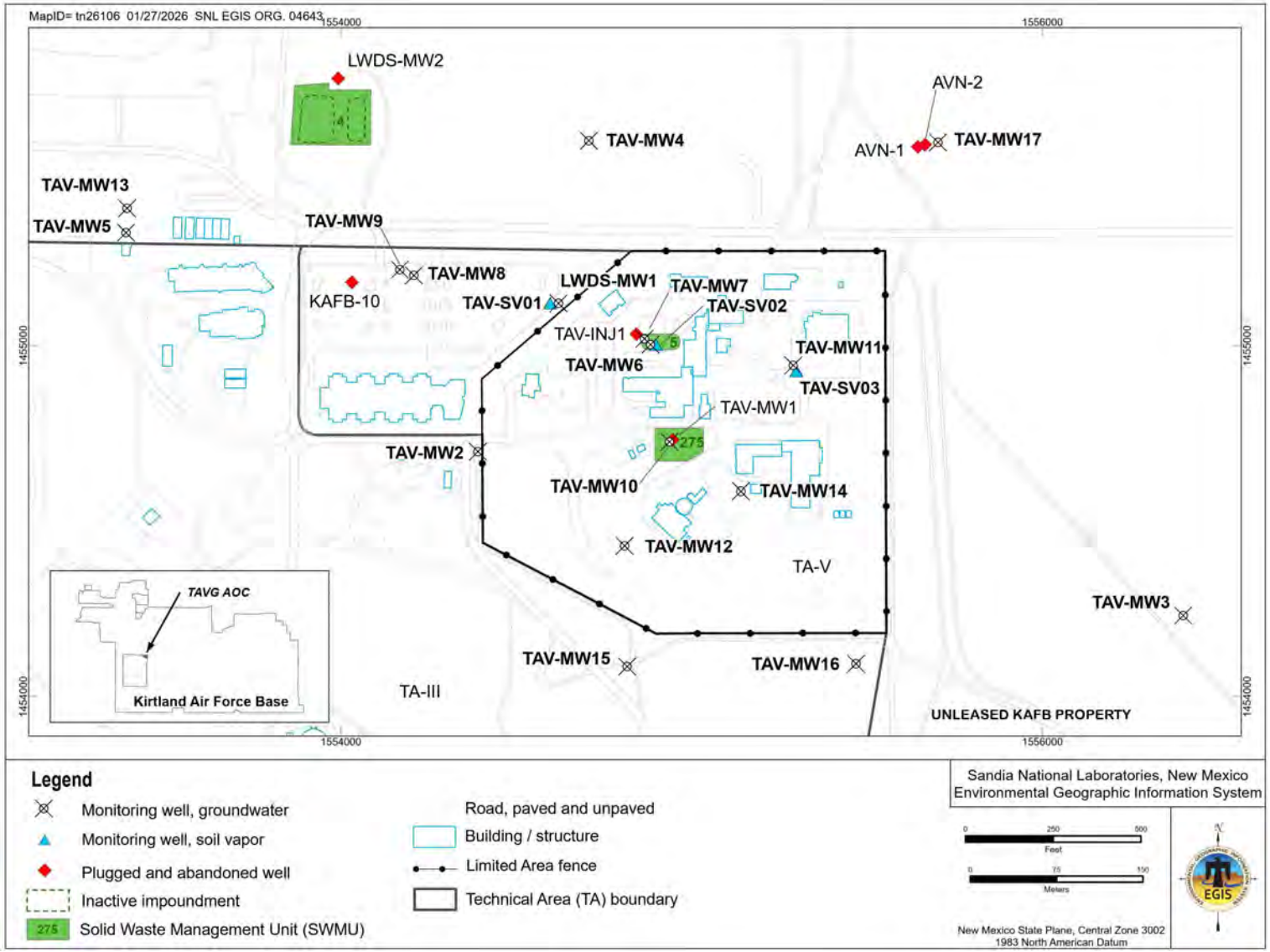


Figure 3-1
Technical Area-V Groundwater Area of Concern Monitoring Well Locations

3.2 Conceptual Site Model

The Conceptual Site Model for the TAVG AOC (SNL/NM, May 2024) (Figure 3-2) outlines the geological features, groundwater flow, and contaminant transport in the region.

3.2.1 Site Geology and Hydrogeology

The TAVG AOC is located within the Albuquerque Basin (Chapter 1.0, Section 1.3.3). The Albuquerque Basin is characterized by sediment-filled structural basins and uplifted mountain ranges, with the Regional Aquifer serving as a vital municipal and industrial water source. The Regional Aquifer comprises discontinuous hydrostratigraphic units influenced by numerous faults and generally functions under unconfined conditions. Historically, groundwater flowed north to south with a westward component from recharge areas along the eastern mountain front. However, groundwater extraction near the northeastern boundary of KAFB has altered these natural flow patterns. Groundwater discharges as underflow or directly to the Rio Grande.

The subsurface geology in Technical Area V consists primarily of thick alluvial fan deposits divided into coarse-grained upper and fine-grained, clay-rich lower sections. The water table lies within the fine-grained lower unit. No perched groundwater has been observed above the Regional Aquifer, and vadose zone moisture measurements indicate minimal retention from historical wastewater disposal. The area receives average annual precipitation of approximately 8.84 in, mostly from brief summer thunderstorms, but high evapotranspiration (95–99%) limits recharge and contaminant transport through the vadose zone. Groundwater flow near the area predominantly moves east to west and then shifts northward due to pumping by KAFB, VA, and ABCWUA production wells.

3.2.2 Sources and Nature of Contamination

The groundwater contamination in the TAVG AOC primarily originates from historical wastewater disposal at several SWMUs. Small volumes of TCE and other organic solvents were likely present in wastewater disposed of at the Liquid Waste Disposal System (LWDS) Drain Field (SWMU 5) from 1962 to 1967, the LWDS Surface Impoundments (SWMU 4) from 1967 to 1972, and the Technical Area-V Seepage Pits (SWMU 275) from the 1960s to early 1980s. Disposal practices were modified in the 1980s (wastewater no longer contained organic solvents), and by 1992, wastewater disposal ceased, with sanitary waste redirected to the sanitary sewer connected to the ABCWUA. Elevated nitrate concentrations in the groundwater are attributed to these historical sanitary waste disposals, as nitrate is highly soluble and readily transported through the vadose zone. The NMED has granted Corrective Action Complete status to all three SWMUs (NMED, January 2015, as modified), while the TAVG AOC remains in the corrective action process.

3.2.3 Contaminant Fate and Transport

Contaminant migration beneath Technical Area V is driven by historical wastewater infiltration through heterogeneous, low-permeability sedimentary units. Wastewater percolated along preferential pathways, with vertical flow attenuated or diverted by layered sediments of varying hydraulic properties. Soil-vapor monitoring from 2011 to 2013 showed stabilized TCE concentrations, indicating that without ongoing inputs, vadose zone TCE is unlikely to be an active contaminant source to groundwater (SNL/NM, September 2015). In groundwater, contaminant transport involves advection, dispersion, diffusion, biodegradation, and sorption. However, low groundwater flow velocities limit advective transport. Natural biodegradation has a limited effect on VOCs and nitrate. TCE retention is enhanced by sorption to fine-grained sediments, while nitrate remains highly mobile. The relatively stable concentrations of

TCE and nitrate in the groundwater in the TAVG AOC reflect the slow dispersion and diffusion processes and the reversible sorption process for TCE.

3.2.4 Potential Receptors and Risk

Potential receptors include production wells screened in the Regional Aquifer, but no groundwater use occurs within 2.8 mi of Technical Area V. Modeling indicates that the contaminants do not pose a threat to nearby production wells. Institutional controls remain in place, and there is no foreseeable risk to human health or the environment from the groundwater contamination in the TAVG AOC.

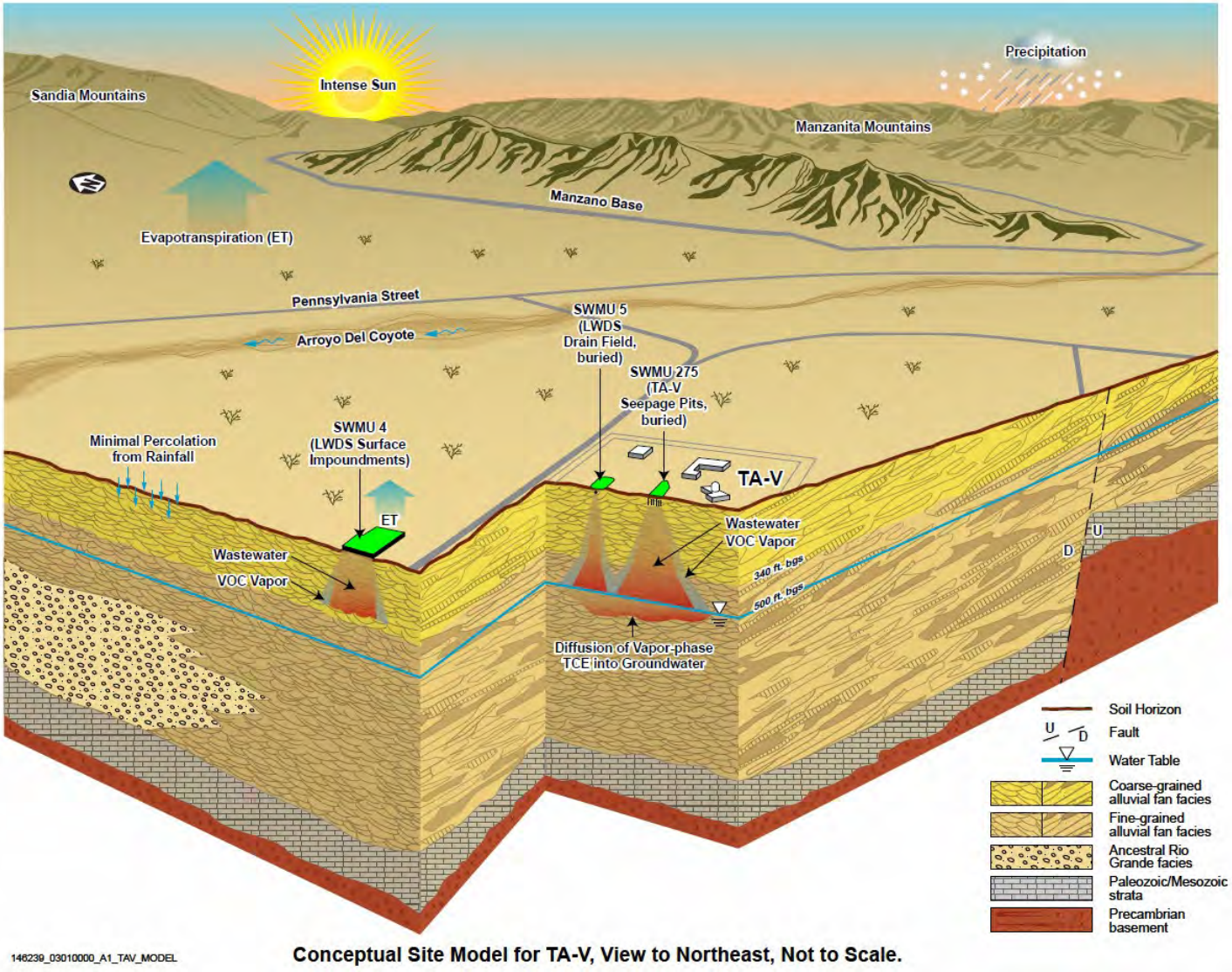


Figure 3-2
Conceptual Site Model for the Technical Area-V Groundwater Area of Concern

3.3 Calendar Year 2025 Monitoring Activities

The CY 2025 TAVG AOC monitoring activities included:

- Quarterly water level measurements (Chapter 1.0, Section 1.4.1) and groundwater elevation calculations for all 17 TAVG AOC monitoring wells.
- Semiannual collection and analysis of groundwater samples (Chapter 1.0, Sections 1.4.2 through 1.5) from 11 TAVG AOC monitoring wells in January/February/March and August/September 2025.
- Annual collection and analysis of groundwater samples (Chapter 1.0, Sections 1.4.2 through 1.5) from 6 TAVG AOC monitoring wells in August/September 2025.
- Preparation of monitoring well hydrographs (Attachment 3A), analytical results tables (Attachment 3B), and concentration trend plots (Attachment 3C).
- Submittal of the CY 2026 Comprehensive Site-Wide Groundwater Monitoring Plan (SNL/NM, April 2025) to the NMED.
- Decommissioning of monitoring well TAV-INJ1 and submittal of the *Well TAV-INJ1 Decommissioning Report* (SNL/NM, May 2025) to the NMED.

3.4 Calendar Year 2025 Monitoring Results

Sections 3.4.1 through 3.4.2 summarize the CY 2025 TAVG AOC monitoring results.

3.4.1 Water Level Results

The water levels in all 17 TAVG AOC monitoring wells were measured quarterly and used to determine groundwater elevations. Table 3-2 presents the October 2025 groundwater elevation data.

Table 3-2
Groundwater Elevation Data for the Technical Area-V Groundwater Area of Concern Monitoring Wells, October 2025

Well ID	Top of Casing (ft amsl) NAVD 88	Date Measured	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)
LWDS-MW1	5423.83	1-Oct-2025	508.10	4915.73
TAV-MW2	5427.33	9-Oct-2025	512.51	4914.82
TAV-MW3	5464.30	9-Oct-2025	550.66	4913.64
TAV-MW4	5427.89	1-Oct-2025	512.48	4915.41
TAV-MW5	5408.71	9-Oct-2025	498.05	4910.66
TAV-MW6	5431.17	1-Oct-2025	515.83	4915.34
TAV-MW7	5430.40	1-Oct-2025	517.73	4912.67
TAV-MW8	5417.00	1-Oct-2025	501.09	4915.91
TAV-MW9	5416.27	1-Oct-2025	503.69	4912.58
TAV-MW10	5437.03	1-Oct-2025	522.17	4914.86
TAV-MW11	5440.12	1-Oct-2025	524.79	4915.33
TAV-MW12	5435.72	1-Oct-2025	521.50	4914.22
TAV-MW13	5409.02	9-Oct-2025	499.94	4909.08
TAV-MW14	5441.52	1-Oct-2025	528.49	4913.03
TAV-MW15	5437.32	9-Oct-2025	523.34	4913.98
TAV-MW16	5448.34	9-Oct-2025	534.92	4913.42
TAV-MW17	5443.92	1-Oct-2025	529.99	4913.93

Notes:
amsl = above mean sea level
btoc = below top of casing (the measuring point)
ft = foot (feet)
ID = identifier
LWDS = Liquid Waste Disposal System
MW = Monitoring Well
NAVD 88 = North American Vertical Datum of 1988
TAV = Technical Area-V

3.4.1.1 Potentiometric Surface

Figure 3-3 is the October 2025 potentiometric surface map of the Regional Aquifer in the TAVG AOC. The potentiometric surface contours on this figure indicate that the groundwater in the TAVG AOC predominantly flows southwestward. The horizontal hydraulic gradient derived from the potentiometric surface contours ranges from 0.0015 to 0.015 ft/ft. Vertical hydraulic gradients were calculated for the paired monitoring wells (TAV-MW5/TAV-MW13, TAV-MW6/TAV-MW7, and TAV-MW8/TAV-MW9) using the publicly available EPA online tool. Based on the October 2025 groundwater elevations, vertical groundwater flow is downward, with an average vertical hydraulic gradient of 0.035 ft/ft.

Figure 3-3 shows a subtle groundwater mound in the potentiometric surface. The groundwater mound is most likely an artifact of laterally variable water level declines within the heterogeneous and anisotropic aquifer that is undergoing regional drainage due to the combined effect of pumping by KAFB, VA, and ABCWUA production wells. Mounding in Technical Area V occurs where the sediments have lesser degrees of hydraulic conductivity than the surroundings and thus drain relatively slowly.

3.4.1.2 Hydrographs

The CY 2025 TAVG AOC monitoring well hydrographs (Attachment 3A, Figures 3A-1 through 3A-4) show the following water level and groundwater elevation trends:

- The water level in TAV-MW5 (Figure 3A-1) dropped approximately 3.6 ft from October 2010 to January 2011 after TAV-MW13 installation nearby in November 2010, indicating a certain degree of hydraulic communication between these two monitoring wells. Since 2011, the water levels in these two monitoring wells have been gradually approaching each other, with the water level in TAV-MW5 less than 2 ft higher than the water level in TAV-MW12 in October 2025 (Table 3-2).
- The groundwater elevations at all 17 monitoring wells have steadily declined due to pumping of the Regional Aquifer by KAFB, VA, and ABCWUA production wells. Up to CY 2025, the decline rates ranged from 0.38 ft/yr (the slowest at TAV-MW16) to 0.77 ft/yr (the fastest at TAV-MW3), with an average decline rate of 0.60 ft/yr. The declines are expected to continue as long as pumping by production wells in the region continues.
- Since late 2008, groundwater elevations at Regional Aquifer wells in the northeastern part of KAFB have increased. Presumably, this is in response to the ABCWUA transitioning to surface water for potable water supplies and depending less on their production wells immediately north of KAFB. However, this trend has not been seen as far south as Technical Area V.

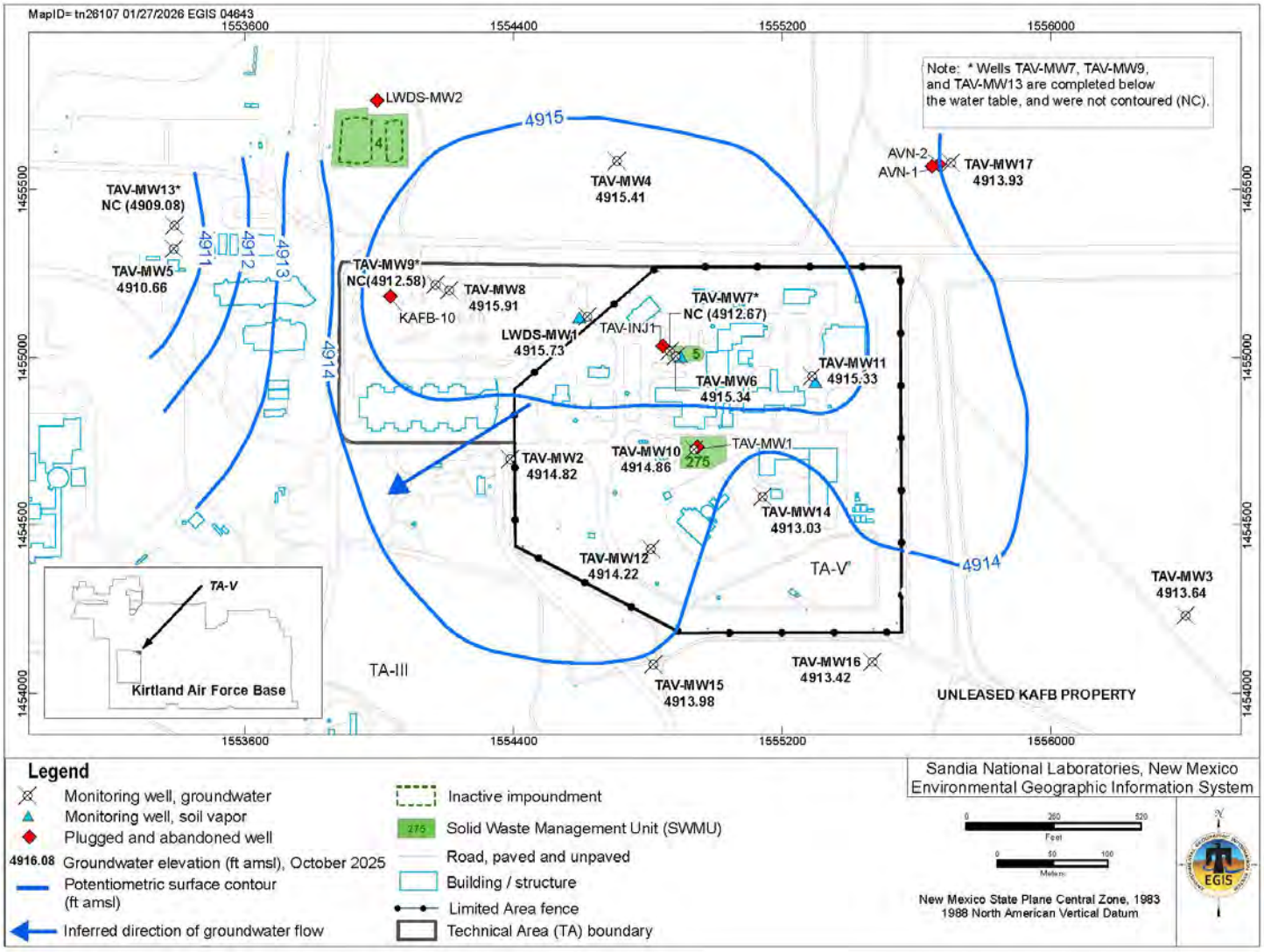


Figure 3-3
Potentiometric Surface of the Regional Aquifer in the Technical Area-V Groundwater Area of Concern, October 2025

3.4.2 Groundwater Sample Analytical Results

The CY 2025 sampling events were conducted in January/February/March and August/September 2025. Groundwater samples were collected from all 17 TAVG AOC monitoring wells. Table 3-3 summarizes both sampling events; Table 3-4 lists the sampling parameters for each monitoring well for each sampling event. The sampling parameters included VOCs and NPN for measuring TCE and nitrate, the COCs, and the annual sampling parameters requested by the NMED (anions, alkalinity, TAL metals plus uranium, gamma spectroscopy short list, gross alpha/beta activity, and tritium) (NMED, July 2023). The tables reflect the CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan.

Table 3-3
Technical Area-V Groundwater Area of Concern Monitoring Well Sampling Events, Calendar Year 2025

Date of Sampling Event	Monitoring Wells Sampled		Monitoring Plan
January/February/March 2025	LWDS-MW1* TAV-MW2 TAV-MW4 TAV-MW6 TAV-MW8 TAV-MW10	TAV-MW11 TAV-MW12 TAV-MW14 TAV-MW16 TAV-MW17	CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan
August/September 2025	LWDS-MW1 TAV-MW2 TAV-MW3 TAV-MW4 TAV-MW5 TAV-MW6 TAV-MW7 TAV-MW8 TAV-MW9	TAV-MW10 TAV-MW11 TAV-MW12, TAV-MW13 TAV-MW14 TAV-MW15 TAV-MW16 TAV-MW17	CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan

Notes:
*LWDS-MW1 was sampled on February 17, 2025, but no chlorinated hydrocarbons were detected. It was resampled for VOCs and NPN on March 28, 2025.
CY = calendar year
LWDS = Liquid Waste Disposal System
MW = Monitoring Well
NPN = nitrate plus nitrite
TAV = Technical Area V
VOC = volatile organic compound

Table 3-4
Technical Area-V Groundwater Area of Concern Monitoring Well Sampling Parameters, Calendar Year 2025

Parameters	January/February/March 2025	
VOCs NPN	LWDS-MW1 TAV-MW2 TAV-MW4 TAV-MW4 (Duplicate) TAV-MW6 TAV-MW6 (Duplicate) TAV-MW8 TAV-MW10	TAV-MW10 (Duplicate) TAV-MW11 TAV-MW12 TAV-MW14 TAV-MW16 TAV-MW17 TAV-MW17 (Duplicate)
Parameters	**August/September 2025**	
VOCs NPN Anions (bromide, chloride, fluoride, sulfate) Alkalinity TAL metals plus uranium (as mass) Gamma spectroscopy short list* Gross alpha/beta activity Tritium	LWDS-MW1 TAV-MW2 TAV-MW3 TAV-MW3 (Duplicate) TAV-MW4 TAV-MW5 TAV-MW6 TAV-MW7 TAV-MW7 (Duplicate) TAV-MW8 TAV-MW9	TAV-MW10 TAV-MW11 TAV-MW12 TAV-MW13 TAV-MW14 TAV-MW14 (Duplicate) TAV-MW15 TAV-MW15 (Duplicate) TAV-MW16 TAV-MW17

Notes:
*Gamma spectroscopy short list includes americium-241, cesium-137, cobalt-60, and potassium-40.
For the August/September 2025 sampling event, environmental duplicate samples were analyzed for VOCs and NPN only.
LWDS = Liquid Waste Disposal System
MW = Monitoring Well
NPN = nitrate plus nitrite
TAL = Target Analyte Lis
TAV = Technical Area-V
VOC = volatile organic compound

Sections 3.4.2.1 through 3.4.2.2 summarize the analytical results. Attachment 3B presents the analytical results tables (Tables 3B-1 through 3B-6) and the final field water quality parameter measurements (Table 3B-7). Attachment 3C (Figures 3C-1 through 3C-9) presents concentration trend plots for the monitoring wells where TCE and NPN concentrations exceeded the EPA MCLs. Data Package 2 contains the data validation reports and analytical laboratory data packages.

3.4.2.1 Constituents of Concern

3.4.2.1.1 Trichloroethene

Table 3B-1 presents the detected VOC results, including the TCE results; Table 3B-2 lists the corresponding MDLs.

TCE exceeded the EPA MCL of 5 µg/L in the environmental/environmental duplicate samples collected from six TAVG AOC monitoring wells (LWDS-MW1, TAV-MW4, TAV-MW6, TAV-MW8, TAV-MW10, and TAV-MW11), with a maximum concentration of 9.24 µg/L in the March 2025 LWDS-MW1 environmental sample. Historically, the highest TCE concentrations in the TAVG AOC have typically been detected at LWDS-MW1.

Figures 3C-1 through 3C-6 present the TCE concentration trend plots for LWDS-MW1, TAV-MW4, TAV-MW6, TAV-MW8, TAV-MW10, and TAV-MW11, respectively. These plots show the following:

- LWDS-MW1 (Figure 3C-1): The TCE concentrations were 9.24 and 4.65 μg/L in March and September 2025, respectively. The TCE concentration was below the EPA MCL for the first time in September 2025. The overall TCE concentration trend is decreasing.
- TAV-MW4 (Figure 3C-2): The TCE concentrations were 5.97/5.92 and 6.83 μg/L in February and September 2025, respectively. The TCE concentration exceeded the EPA MCL for the first time in May 2019. Since then, the overall TCE concentration trend has been increasing, with almost all concentrations above the EPA MCL.
- TAV-MW6 (Figure 3C-3): The TCE concentrations were 8.11/7.73 and 8.43 μg/L in February and September 2025, respectively. The TCE concentration exceeded the EPA MCL for the first time in August 2006. Since then, the TCE concentrations increased, reaching the highest concentration of 18.8 μg/L in March 2014, and thereafter have decreased while remaining consistently above the EPA MCL.
- TAV-MW8 (Figure 3C-4): The TCE concentrations were 5.14 and 5.16 μg/L in February and September 2025, respectively. The TCE concentration exceeded the EPA MCL in February 2019, the first time since November 2003. The TCE concentrations have fluctuated above and below the EPA MCL since February 2019.
- TAV-MW10 (Figure 3C-5): The TCE concentrations were 8.00/7.92 and 8.90 μg/L in February and September 2025, respectively. The overall TCE concentration trend is decreasing slightly, with all concentrations above the EPA MCL.
- TAV-MW11 (Figure 3C-6): The TCE concentrations were 4.51 and 5.34 μg/L in February and September 2025, respectively. The TCE concentration exceeded the EPA MCL for the first time in September 2025. The overall TCE concentration trend is increasing.

Historically, TCE has been detected at concentrations below the EPA MCL at the following five TAVG AOC monitoring wells: TAV-MW2, TAV-MW12, TAV-MW14, TAV-MW16, and TAV-MW17.

TCE has never been detected at the following TAVG AOC monitoring wells: TAV-MW3, TAV-MW5, TAV-MW7, TAV-MW9, or TAV-MW15. The only detection of 0.410 μg/L (J-qualified) in May 2021 at TAV-MW13 is considered an anomaly (SNL/NM, June 2022). Also, TCE was never detected at AVN-1, AVN-2, or LWDS-MW2 before they were decommissioned in February 2023.

Figure 3-4 shows the TCE isoconcentration contour for the August/September 2025 sampling event, during which all 17 TAVG AOC monitoring wells were sampled (Table 3-4).

- The figure shows only one TCE isoconcentration contour – the 5-μg/L contour. This is the second year that the TCE concentrations at all 17 monitoring wells have been below 10 μg/L during the calendar year. The general location and shape of the 5-μg/L contour have not changed significantly over the past several years.
- TAV-MW3, TAV-MW5, TAV-MW15, TAV-MW16, and TAV-MW17 are located farther from the contaminant sources to the east, west, south, southeast, and northeast, respectively. TAV-MW13 is located near TAV-MW5; the top of the screen in TAV-MW13 is 18.6 ft deeper than the bottom of the screen in TAV-MW5. These boundary monitoring wells with no TCE detections (and minimum detections at TAV-MW16 and TAV-MW17) define the lateral extent of TCE contamination.
- TAV-MW7 and TAV-MW9 are located near TAV-MW6 and TAV-MW8, respectively. The top of the screen in TAV-MW7 is 70.6 ft deeper than the bottom of the screen in TAV-MW6; the top of the screen in TAV-MW9 is 71.5 ft deeper than the bottom of the screen in TAV-MW8. TCE has never been detected at the two deeper monitoring wells, TAV-MW7 and TAV-MW9. The lack of TCE detection in the deeper groundwater near the contaminant sources (SWMUs 5 and 275) indicates that TCE has not migrated deeper into the Regional Aquifer.

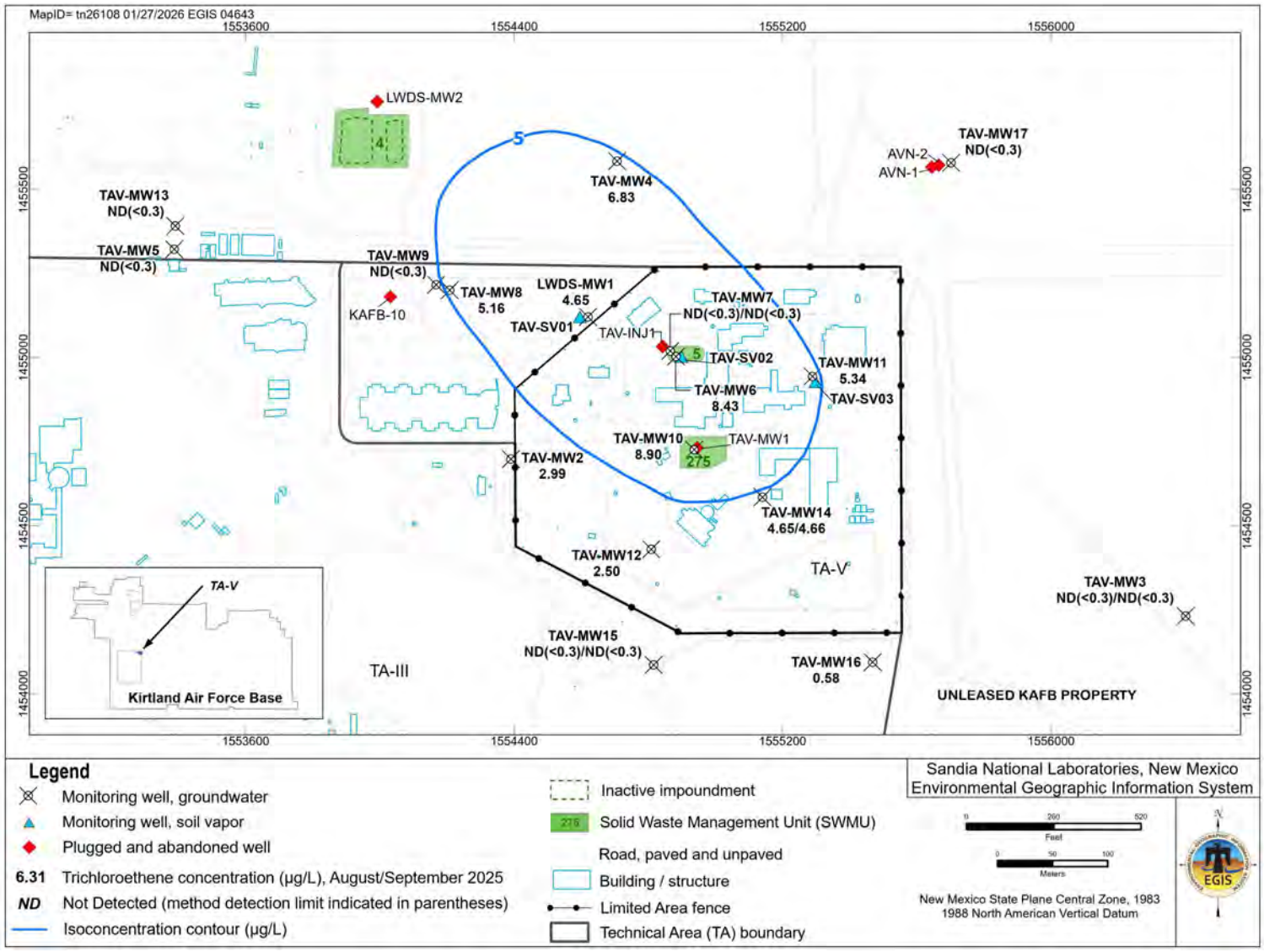


Figure 3-4
Trichloroethene Distribution in the Technical Area-V Groundwater Area of Concern, August/September 2025

3.4.2.1.2 Nitrate plus Nitrite

Table 3B-3 presents the NPN results. NPN has historically been reported at low concentrations for each TAVG AOC monitoring well, ranging up to slightly above the EPA MCL of 10 mg/L.

NPN exceeded the EPA MCL in the environmental/environmental duplicate samples collected from three TAVG AOC monitoring wells (LWDS-MW1, TAV-MW10, and TAV-MW17), with a maximum concentration of 12.9 mg/L in the March 2025 LWDS-MW1 environmental sample. The NPN concentrations at LWDS-MW1 and TAV-MW10 have typically exceeded the EPA MCL.

Figures 3C-7, 3C-8, and 3C-9 present the NPN concentration trend plots for LWDS-MW1, TAV-MW10, and TAV-MW17, respectively. These plots show the following:

- LWDS-MW1 (Figure 3C-7): The NPN concentrations were 12.9 and 7.52 mg/L in March and September 2025, respectively. The overall NPN concentration trend is increasing slightly, with most concentrations above the EPA MCL.
- TAV-MW10 (Figure 3C-8): The NPN concentrations were 12.4/12.4 and 12.6 mg/L in February and September 2025, respectively. The overall NPN concentration trend is increasing slightly, with almost all concentrations above the EPA MCL.
- TAV-MW17 (Figure 3C-9): The NPN concentrations were 8.95/8.71 and 12.7 mg/L in January and September 2025, respectively. The September 2025 NPN concentration did not align with historical data. SNL/NM personnel will continue monitoring the NPN concentrations at this monitoring well semiannually.

NPN concentrations previously exceeded the EPA MCL in groundwater samples collected from TAV-MW6 and TAV-MW14, as well as AVN-1, AVN-2, and LWDS-MW2 before they were decommissioned in February 2023.

TAV-MW17 was installed in the vicinity of AVN-1 and AVN-2 after they were decommissioned. AVN-1 and AVN-2 were located approximately 310 ft northeast and upgradient of Technical Area V (Figure 3-1) and historically had similar NPN concentrations, even though the top of the screen in AVN-1 is 55.4 ft deeper than the bottom of the screen in AVN-2. The maximum NPN concentration at AVN-1 was 11.8 mg/L in June 2009; the maximum NPN concentration at AVN-2 was 10.7 mg/L in December 2004. Higher nitrate levels near AVN-1, AVN-2, and TAV-MW17 may be caused by surface water seeping through nitrate-rich soils along Arroyo del Coyote, which is about half a mile from Technical Area V. Surface water infiltration can leach naturally occurring nitrate from the vadose zone. The elevated background nitrate is likely due to sediment deposits or nitrate from decayed vegetation that has built up beneath Arroyo del Coyote. Similar cases have been observed in several locations across the arid southwestern United States (Walvoord et al., November 2003).

Nitrate above the EPA MCL was also detected once at TAV-MW5 in a split sample collected in November 1998 (soon after well installation) but has not been detected above the EPA MCL at this monitoring well since then.

Figure 3-5 shows the NPN isoconcentration contour for the August/September 2025 sampling event, during which all 17 TAVG AOC monitoring wells were sampled (Table 3-4).

- The general location of the 10-mg/L contour has not changed significantly over the past several years, and the contour typically encloses LWDS-MW1 and TAV-MW10. However, the September 2025 NPN concentration was below 10 mg/L while the March 2025 NPN concentration was above 10 mg/L at LWDS-MW1. The September 2025 NPN concentrations at all the other monitoring wells except TAV-MW17 were below 10 mg/L.
- The NPN concentrations at the paired monitoring wells – TAV-MW5/ TAV-MW13, TAV-MW6/TAV-MW7, and TAV-MW8/TAV-MW9 – were lower than the NPN concentrations at the deeper-screened monitoring wells – TAV-MW13, TAV-MW7, and TAV-MW9 (Table 3B-3).

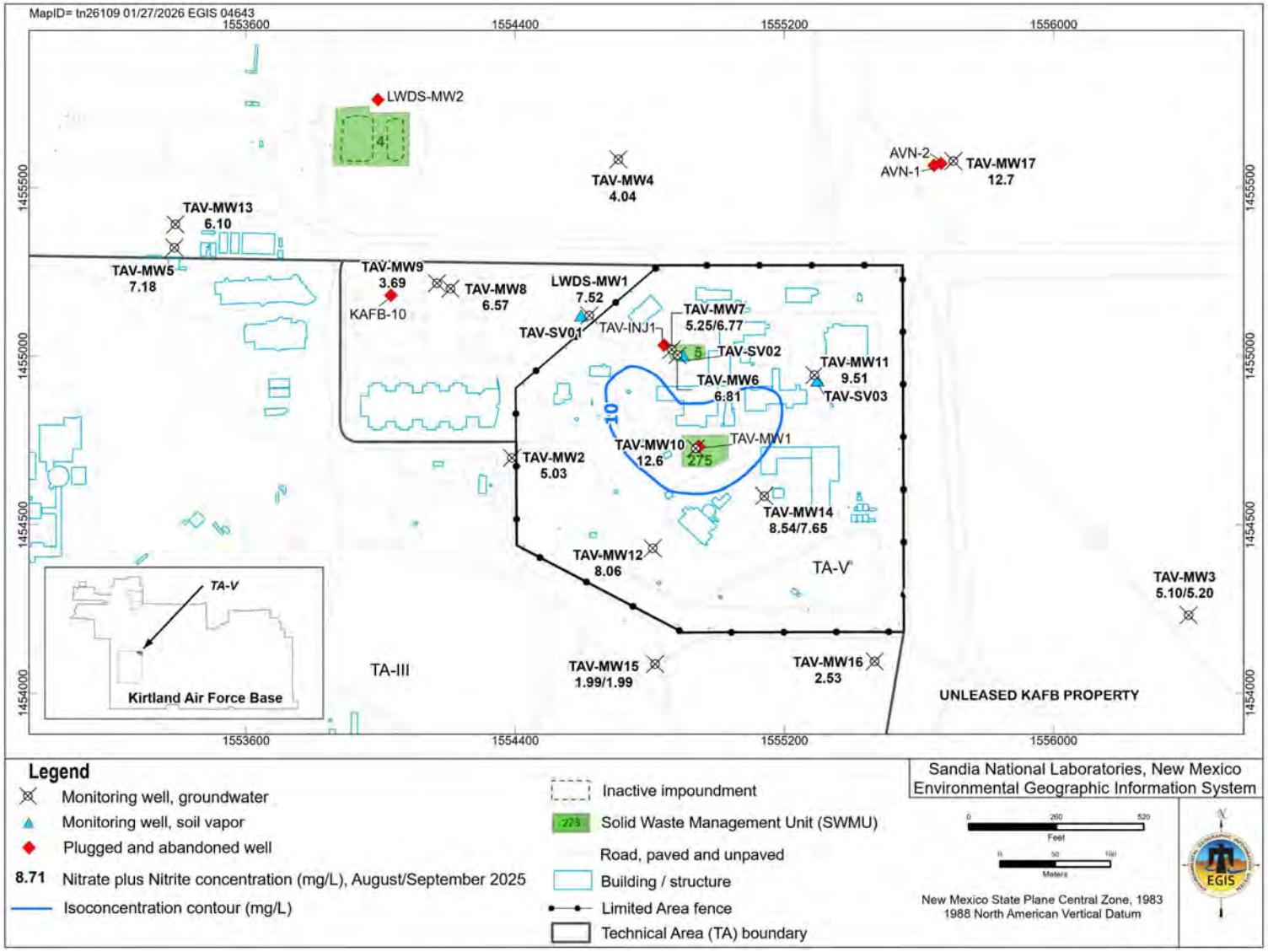


Figure 3-5
Nitrate Plus Nitrite Distribution in the Technical Area-V Groundwater Area of Concern, August/September 2025

3.4.2.2 Annual Sampling Parameters

Table 3B-4 presents the anion and alkalinity results.

Table 3B-5 presents the TAL metals and uranium results.

Table 3B-6 presents the gamma spectroscopy short list, gross alpha/beta activity, and tritium results. Gross alpha activity was measured in accordance with 40 CFR Part 141 and used as a radiological screening tool. Naturally occurring uranium was measured independently (uranium [as mass] concentration determined by metals analysis), and the gross alpha activity measurements were corrected by subtracting the total uranium activity from the uncorrected gross alpha activity results. An SNL/NM health physicist reviewed the results to screen for radiological anomalies and verify that levels were within acceptable limits.

The annual sampling parameter results are consistent with historical results, indicating stability of the general groundwater quality in the TAVG AOC.

3.5 Calendar Year 2025 Quality Control Results

Sections 3.5.1 through 3.5.2 summarize the CY 2025 TAVG AOC field and laboratory QC sample results and their impact on the environmental/environmental duplicate sample results (Chapter 1.0, Section 1.6).

3.5.1 Field Quality Control Samples

The field QC samples (Chapter 1.0, Section 1.6.1) included environmental duplicate, equipment blank, field blank, and trip blank samples.

3.5.1.1 Environmental Duplicate Samples

The environmental duplicate samples (Chapter 1.0, Section 1.6.1.1) were analyzed for VOCs and NPN (Table 3-4). RPDs were calculated for the analytes detected (validated detections) in both the environmental and environmental duplicate samples. The sample pairs for both CY 2025 sampling events showed good agreement based on the RPD goals of less than 20 for organic compounds and less than 35 for inorganic compounds.

- January/February/March 2025 Sampling Event: Environmental duplicate samples were collected from TAV-MW4, TAV-MW6, TAV-MW10, and TAV-MW17. The RPDs for the VOCs ranged from less than 1 to 2; the RPDs for NPN ranged from less than 1 to 25.
- August/September 2025 Sampling Event: Environmental duplicate samples were collected from TAV-MW3, TAV-MW7, TAV-MW14, and TAV-MW15. The RPDs for the VOCs ranged from less than 1 to 11; the RPDs for NPN ranged from less than 1 to 10.

3.5.1.2 Equipment Blank Samples

The equipment blank samples (Chapter 1.0, Section 1.6.1.2) were collected before sampling began and were analyzed for all analytes (Table 3-4).

- January/February/March 2025 Sampling Event: Four equipment blank samples associated with TAV-MW4, TAV-MW6, TAV-MW10, and TAV-MW17 were collected. Bromodichloromethane, chloroform, dibromochloromethane, and methylene chloride were detected in the equipment blank samples. Their results did not affect the environmental/environmental duplicate sample results because they were either not detected in the associated environmental/environmental duplicate samples or were qualified during data validation as not detected, except for chloroform at TAV-MW4.
  - The chloroform result for the equipment blank sample associated with TAV-MW4 did not affect the TAV-MW4 environmental/environmental duplicate sample results because chloroform has been historically detected at this monitoring well.
- August/September 2025 Sampling Event: Four equipment blank samples associated with TAV-MW3, TAV-MW7, TAV-MW14, and TAV-MW15 were collected. Acetone, aluminum, bromodichloromethane, chloroform, chloride, copper, dibromochloromethane, manganese, methylene chloride, NPN, sodium, sulfate, toluene, zinc, and potassium-40 were detected in the equipment blank samples. Their results did not affect the environmental/environmental duplicate sample results because they were not detected in the associated environmental/environmental duplicate samples, were detected in such samples at concentrations greater than five times the equipment blank sample result, or were qualified during data validation as not detected, except for copper, manganese, and zinc at TAV-MW15.
  - Copper, manganese, and zinc in the TAV-MW15 environmental sample were qualified during data validation as not detected because they were detected at concentrations less than five times the associated equipment blank sample result.

3.5.1.3 Field Blank Samples

The field blank samples (Chapter 1.0, Section 1.6.1.3) were analyzed for VOCs.

- January/February/March 2025 Sampling Event: Three field blank samples were collected at TAV-MW8, TAV-MW14, and TAV-MW16. Bromodichloromethane, chloroform, dibromochloromethane, and methylene chloride were detected in the field blank samples. Their results did not affect the environmental sample results because they were either not detected in the associated environmental samples or were qualified during data validation as not detected.
- August/September 2025 Sampling Event: Five field blank samples were collected at TAV-MW2, TAV-MW10, TAV-MW12, TAV-MW14, and TAV-MW16. Acetone, bromodichloromethane, chloroform, dibromochloromethane, and methylene chloride were detected in the field blank samples. Their results did not affect the environmental/environmental duplicate sample results because they were either not detected in the associated environmental/environmental duplicate samples or were qualified during data validation as not detected.

For each sampling event, a field blank sample was collected from the DI water used for decontamination and equipment blank sample collection and was analyzed for all analytes (Table 3-4). The field blank sample results were used to internally verify the quality of the DI water but were not used during data validation to qualify environmental or field QC sample results.

3.5.1.4 Trip Blank Samples

The trip blank samples (Chapter 1.0, Section 1.6.1.4) were analyzed for VOCs.

- January/February/March 2025 Sampling Event: A total of 16 trip blank samples were submitted and analyzed. Acetone and methylene chloride were detected in the trip blank samples. Their results did not affect the environmental/environmental duplicate sample results because they were qualified during data validation as not detected, except for methylene chloride at TAV-MW2 and TAV-MW12.
  - The environmental sample result of methylene chloride at TAV-MW2 and TAV-MW12 was qualified during data validation as not detected because methylene chloride was detected below the PQL in the associated trip blank samples.
- August/September 2025 Sampling Event: A total of 22 trip blank samples were submitted and analyzed. Methylene chloride was detected in the trip blank samples.
  - The environmental/environmental duplicate sample result of methylene chloride at TAV-MW9 and TAV-MW15 was qualified during data validation as not detected because methylene chloride was detected below the PQL in the associated trip blank samples.

3.5.2 Laboratory Quality Control Samples

The laboratory QC samples (Chapter 1.0, Section 1.6.2) included laboratory control, method blank, matrix spike and matrix spike duplicate, surrogate spike, and replicate samples.

The laboratory QC sample results led to the following qualifications of the environmental/environmental duplicate sample results:

- January/February/March 2025 Sampling Event:
  - The environmental/environmental duplicate sample result of methylene chloride at nine TAVG AOC monitoring wells was qualified during data validation as not detected because methylene chloride was detected below the PQL in the associated method blank sample.
- August/September 2025 Sampling Event:
  - The environmental/environmental duplicate sample result of methylene chloride at five TAVG AOC monitoring wells was qualified during data validation as not detected because methylene chloride was detected below the PQL in the associated method blank sample.
  - The environmental sample results of aluminum at TAV-MW3, copper at TAV-MW10, and vanadium at TAV-MW7 were qualified during data validation as not detected because aluminum, copper, and vanadium were detected below the PQL in the associated method blank sample.

3.6 Variances and Nonconformances

All CY 2025 TAVG AOC monitoring activities were performed and documented in accordance with the Consent Order and the CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan.

During the January/February/March 2025 sampling event, LWDS-MW1 purged dry before the minimum purge volume was removed. It was allowed to recover and was sampled the following workday to ensure collection of the most representative groundwater sample possible given the low yield. It was first sampled on February 17, 2025, but no chlorinated hydrocarbons were detected. It was resampled for

VOCs and NPN on March 28, 2025. Tables 3B-1 and 3B-3 (Attachment 3B) present the resample VOC and NPN results, respectively.

During the August/September 2025 sampling event, LWDS-MW1 purged dry before the minimum purge volume was removed. It was allowed to recover and was sampled the following workday to ensure collection of the most representative groundwater sample possible given the low yield. TAV-MW5 was purged of extra volume to meet the stability criteria before sample collection.

3.7 Summary and Conclusions

TCE concentrations in the environmental/environmental duplicate samples collected from six TAVG AOC monitoring wells (LWDS-MW1, TAV-MW4, TAV-MW6, TAV-MW8, TAV-MW10, and TAV-MW11) exceeded the EPA MCL of 5 µg/L in CY 2025. The maximum TCE concentration was 9.24 µg/L in the March 2025 LWDS-MW1 environmental sample.

NPN concentrations in the environmental/environmental duplicate samples collected from three TAVG AOC monitoring wells (LWDS-MW1, TAV-MW10, and TAV-MW17) exceeded the EPA MCL of 10 mg/L in CY 2025. The maximum NPN concentration was 12.9 mg/L in the March 2025 LWDS-MW1 environmental sample.

The CY 2025 TCE and nitrate plumes (Figures 3-5 and 3-6, respectively) are roughly co-located, showing that contaminants are present at low concentrations in the Regional Aquifer near the LWDS Drain Field (SWMU 5) and the Technical Area-V Seepage Pits (SWMU 275).

The CY 2025 analytical results are consistent with historical results. The following conclusions are based on a comprehensive review of historical and current groundwater contamination in the TAVG AOC:

- The COCs are TCE and nitrate.
- The primary sources of TCE and nitrate are two wastewater disposal systems: the LWDS Drain Field (SWMU 5) and the Technical Area-V Seepage Pits (SWMU 275).
- TCE contamination in the Regional Aquifer is attributed to historical wastewater releases containing TCE and subsequent transport through the vadose zone to groundwater.
- The distribution of low TCE concentrations has remained relatively stable and is attributed to fine-grained aquifer lithology, low groundwater flow velocities, dispersion, diffusion, and sorption.
- Nitrate concentrations are laterally widespread both inside and outside the Technical Area-V boundary. The extent of the 10-mg/L NPN isoconcentration contour has remained relatively stable inside the boundary.
- Elevated nitrate concentrations at upgradient monitoring well TAV-MW17, located northeast of Technical Area V, may reflect background conditions and may not be associated with Technical Area-V operations.

Currently, there is no foreseeable risk to human health or the environment from the groundwater contamination in the TAVG AOC. Potential receptors are production wells, with the nearest one located 2.8 mi away, and modeling indicates that the contaminants do not threaten nearby production wells.

3.8 Future Activities

The CY 2026 TAVG AOC monitoring activities will include:

- Quarterly water level measurements and semiannual/annual groundwater sample collection and analysis in accordance with the CY 2026 Comprehensive Site-Wide Groundwater Monitoring Plan.
- Submittal of the CY 2027 Annual Groundwater Monitoring Plan (Chapter 1.0, Section 1.7.1) to the NMED in April 2026.
- Monitoring results reporting in the CY 2026 Annual Groundwater Monitoring and Corrective Measures Progress Report.

4.0 Burn Site Groundwater Area of Concern

4.1 Introduction

This chapter summarizes the CY 2025 monitoring activities and results for the BSG AOC. The monitoring activities were performed and documented in accordance with the Consent Order (NMED, April 2004) (Chapter 1.0, Section 1.2.2) and the CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan (SNL/NM, April 2024) (Chapter 1.0, Section 1.2.4). The monitoring results were compiled from groundwater data collected from the BSG AOC monitoring well network.

Nitrate has been identified as a COC in the groundwater in the BSG AOC based on detections above the EPA MCL and MAC (Chapter 1.0, Section 1.2.2). Low concentrations of nitrate have consistently been detected in the groundwater, which occurs in the fractured bedrock aquifer system (Chapter 1.0, Section 1.3.4). The EPA MCL and MAC for nitrate is 10 mg/L. Since 1996, the maximum nitrate concentration detected in the groundwater has been 49.6 mg/L.

Because the EPA MCL and MAC for nitrate are the same, the term EPA MCL is used in this chapter and its attachments for both regulatory standards.

4.1.1 Location

The BSG AOC is located beneath and around the Lurance Canyon Burn Site facility (Burn Site) in the far eastern part of KAFB (Figure 1-1). Defined by the extent of its monitoring well network, the BSG AOC covers approximately 360 acres.

4.1.2 Site History

The Burn Site has been operational since 1967. It was established primarily to test the fire survivability of transport containers, weapons components, simulated weapons, and satellite components. Historical operations included open detonation of HEs and ammonium-nitrate slurry, as well as open burning of HE compounds, liquid slurry propellants, and solid propellants.

Most HE tests occurred between 1967 and 1975 and were completely phased out by the 1980s. Early burn testing was conducted in unlined pits excavated in native soil and alluvium. By 1975, portable steel burn pans were introduced for open burning. Several engineered test structures were used, typically employing jet propellant fuel and occasionally diesel fuel and gasoline to simulate high-temperature fire environments associated with transportation accidents.

Over the past decade, testing activities at the Burn Site have been significantly reduced. As a result, the Burn Site now primarily consists of the Fire Laboratory for Accreditation of Modeling by Experiment facility and three open pools.

4.1.3 Monitoring History

Groundwater investigations at the BSG AOC began in 1997 following the detection of elevated nitrate concentrations at the Burn Site Well, a non-potable production well that has been inactive since 2003 but serves as a water level monitoring well. Since 1996, 19 monitoring wells have been installed in the BSG AOC; 3 of the 19 have been plugged and abandoned (Table 4-1).

4.1.4 Monitoring Well Network

Table 4-1 lists the monitoring wells installed in the BSG AOC to date; Figure 4-1 shows the well locations. The current BSG AOC monitoring well network consists of 17 monitoring wells.

Table 4-1
Burn Site Groundwater Area of Concern Monitoring Well Network

Well ID	Installation Year	WQ	WL	Comments
12AUP01	1996	NA	NA	Alluvial underflow monitoring well, P&A in November 2012
Burn Site Well	1986	NA	✓	Non-potable bedrock production well, inactive since 2003
CYN-MW1D	1997	NA	NA	Bedrock groundwater well, P&A in November 2012
CYN-MW2S	1997	NA	NA	Alluvial underflow monitoring well, P&A in November 2012
CYN-MW3	1999	NA	✓	Bedrock groundwater well, dry since 2019
CYN-MW4	1999	✓	✓	Bedrock groundwater well
CYN-MW6	2005	NA	✓	Bedrock groundwater well, did not produce sufficient volume for sample collection
CYN-MW7	2005	✓	✓	Bedrock groundwater well
CYN-MW8	2006	✓	✓	Bedrock groundwater well
CYN-MW9	2010	✓	✓	Bedrock groundwater well
CYN-MW10	2010	✓	✓	Bedrock groundwater well
CYN-MW11	2010	✓	✓	Bedrock groundwater well
CYN-MW12	2010	✓	✓	Bedrock groundwater well
CYN-MW13	2012	✓	✓	Bedrock groundwater well, replaced CYN-MW1D
CYN-MW14A	2014	✓	✓	Bedrock groundwater well
CYN-MW15	2014	NA	✓	Bedrock groundwater well, replaced CYN-MW6, did not produce sufficient volume for sample collection
CYN-MW16	2019	✓	✓	Bedrock groundwater well
CYN-MW17	2019	✓	✓	Bedrock groundwater well
CYN-MW18	2019	✓	✓	Bedrock groundwater well
CYN-MW19	2019	✓	✓	Bedrock groundwater well
Total	----	13	17	Total for this reporting period

Notes:
Check marks (✓) indicate that WQ sampling and WL measurements were performed in CY 2025.
Water level checks in CYN-MW3 confirm that the groundwater elevation is below the bottom of the screen (dry).
AUP = alluvial underflow piezometer
CYN = Canyons
ID = identifier
MW = Monitoring Well
NA = not applicable
P&A = plugged and abandoned (decommissioned)
WL = water level
WQ = water quality

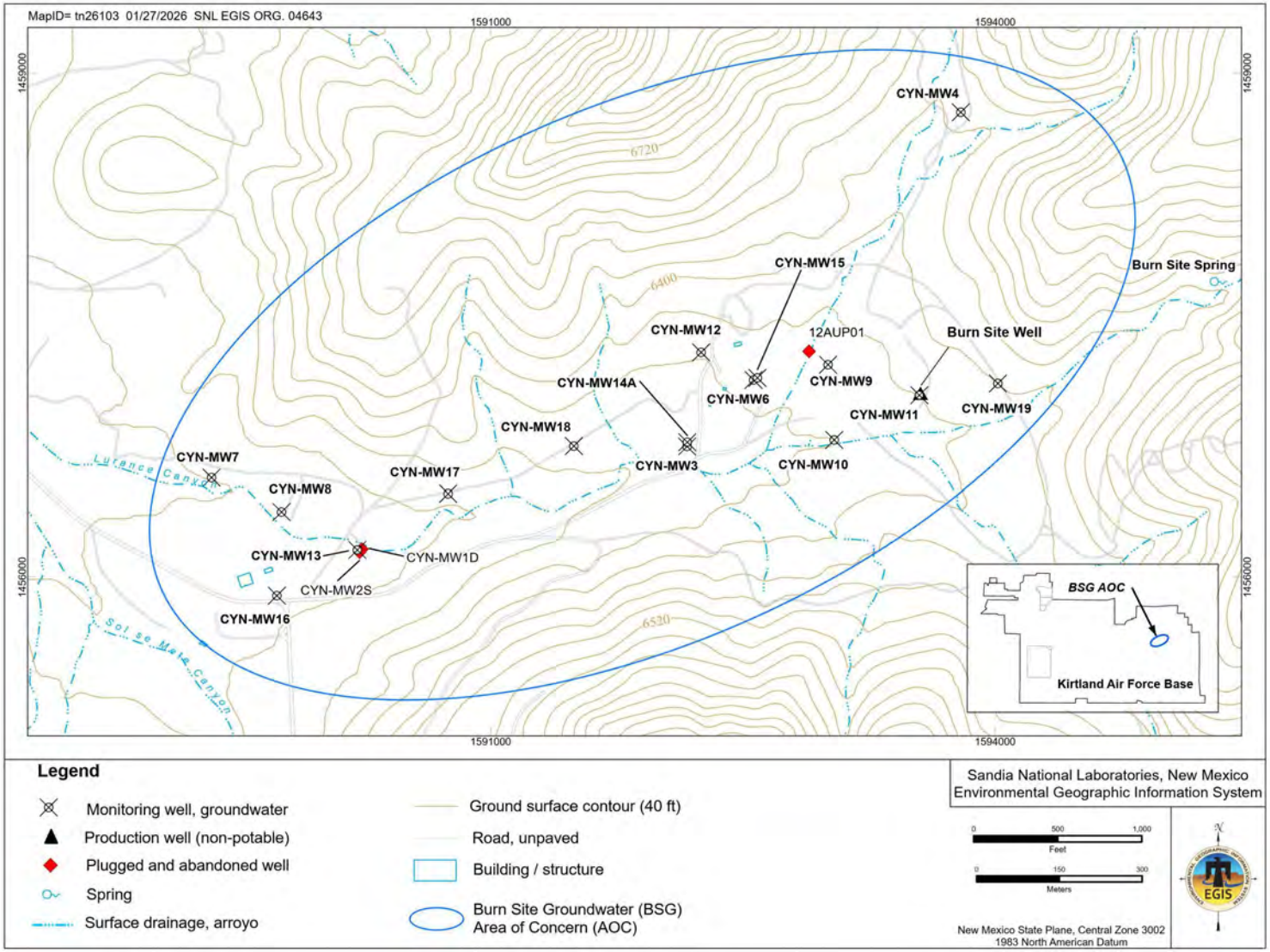


Figure 4-1
Burn Site Groundwater Area of Concern Monitoring Well Locations

4.2 Conceptual Site Model

The Conceptual Site Model for the BSG AOC (SNL/NM, January 2023) (NMED, May 2024) (Figure 4-2) outlines the geological features, groundwater flow, and contaminant transport in the region.

4.2.1 Site Geology and Hydrogeology

The BSG AOC is located in the Manzanita Mountains, which are composed of uplifted Precambrian metamorphic and granitic rocks overlain by Paleozoic sandstones, shales, and limestones. Groundwater occurs mainly in fractured metamorphic and intrusive units such as metavolcanics, quartzite, schists, phyllites, and granitic gneiss. Flow is generally westward through discontinuous fractures and brecciated faults, with low matrix permeability limiting rock matrix flow. Some fractures are sealed by mineral precipitates, forming semiconfined zones that restrict vertical movement and compartmentalize the aquifer system. A 2017 aquifer pumping test confirmed this compartmentalization, showing distinct hydraulic domains where some areas behave as unconfined and respond to precipitation infiltration, while others are semiconfined or confined (SNL/NM, December 2017).

The BSG AOC lies along the eastern edge of the Albuquerque Basin (Chapter 1.0, Section 1.3.3) and features over 500 ft of topographic relief. Lurance Canyon, deeply incised into bedrock, drains ephemeral surface water westward to Arroyo del Coyote. Madera Canyon and Sol se Mete Canyon join Lurance Canyon just west of the BSG AOC; together, they form the headwaters of Arroyo del Coyote, a tributary to Tijeras Arroyo.

The canyon floor contains 21 to 55 ft of unconsolidated sand and gravel from upslope erosion and eolian deposits. Groundwater discharges at ephemeral springs near the mountain base and may underflow into the Regional Aquifer (Chapter 1.0, Section 1.3.4) after crossing the Tijeras Fault Complex. Recharge mainly comes from summer thundershowers and winter snowfall but is limited by high evapotranspiration and fractured rock discontinuities. Hydraulic gradients vary due to structural controls, and water levels have shown minimal seasonal variability over three decades of monitoring.

4.2.2 Sources and Nature of Contamination

The groundwater contamination in the BSG AOC originates from both natural and anthropogenic nitrate sources. The natural nitrate sources include weathering of nitrate-bearing rocks, atmospheric deposition, and concentration by evapotranspiration in alluvial sediments. The anthropogenic nitrate sources include the historical use of ammonium nitrate explosives and burn tests involving HEs and rocket propellants at SWMUs 65 and 94. The NMED has granted Corrective Action Complete status to both SWMUs (NMED, January 2015, as modified), while the BSG AOC remains in the corrective action process. Soil sampling has not identified secondary nitrate sources, likely due to the cessation of chemical releases decades ago and precipitation leaching the nitrate from the soil. Extensive datasets also show that petroleum fuel constituents are not present at levels of concern.

4.2.3 Contaminant Fate and Transport

Nitrate is highly soluble and mobile in the groundwater, transported primarily by advection and dispersion through the fractured bedrock and alluvial deposits. Natural attenuation via biodegradation is limited due to aerobic conditions and lack of suitable carbon sources. Denitrification processes have been found to be insignificant in the fractured bedrock aquifer system, which is compartmentalized, with localized low-permeability zones and semiconfined conditions restricting flow and contaminant migration. With no ongoing primary nitrate sources, the nitrate plumes (Section 4.4.2.1) are stable and primarily controlled by dilution and dispersion.

4.2.4 Potential Receptors and Risk

No potable production wells are located in or near the BSG AOC. Downgradient receptors include Coyote Springs, located approximately 3 mi west, and KAFB, VA, and ABCWUA production wells, located 8 to 12 mi west-northwest. Modeling predicts that the nitrate concentrations will decrease below the EPA MCL through dilution and dispersion in more permeable alluvial deposits before the groundwater reaches these receptors. Consequently, there is no foreseeable risk to human health or the environment from the groundwater contamination in the BSG AOC.

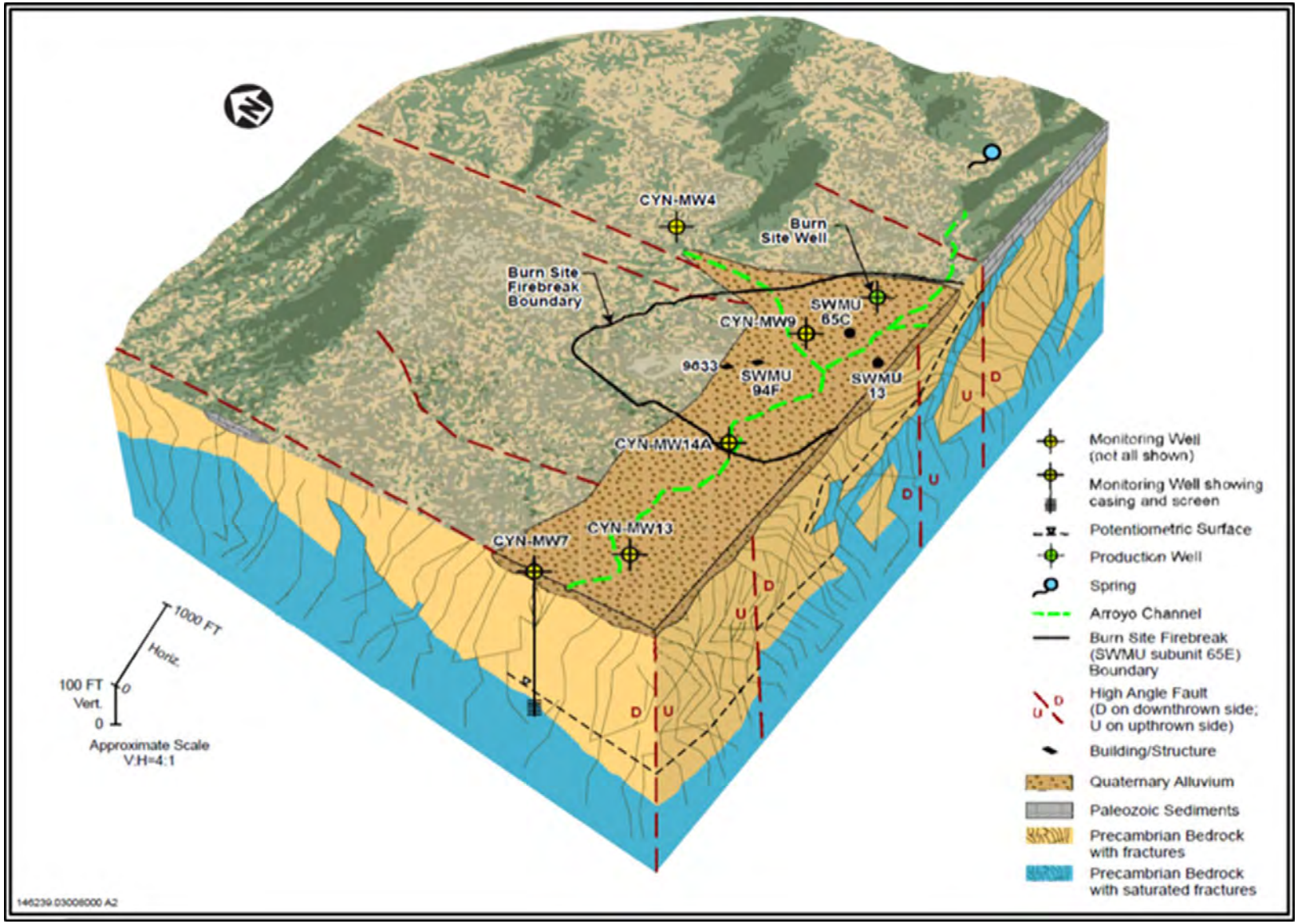


Figure 4-2
Conceptual Site Model for the Burn Site Groundwater Area of Concern

4.3 Calendar Year 2025 Monitoring Activities

The CY 2025 BSG AOC monitoring activities included:

- Quarterly water level measurements (Chapter 1.0, Section 1.4.1) and groundwater elevation calculations for all 17 BSG AOC monitoring wells.
- Semiannual collection and analysis of groundwater samples (Chapter 1.0, Sections 1.4.2 through 1.5) from 13 BSG AOC monitoring wells in May/June and October/November 2025.
- Preparation of monitoring well hydrographs (Attachment 4A), analytical results tables (Attachment 4B), and concentration trend plots (Attachment 4C).
- Submittal of the CY 2026 Comprehensive Site-Wide Groundwater Monitoring Plan (SNL/NM, April 2025) to the NMED.

4.4 Calendar Year 2025 Monitoring Results

Sections 4.4.1 through 4.4.2 summarize the CY 2025 BSG AOC monitoring results.

4.4.1 Water Level Results

The water levels in all 17 BSG AOC monitoring wells were measured quarterly and used to determine groundwater elevations. Table 4-2 presents the October 2025 groundwater elevation data. Note that CYN-MW3 has been dry since 2019.

Table 4-2
Groundwater Elevation Data for the Burn Site Groundwater Area of Concern Monitoring Wells, October 2025

Well ID	Top of Casing (ft amsl) NAVD 88	Date Measured	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)
Burn Site Well	6374.66	01-Oct-2025	109.28	6265.38
CYN-MW3	6313.26	01-Oct-2025	--	--
CYN-MW4	6455.48	01-Oct-2025	248.91	6206.57
CYN-MW6	6343.37	01-Oct-2025	162.07	6181.30
CYN-MW7	6216.35	01-Oct-2025	310.65	5905.70
CYN-MW8	6230.11	01-Oct-2025	326.44	5903.67
CYN-MW9	6360.67	01-Oct-2025	196.17	6164.50
CYN-MW10	6345.45	01-Oct-2025	151.46	6193.99
CYN-MW11	6374.41	01-Oct-2025	109.20	6265.21
CYN-MW12	6345.16	01-Oct-2025	241.73	6103.43
CYN-MW13	6237.79	08-Oct-2025	332.81	5904.98
CYN-MW14A	6315.85	01-Oct-2025	210.38	6105.47
CYN-MW15	6344.44	01-Oct-2025	184.59	6159.85
CYN-MW16	6249.60	01-Oct-2025	344.52	5905.08
CYN-MW17	6268.95	01-Oct-2025	363.82	5905.13
CYN-MW18	6304.02	01-Oct-2025	259.67	6044.35
CYN-MW19	6410.43	01-Oct-2025	45.64	6364.79

Notes:
amsl = above mean sea level
btoc = below top of casing (the measuring point)
CYN = Canyons
ft = foot (feet)
ID = identifier
MW = Monitoring Well
NAVD 88 = North American Vertical Datum of 1988
-- = No data, monitoring well was dry

4.4.1.1 Potentiometric Surface

Figure 4-3 is the October 2025 potentiometric surface map of the fractured bedrock aquifer system in the BSG AOC. The potentiometric surface contours on this figure indicate that the groundwater in the BSG AOC generally flows westward.

A notably steep hydraulic gradient exists between easternmost monitoring well CYN-MW19 and western monitoring well CYN-MW17. Specifically, the groundwater elevation drops by approximately 460 ft over a horizontal distance of approximately 3,200 ft (0.6 mi), resulting in a hydraulic gradient of 0.14 ft.

In contrast, the five westernmost monitoring wells (CYN-MW7, CYN-MW8, CYN-MW13, CYN-MW16, and CYN-MW17) are distributed over approximately 1,400 ft along the canyon and exhibit minimum variability in groundwater elevation, with an approximately 2-ft difference. The groundwater elevation difference between CYN-MW17 and CYN-MW7 is less than 1 ft. Interestingly, although CYN-MW7 is located further west (the presumed downgradient direction), its groundwater elevation is slightly higher than CYN-MW17's groundwater elevation. Among these western monitoring wells, CYN-MW8 has the lowest groundwater elevation, making it the most downgradient monitoring well.

The variability of hydraulic gradients in Lurance Canyon suggests that localized controls are influenced by brecciated fault zones within the low-permeability fractured bedrock in the BSG AOC. The nearly flat hydraulic gradient observed in the western part of the BSG AOC may be related to several high-angle faults that offset Precambrian and Paleozoic bedrock west of CYN-MW18 (Karlstrom et al., 2000). Alternatively, this nearly flat hydraulic gradient may have resulted from localized groundwater flow originating from Sol se Mete Canyon, a large surface drainage south of the BSG AOC that converges with Lurance Canyon west of CYN-MW7 and CYN-MW16.

4.4.1.2 Hydrographs

The CY 2025 BSG AOC monitoring well hydrographs (Attachment 4A, Figures 4A-1 through 4A-4) show the following water level and groundwater elevation trends:

- The water levels in the Paleozoic and Precambrian bedrock are not affected by pumping of the Regional Aquifer west of the Tijeras Fault Complex and show no significant regular seasonal fluctuations. No correlation in the water level changes among the monitoring wells supports the conclusion that the low-permeability fractured bedrock in the BSG AOC is poorly interconnected. The water level variability likely reflects local heterogeneities in hydraulic properties associated with water-bearing fracture zones.
- The Burn Site Well and CYN-MW11 are located 12 ft apart and have identical groundwater elevations (Figure 4A-1).
- The groundwater elevations at the monitoring wells in the upper (eastern) part of the canyon, most notably the Burn Site Well (Figure 4A-1) and CYN-MW6, CYN-MW9, CYN-MW10, CYN-MW11, and CYN-MW15 (Figure 4A-2), increased significantly during a two-year interval starting in early 2014, apparently in response to storm events in the 2013 and 2015 monsoon seasons. Similarly, the groundwater elevations at several monitoring wells, most notably the Burn Site Well and CYN-MW11 (Figure 4A-1) and CYN-MW10 (Figure 4A-2), increased significantly in October 2025, apparently in response to September 2025 storm events. These increases are primarily episodic, reflecting responses to discrete storm events rather than predictable seasonal cycles.
- The groundwater elevations at the five monitoring wells in the lower (western) part of the canyon (CYN-MW7, CYN-MW8, CYN-MW13, CYN-MW16, and CYN-MW17) have exhibited little variability other than a steady decline of approximately 0.67 ft/yr (Figure 4A-4).
- The groundwater elevations at all 17 monitoring wells have been declining (Figures 4A-1 through 4A-4). Up to CY 2025, the decline rates ranged from 0.14 ft/yr (the slowest at CYN-MW19) to 4.26 ft/yr (the fastest at the Burn Site Well), with an average decline rate of 1.74 ft/yr.

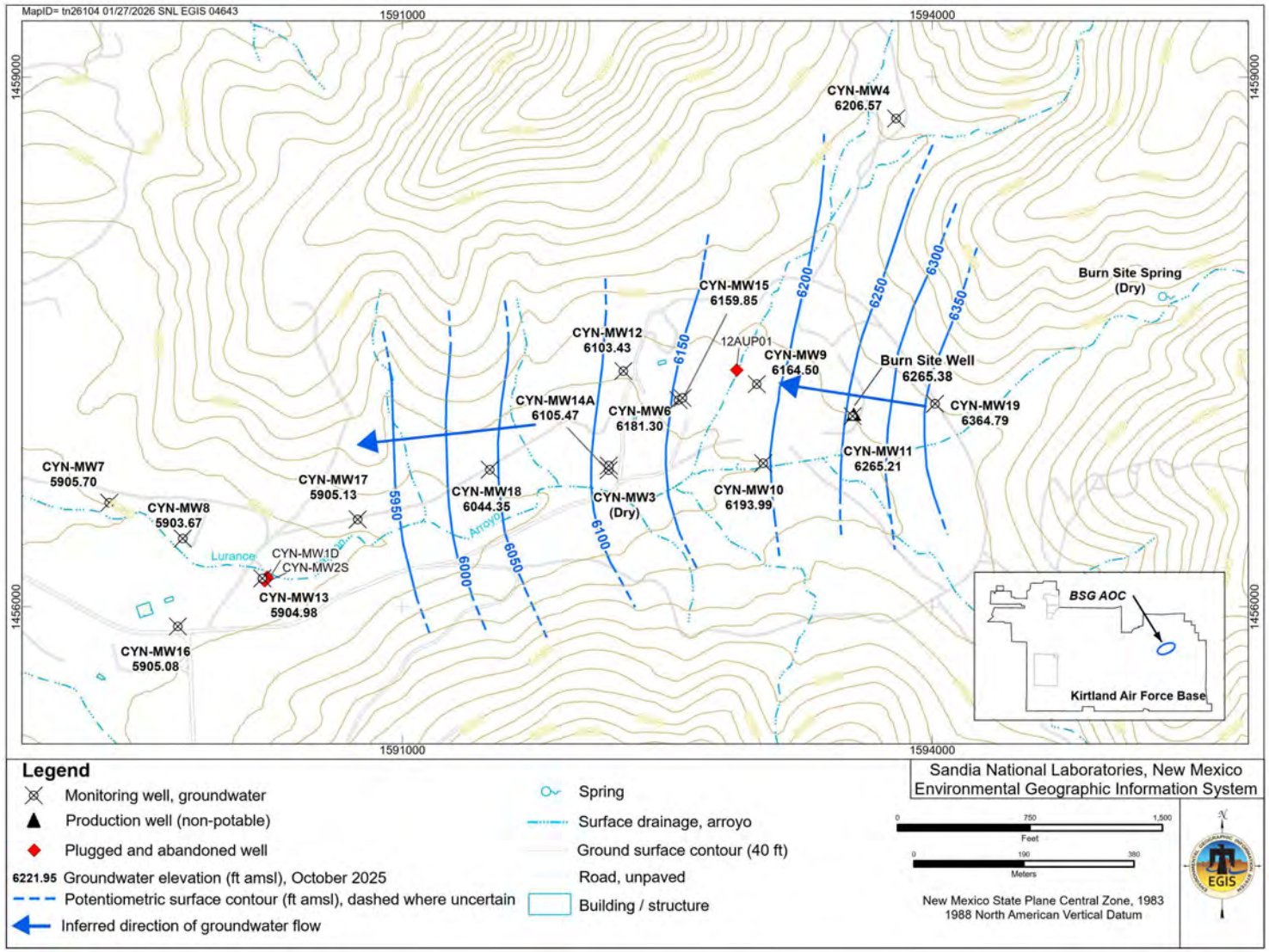


Figure 4-3
Potentiometric Surface of the Fractured Bedrock Aquifer System in the Burn Site Groundwater Area of Concern, October 2025

4.4.2 Groundwater Sample Analytical Results

The CY 2025 sampling events were conducted in May/June and October/November 2025. Groundwater samples were collected from 13 BSG AOC monitoring wells. Table 4-3 summarizes both sampling events; Table 4-4 lists the sampling parameters for each monitoring well for each sampling event. The sampling parameters included NPN for measuring nitrate, the COC; DRO and GRO because fuel constituents have been historically detected (NMED, April 2004); and the annual sampling parameters requested by the NMED (VOCs, HE compounds, anions, alkalinity, TAL metals, gamma spectroscopy short list, gross alpha/beta activity, isotopic uranium, and tritium) (NMED, July 2023). The tables reflect the CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan.

Table 4-3
Burn Site Groundwater Area of Concern Monitoring Well Sampling Events, Calendar Year 2025

Date of Sampling Event	Monitoring Wells Sampled		Monitoring Plan
May/June 2025	CYN-MW4 CYN-MW7 CYN-MW8 CYN-MW9 CYN-MW10 CYN-MW11 CYN-MW12	CYN-MW13 CYN-MW14A CYN-MW16 CYN-MW17 CYN-MW18 CYN-MW19	CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan
October/November 2025	CYN-MW4 CYN-MW7 CYN-MW8 CYN-MW9 CYN-MW10 CYN-MW11 CYN-MW12	CYN-MW13 CYN-MW14A CYN-MW16 CYN-MW17 CYN-MW18 CYN-MW19	CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan

Notes:
CY = calendar year
CYN = Canyons
MW = Monitoring Well

Table 4-4
Burn Site Groundwater Area of Concern Monitoring Well Sampling Parameters, Calendar Year 2025

Parameters	May/June 2025	
NPN DRO GRO VOCs HE compounds Anions (bromide, chloride, fluoride, sulfate) Alkalinity TAL metals Gamma spectroscopy short list* Gross alpha/beta activity Isotopic uranium Tritium	CYN-MW4 CYN-MW7 CYN-MW8 CYN-MW9 CYN-MW9 (Duplicate) CYN-MW10 CYN-MW11 CYN-MW11 (Duplicate) CYN-MW12	CYN-MW13 CYN-MW13 (Duplicate) CYN-MW14A CYN-MW16 CYN-MW17 CYN-MW18 CYN-MW18 (Duplicate) CYN-MW19
Parameters	**October/November 2025**	
NPN DRO GRO	CYN-MW4 CYN-MW7 CYN-MW7 (Duplicate) CYN-MW8 CYN-MW9 CYN-MW10 CYN-MW10 (Duplicate) CYN-MW11 CYN-MW12	CYN-MW13 CYN-MW14A CYN-MW14A (Duplicate) CYN-MW16 CYN-MW16 (Duplicate) CYN-MW17 CYN-MW18 CYN-MW19

Notes:
*Gamma spectroscopy short list includes americium-241, cesium-137, cobalt-60, and potassium-40.
For the May/June 2025 sampling event, the environmental duplicate samples were analyzed for NPN, DRO, and GRO only.
CYN = Canyons
DRO = diesel range organics
GRO = gasoline range organics
HE = high explosive
MW = Monitoring Well
NPN = nitrate plus nitrite
TAL = Target Analyte List
VOC = volatile organic compound

Sections 4.4.2.1 through 4.4.2.3 summarize the analytical results. Attachment 4B presents the analytical results tables (Tables 4B-1 through 4B-8) and the final field water quality parameter measurements (Table 4B-9). Attachment 4C (Figures 4C-1 through 4C-6) presents concentration trend plots for the monitoring wells where NPN concentrations exceeded the EPA MCL. Data Package 3 contains the data validation reports and analytical laboratory data packages.

4.4.2.1 Constituent of Concern

Table 4B-1 presents the NPN results.

- NPN exceeded the EPA MCL of 10 mg/L in the environmental/environmental duplicate samples collected from six BSG AOC monitoring wells (CYN-MW9, CYN-MW10, CYN-MW11, CYN-MW12, CYN-MW13, and CYN-MW14A), with a maximum concentration of 39.5 mg/L in the June 2025 CYN-MW10 environmental sample.
- NPN was detected in the environmental/environmental duplicate samples collected from the other BSG AOC monitoring wells, but the concentrations were below the EPA MCL.

Figures 4C-1 through 4C-6 present the NPN concentration trend plots for CYN-MW9, CYN-MW10, CYN-MW11, CYN-MW12, CYN-MW13, and CYN-MW14A, respectively. These plots show the following:

- CYN-MW9 (Figure 4C-1): The NPN concentrations were 34.3/34.6 and 30.3 mg/L in June and November 2025, respectively. The overall NPN concentration trend is slightly increasing, with concentrations ranging from approximately 29 to 50 mg/L.
- CYN-MW10 (Figure 4C-2): The NPN concentrations were 39.5 and 15.2/16.6 mg/L in June and November 2025, respectively. The overall NPN concentration trend is increasing, with concentrations ranging from approximately 4 to 40 mg/L.
- CYN-MW11 (Figure 4C-3): The NPN concentrations were 8.70/9.20 and 12.8 mg/L in May and November 2025, respectively. The overall NPN concentration trend is decreasing, with concentrations ranging from approximately 7 to 26 mg/L.
- CYN-MW12 (Figure 4C-4): The NPN concentrations were 21.8 and 17.5 mg/L in June and November 2025, respectively. The overall NPN concentration trend is increasing, with concentrations ranging from approximately 11 to 23 mg/L.
- CYN-MW13 (Figure 4C-5): The NPN concentrations were 25.1/25.9 and 25.0 mg/L in June and November 2025, respectively. The overall NPN concentration trend is decreasing, with concentrations ranging from approximately 24 to 40 mg/L.
- CYN-MW14A (Figure 4C-6): The NPN concentrations were 16.3 and 13.7/14.2 mg/L in May and November 2025, respectively. The NPN concentrations do not exhibit a significant trend, with concentrations ranging from approximately 10 to 16 mg/L.

NPN concentrations previously exceeded the EPA MCL in groundwater samples collected from CYN-MW1D, CYN-MW3, CYN-MW6, and CYN-MW15. CYN-MW1D was decommissioned in 2012 and replaced by CYN-MW13 (Table 4-1). CYN-MW3 is currently dry. CYN-MW6 and CYN-MW15 cannot produce sufficient volume for sample collection and are retained for water level measurements only. Although NPN concentrations at CYN-MW6 and CYN-MW15 historically exceeded the EPA MCL, the monitoring wells located both upgradient and downgradient adequately define the NPN distribution in the eastern part of the canyon.

Figure 4-4 shows the NPN isoconcentration contours for the October/November 2025 sampling event.

- There are two distinct plumes with elevated NPN concentrations. It is unknown if the two plumes are derived from the same source as the horizontal distance between their centers is approximately 4,000 ft.
- NPN concentrations below the EPA MCL in groundwater samples collected from CYN-MW17 and CYN-MW18 demonstrate that the two plumes are not contiguous.
- NPN concentrations are currently below the EPA MCL at CYN-MW8/MW16 and CYN-MW19, which delineate the western and eastern extents of the two plumes, respectively.
- The general location and shape of the two plumes have not changed significantly since CY 2019.

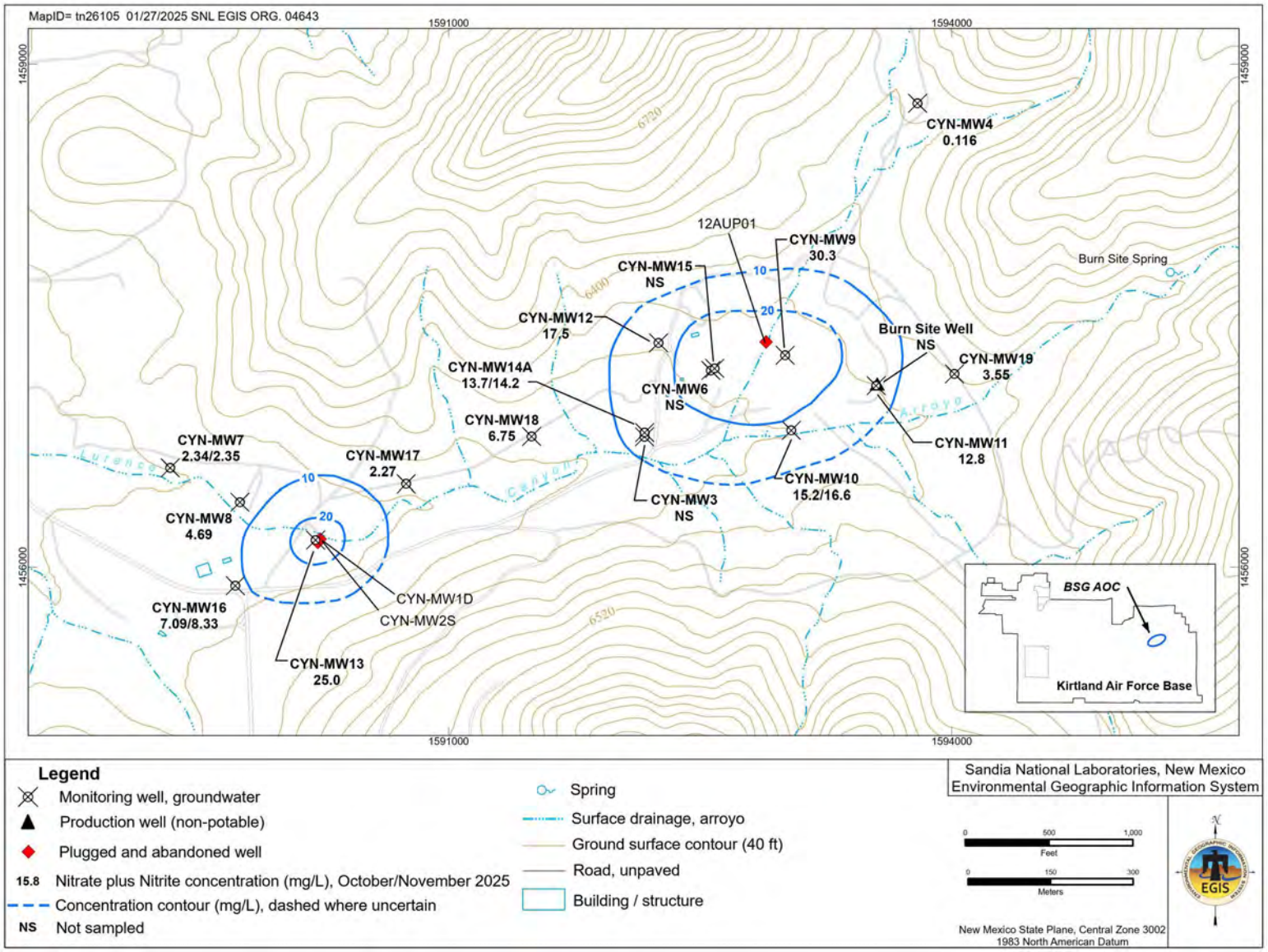


Figure 4-4
Nitrate Plus Nitrite Distribution in the Burn Site Groundwater Area of Concern, October/November 2025

4.4.2.2 Diesel Range Organics and Gasoline Range Organics

Table 4B-2 presents the DRO and GRO results. There is no EPA MCL or MAC for DRO or GRO.

- GRO was not detected in any samples collected during either CY 2025 sampling event.
- DRO was detected in the following five samples collected during the May/June 2025 sampling event: CYN-MW8 environmental sample, CYN-MW9 environmental/environmental duplicate samples, CYN-MW12 environmental sample, and CYN-MW18 environmental sample. All five results were estimated (qualified as J or J-).
- DRO was detected in the following three samples collected during the October/November 2025 sampling event: CYN-MW8 environmental sample and CYN-MW16 environmental/environmental duplicate samples. All three results were estimated (qualified as J or J+).
- DRO was also detected in the October 2025 CYN-MW17 environmental sample but was qualified during data validation as not detected (Section 4.5.2).

4.4.2.3 Annual Sampling Parameters

Table 4B-3 presents the detected VOC and HE compound results; Tables 4B-4 and 4B-5 list the corresponding MDLs, respectively.

- No VOCs were qualified during data validation as detected.
- HMX, an HE compound, was detected in the May/June 2025 CYN-MW10 and CYN-MW16 environmental samples. Both results were estimated (J-qualified).

Table 4B-6 presents the anion and alkalinity results.

Table 4B-7 presents the TAL metals results.

Table 4B-8 presents the gamma spectroscopy short list, gross alpha/beta activity, isotopic uranium, and tritium results. Gross alpha activity was measured in accordance with 40 CFR Part 141 and used as a radiological screening tool. An SNL/NM health physicist reviewed the results to screen for radiological anomalies and verify that levels were within acceptable limits.

The annual sampling parameter results are consistent with historical results, indicating stability of the general groundwater quality in the BSG AOC.

4.5 Calendar Year 2025 Quality Control Results

Sections 4.5.1 through 4.5.2 summarize the CY 2025 BSG AOC field and laboratory QC sample results and their impact on the environmental/environmental duplicate sample results (Chapter 1.0, Section 1.6).

4.5.1 Field Quality Control Samples

The field QC samples (Chapter 1.0, Section 1.6.1) included environmental duplicate, equipment blank, field blank, and trip blank samples.

4.5.1.1 Environmental Duplicate Samples

The environmental duplicate samples (Chapter 1.0, Section 1.6.1.1) were analyzed for NPN, DRO, and GRO (Table 4-4). RPDs were calculated for the analytes detected (validated detections) in both the environmental and environmental duplicate samples. Except as noted below, the sample pairs for both CY 2025 sampling events showed good agreement based on the RPD goals of less than 20 for organic compounds and less than 35 for inorganic compounds.

- May/June 2025 Sampling Event: Environmental duplicate samples were collected from CYN-MW9, CYN-MW11, CYN-MW13, and CYN-MW18. The RPDs for NPN ranged from less than 1 to 6; the RPD for DRO was 11.
- October/November 2025 Sampling Event: Environmental duplicate samples were collected from CYN-MW7, CYN-MW10, CYN-MW14A, and CYN-MW16. The RPDs for NPN ranged from less than 1 to 16. The DRO results for the CYN-MW16 environmental/environmental duplicate samples yielded an RPD of 24, exceeding the RPD goal of less than 20 for organics (Table 4B-2). However, both DRO results were estimated (qualified as J+).

4.5.1.2 Equipment Blank Samples

The equipment blank samples (Chapter 1.0, Section 1.6.1.2) were collected before sampling began and were analyzed for all analytes (Table 4-4).

- May/June 2025 Sampling Event: Four equipment blank samples associated with CYN-MW9, CYN-MW11, CYN-MW13, and CYN-MW18 were collected. Acetone, bromodichloromethane, calcium, chloride, chloroform, copper, dibromochloromethane, magnesium, manganese, methylene chloride, sodium, and sulfate were detected in the equipment blank samples. Their results did not affect the environmental/environmental duplicate sample results because they were not detected in the associated environmental/environmental duplicate samples, were detected in such samples at concentrations greater than five times the equipment blank sample result, or were qualified during data validation as not detected, except for copper at CYN-MW9 and CYN-MW13 and manganese at CYN-MW11.
  - Copper in the CYN-MW9 and CYN-MW13 environmental samples and manganese in the CYN-MW11 environmental sample were qualified during data validation as not detected because they were detected below the PQL in the associated equipment blank samples.
- October/November 2025 Sampling Event: Four equipment blank samples associated with CYN-MW7, CYN-MW10, CYN-MW14A, and CYN-MW16 were collected. DRO and NPN were detected in the equipment blank samples. Their results did not affect the environmental/environmental duplicate sample results because they were either not detected in the associated environmental/environmental duplicate samples or were detected in such samples at concentrations greater than five times the equipment blank sample result.

4.5.1.3 Field Blank Samples

The field blank samples (Chapter 1.0, Section 1.6.1.3) were analyzed for GRO (both CY 2025 sampling events) and VOCs (May/June 2025 sampling event).

- May/June 2025 Sampling Event: Four field blank samples were collected at CYN-MW4, CYN-MW7, CYN-MW12, and CYN-MW16. GRO was not detected in the field blank samples. Acetone, bromodichloromethane, chloroform, dibromochloromethane, and methylene chloride were detected in the field blank samples. Their results did not affect the environmental sample results because they were either not detected in the associated environmental samples or were qualified during data validation as not detected.
- October/November 2025 Sampling Event: Three field blank samples were collected at CYN-MW11, CYN-MW12, and CYN-MW17. GRO was not detected in the field blank samples.

For each sampling event, a field blank sample was collected from the DI water used for decontamination and equipment blank sample collection and was analyzed for all analytes (Table 4-4). The field blank sample results were used to internally verify the quality of the DI water but were not used during data validation to qualify environmental or field QC sample results.

4.5.1.4 Trip Blank Samples

The trip blank samples (Chapter 1.0, Section 1.6.1.4) were analyzed for GRO (both CY 2025 sampling events) and VOCs (May/June 2025 sampling event).

- May/June 2025 Sampling Event: A total of 18 trip blank samples were submitted and analyzed. GRO was not detected in the trip blank samples. Acetone, chloroform, and methylene chloride were detected in the trip blank samples. Their results did not affect the environmental sample results because they were either not detected in the associated environmental samples or were qualified during data validation as not detected, except for methylene chloride at CYN-MW10, CYN-MW12, and CYN-MW18.
  - Methylene chloride in the CYN-MW10, CYN-MW12, and CYN-MW18 environmental samples was qualified during data validation as not detected because it was detected below the PQL in the associated trip blank samples.
- October/November 2025 Sampling Event: A total of 18 trip blank samples were submitted and analyzed. GRO was not detected in the trip blank samples.

4.5.2 Laboratory Quality Control Samples

The laboratory QC samples (Chapter 1.0, Section 1.6.2) included laboratory control, method blank, matrix spike and matrix spike duplicate, surrogate spike, and replicate samples.

The laboratory QC sample results led to the following qualifications of the environmental/environmental duplicate sample results:

- May/June 2025 Sampling Event:
  - The environmental sample results of acetone at CYN-MW9 and methylene chloride at 10 BSG AOC monitoring wells were qualified during data validation as not detected because acetone and methylene chloride were detected below the PQL in the associated method blank sample.
  - The environmental sample result of copper at CYN-MW18 was qualified during data validation as not detected because copper was detected below the PQL in the associated method blank sample.
  - The environmental sample result of manganese at CYN-MW9 and CYN-MW13 was qualified during data validation as rejected because the manganese result for the interference check sample was outside acceptance criteria.
  - The potassium-40 activities at CYN-MW14A and CYN-MW16 were rejected by the analytical laboratory due to the peak not meeting identification criteria.
- October/November 2025 Sampling Event:
  - The environmental sample result of DRO at CYN-MW17 was qualified during data validation as not detected because DRO was detected below the PQL in the associated method blank sample.

4.6 Variances and Nonconformances

All CY 2025 BSG AOC monitoring activities were performed and documented in accordance with the Consent Order and the CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan.

In May 2023, SNL/NM personnel were unable to sample CYN-MW15 for the first time in eight years as it purged dry and the water level did not recover the following day. SNL/NM personnel subsequently made three additional attempts to sample CYN-MW15 during the October/November 2023, May/June 2024, and October/November 2024 sampling events, but each time, it purged dry and did not recover sufficient volume for sample collection. In September 2025, SNL/NM personnel performed activities aimed at increasing the well yield, including video inspections, surging CYN-MW15 with a bailer, brushing the submerged well screen, and measuring water levels. However, despite these yield improvement activities, SNL/NM personnel were unable to sample CYN-MW15 in October 2025 due to insufficient volume recovery after purging. Therefore, it will be retained for water level measurements only.

4.7 Summary and Conclusions

NPN concentrations in the environmental/environmental duplicate samples collected from six BSG AOC monitoring wells (CYN-MW9, CYN-MW10, CYN-MW11, CYN-MW12, CYN-MW13, and CYN-MW14A) exceeded the EPA MCL of 10 mg/L in CY 2025. The maximum NPN concentration was 39.5 mg/L in the June 2025 CYN-MW10 environmental sample.

DRO was detected at estimated concentrations in several samples and GRO was not detected in any samples in CY 2025.

The CY 2025 nitrate plumes (Figure 4-4) are spatially distinct, separated by approximately 4,000 ft within the fractured bedrock aquifer system.

The CY 2025 analytical results are consistent with historical results. The following conclusions are based on a comprehensive review of historical and current groundwater contamination in the BSG AOC:

- The COC is nitrate.
- The primary sources of nitrate are historical use of ammonium nitrate explosives and burn testing activities at SWMUs 65 and 94.
- Nitrate contamination is attributed to historical releases and subsequent transport through the fractured bedrock and alluvial deposits.
- The fractured bedrock aquifer system is compartmentalized, with localized low-permeability zones and semiconfined conditions that restrict contaminant migration.
- Natural attenuation of nitrate is limited due to aerobic conditions and lack of suitable carbon sources for denitrification.
- The extent of nitrate contamination has remained relatively stable within the BSG AOC.
- Elevated nitrate concentrations at some locations may also be attributed to natural sources such as weathering of nitrate-bearing rocks and atmospheric deposition.

Currently, there is no foreseeable risk to human health or the environment from the groundwater contamination in the BSG AOC. Potential receptors are production wells located at least 8 mi downgradient, and modeling indicates that the contaminants do not threaten any production well.

4.8 Future Activities

Remedy implementation at the BSG AOC will begin on January 1, 2026. The CY 2026 BSG AOC remedy implementation activities will include:

- Groundwater monitoring, including quarterly water level measurements and annual groundwater sample collection and analysis, in accordance with the CY 2026 Comprehensive Site-Wide Groundwater Monitoring Plan.
- Submittal of the CY 2027 Annual Groundwater Monitoring Plan (Chapter 1.0, Section 1.7.1) to the NMED in April 2026.
- Remedy progress reporting in the CY 2026 Annual Groundwater Monitoring and Corrective Measures Progress Report.

5.0 Tijeras Arroyo Groundwater Area of Concern

5.1 Introduction

This chapter presents the first annual corrective measures (i.e., remedy) progress report for the TAG AOC. It summarizes the CY 2025 remedy implementation activities and results in accordance with the TAG CMI Plan (SNL/NM, June 2023) (Chapter 1.0, Section 1.2.3). The monitoring results were compiled from groundwater data collected from the TAG AOC monitoring well network.

The TAG AOC is located in the north-central part of KAFB. It covers approximately 1.82 mi^2 and spans Technical Areas I, II, and IV (Figure 1-1).

Nitrate has been identified as a COC in the groundwater in the TAG AOC based on detections above the EPA MCL and MAC (Chapter 1.0, Section 1.2.2). The EPA MCL and MAC for nitrate is 10 mg/L. Because the EPA MCL and MAC for nitrate are the same, the term EPA MCL is used in this chapter and its attachments for both regulatory standards.

The groundwater in the TAG AOC occurs in the Regional Aquifer and the PGWS that lies above it (Chapter 1.0, Section 1.3.4). The groundwater contamination primarily originates from anthropogenic nitrate sources, specifically historical wastewater and septic water discharges associated with past activities at the site. The selected final remedy for the groundwater contamination is MNA. MNA consists of actively monitoring the groundwater at specified intervals and tracking changes in groundwater quality and system conditions. This ongoing effort aims to verify that the nitrate concentrations are decreasing below the EPA MCL or that the PGWS is naturally dewatering, further reducing risks to human health and the environment.

5.1.1 Conceptual Site Model

The Conceptual Site Model for the TAG AOC (SNL/NM, February 2018) (NMED, January 2023) (Figure 5-1) outlines the geological features, groundwater flow, and contaminant transport in the region.

5.1.1.1 Site Geology and Hydrogeology

The TAG AOC is located along the eastern edge of the Albuquerque Basin (Chapter 1.0, Section 1.3.3) and features a complex hydrogeologic setting with two primary water-bearing zones: the PGWS and the Regional Aquifer. The PGWS is a shallow, discontinuous water-bearing zone within silty sands, clayey layers, and poorly sorted gravels of the SFG alluvial-fan lithofacies. Beneath the PGWS lies the Perching Horizon, a low-permeability silty and clayey sediment layer approximately 5 to 11 ft thick. The Regional Aquifer consists of both alluvial-fan and ARG fluvial lithofacies composed of unconsolidated to poorly cemented gravel, sand, silt, and clay. The PGWS and the deeper Regional Aquifer are separated by the Perching Horizon and an approximately 200-ft-thick sequence of unsaturated sediments.

The PGWS is a thin dissipating unit that was formed largely by historical anthropogenic discharges and is thinning due to reduced recharge and downward migration through the Perching Horizon. The groundwater in the PGWS flows primarily southeastward, influenced by stratigraphic dip and depositional fabric, while the groundwater in the Regional Aquifer flows generally northwest toward KAFB, VA, and ABCWUA production wells near the northwest corner of KAFB. A localized Merging Zone in the southeast corner of the TAG AOC hydraulically connects the PGWS and the Regional Aquifer.

5.1.1.2 Sources and Nature of Contamination

The groundwater contamination in the TAG AOC primarily originates from anthropogenic nitrate sources, specifically historical wastewater and septic water discharges associated with past activities at the site. The greatest volume of discharges occurred at the Old Acid Waste Line (SWMU 46), which operated from 1948 to 1974. Discharges also occurred from 1947 to 1992 at smaller septic systems and outfalls collectively known as the Technical Area-II Discharges site. The anthropogenic nitrate sources may also include the former KAFB sewage lagoons, former base housing, leaking sanitary sewer lines, and the KAFB Tijeras Arroyo Golf Course (SNL/NM, February 2018). Natural nitrate sources, such as geologic deposits and decomposing organic matter, may also contribute to background concentrations.

The NMED has granted Corrective Action Complete status to all SWMUs located in the TAG AOC (NMED, January 2015, as modified), while the TAG AOC remains in the corrective action process.

5.1.1.3 Contaminant Fate and Transport

Nitrate is highly soluble and mobile, occurring primarily in the dissolved phase, and does not significantly sorb to sediments. Nitrate transport in the TAG AOC occurs primarily through advection and dispersion within the PGWS and the Regional Aquifer. The Perching Horizon acts as a semi-confining layer, limiting vertical flow and causing the PGWS to slowly dewater as the groundwater migrates downward. Natural attenuation processes such as biodegradation have been found to be insignificant in the Regional Aquifer. Modeling predicts that the nitrate concentrations will decrease over time due to dilution and dispersion as the groundwater moves through the system (SNL/NM, February 2018).

5.1.1.4 Potential Receptors and Risk

Potential receptors include KAFB, VA, and ABCWUA production wells located northwest of the TAG AOC. No production wells are screened in the PGWS, and there is no potable use of groundwater within the TAG AOC boundary. Modeling predicts that the nitrate concentrations in the PGWS will decrease below the EPA MCL before the groundwater reaches the production wells (SNL/NM, February 2018). Consequently, there is no foreseeable risk to human health or the environment from the groundwater contamination in the TAG AOC.

5.1.2 Remedial Objectives

The *Revised Tijeras Arroyo Groundwater Current Conceptual Model and Corrective Measures Evaluation Report* (Revised TAG CCM/CME Report) (SNL/NM, February 2018) identified nitrate as the only COC for the TAG AOC. Therefore, the remedial objectives are to measure the nitrate concentrations, monitor the lateral extent of the nitrate contamination in the PGWS, and prevent exposure until the cleanup goals are met or the PGWS naturally dewaters.

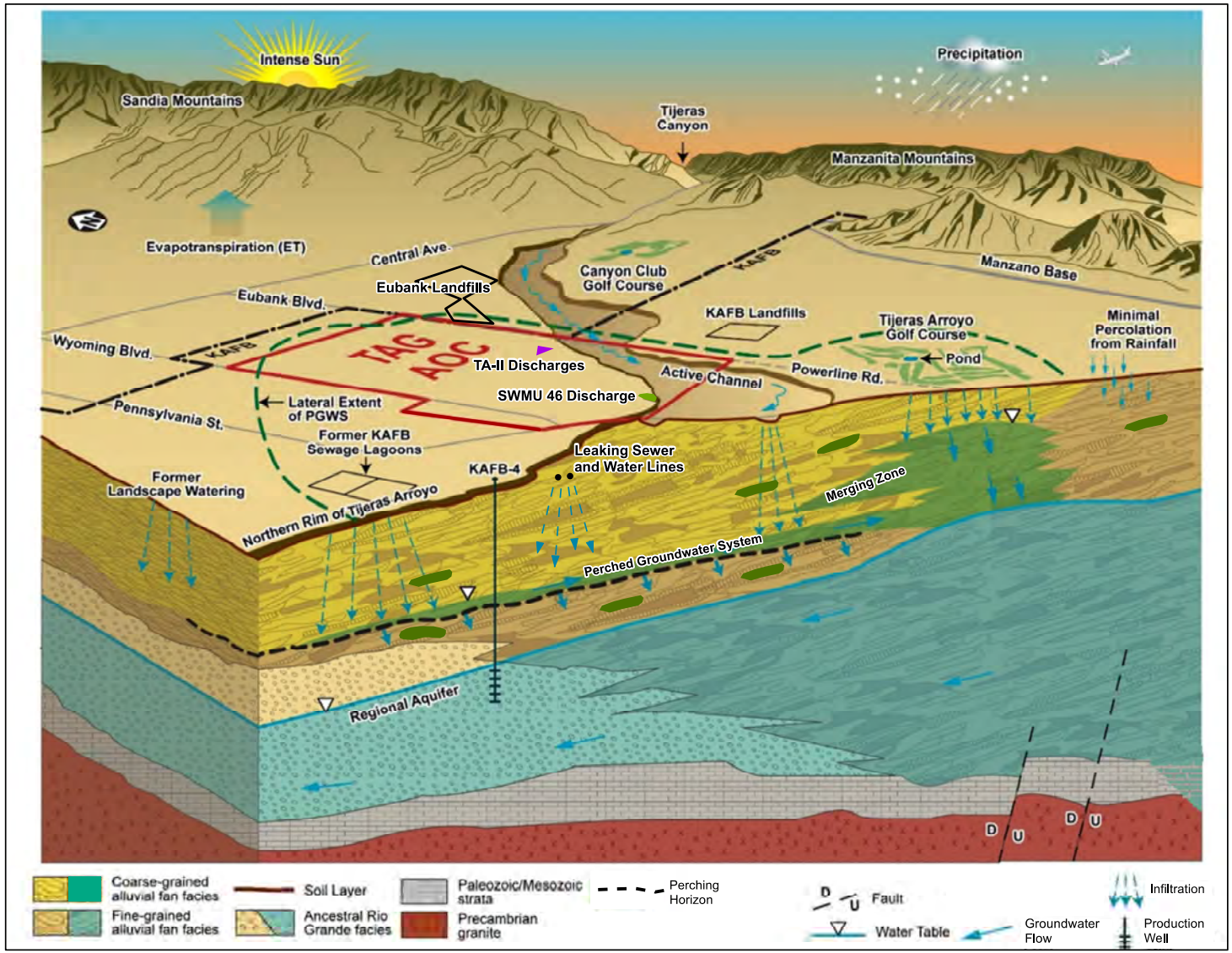


Figure 5-1
Conceptual Site Model for the Tijeras Arroyo Groundwater Area of Concern

5.2 Calendar Year 2025 Remedy Implementation

The CY 2025 TAG AOC remedy implementation activities included:

- Water level measurements, groundwater sampling and analysis, measuring and sampling equipment inspections and maintenance, and monitoring well network inspections and maintenance performed and documented in accordance with the TAG CMI Plan, Appendices C (Operations and Maintenance Plan) and E (Sampling and Analysis Plan).
- Waste management performed and documented in accordance with the TAG CMI Plan, Appendix D (Waste Management Plan).
- An LUC review performed and documented in accordance with the TAG CMI Plan, Appendix F (Land Use Controls Implementation Plan).

All remedy implementation activities were performed in accordance with the TAG CMI Plan, Appendix G (Health and Safety Plan).

5.2.1 Monitoring Well Network

Groundwater investigations at the TAG AOC began in 1992, with monitoring continuing since then. Table 5-1 lists the monitoring wells installed in the TAG AOC to date; Figure 5-2 shows the well locations. The current TAG AOC monitoring well network consists of 27 monitoring wells. As Table 5-1 indicates, 14 are screened in the PGWS, 12 are screened in the Regional Aquifer, and 1 is screened in the Merging Zone.

Note that WYO-4, which is screened in the PGWS, was in the TAG AOC monitoring well network during the TAG AOC corrective measures evaluation. While the DOE still owns it, KAFB currently manages it for site investigation (KAFB, September 2020).

TA1-W-01 was accidentally damaged by a cement truck in July 2025 and has been inaccessible for water level measurement since then.

Table 5-1
Tijeras Arroyo Groundwater Area of Concern Monitoring Well Network

Well ID	Installation Year	WQ	WL	Comments
Eubank-1	1988	NA	✓	Regional Aquifer well
PGS-2	1995	NA	✓	Regional Aquifer well
TA1-W-01	1997	NA	✓[6]	Regional Aquifer well
TA1-W-02	1998	✓	✓	Regional Aquifer well
TA1-W-03	1998	NA	NA	PGWS well, dry since 2018
TA1-W-04	1998	NA	✓	Regional Aquifer well
TA1-W-05	1998	NA	✓	Regional Aquifer well
TA1-W-06	1998	✓	✓	PGWS well
TA1-W-07	1998	NA	✓	PGWS well
TA1-W-08	2001	✓	✓	PGWS well
TA2-NW1-325	1993	✓	✓	PGWS well
TA2-NW1-595	1993	✓	✓	Regional Aquifer well
TA2-W-01	1994	✓	✓	PGWS well
TA2-W-19	1995	✓	✓	PGWS well
TA2-W-24	1998	✓	✓	Regional Aquifer well
TA2-W-25	1997	✓	✓	Regional Aquifer well
TA2-W-26	1998	✓	✓	PGWS well
TA2-W-27	1998	✓	✓	PGWS well
TA2-W-28	2014	✓	✓	PGWS well
TJA-2	1994	✓	✓	PGWS well
TJA-3	1998	✓	✓	Regional Aquifer well
TJA-4	1998	✓	✓	Regional Aquifer well – Merging Zone
TJA-5	1998	✓	✓	PGWS well
TJA-6	2001	✓	✓	Regional Aquifer well
TJA-7	2001	✓	✓	PGWS well
WYO-3	2001	✓	✓	Regional Aquifer well
WYO-4	2001	NA[7]	NA	PGWS well, dry since 2023
Total	----	19	25[6]	Total for this reporting period

Notes:
1. Check marks (✓) indicate that WQ sampling and WL measurements were performed in CY 2025.
2. Green shading denotes monitoring wells screened in the Perched Groundwater System.
3. Purple shading denotes the monitoring well screened in the Merging Zone (below the Perching Horizon and above the Regional Aquifer).
4. No shading denotes monitoring wells screened in the Regional Aquifer.
5. Eubank-1 is owned by the City of Albuquerque. SNL/NM personnel measure the water level.
6. TA1-W-01 was accidentally damaged by a cement truck in July 2025 and has been inaccessible for WL measurement since then.
7. WYO-4 is currently managed by Kirtland Air Force Base.

CY = calendar year
ID = identifier
NA = not appliable
PGS = Parade Ground South
PGWS = Perched Groundwater System
SNL/NM = Sandia National Laboratories, New Mexico
TA1-W = Technical Area-I well
TA2-NW = Technical Area-II northwest well
TA2-W = Technical Area-II well
TJA = Tijeras Arroyo well
WL = water level
WQ = water quality
WYO = Wyoming Boulevard well

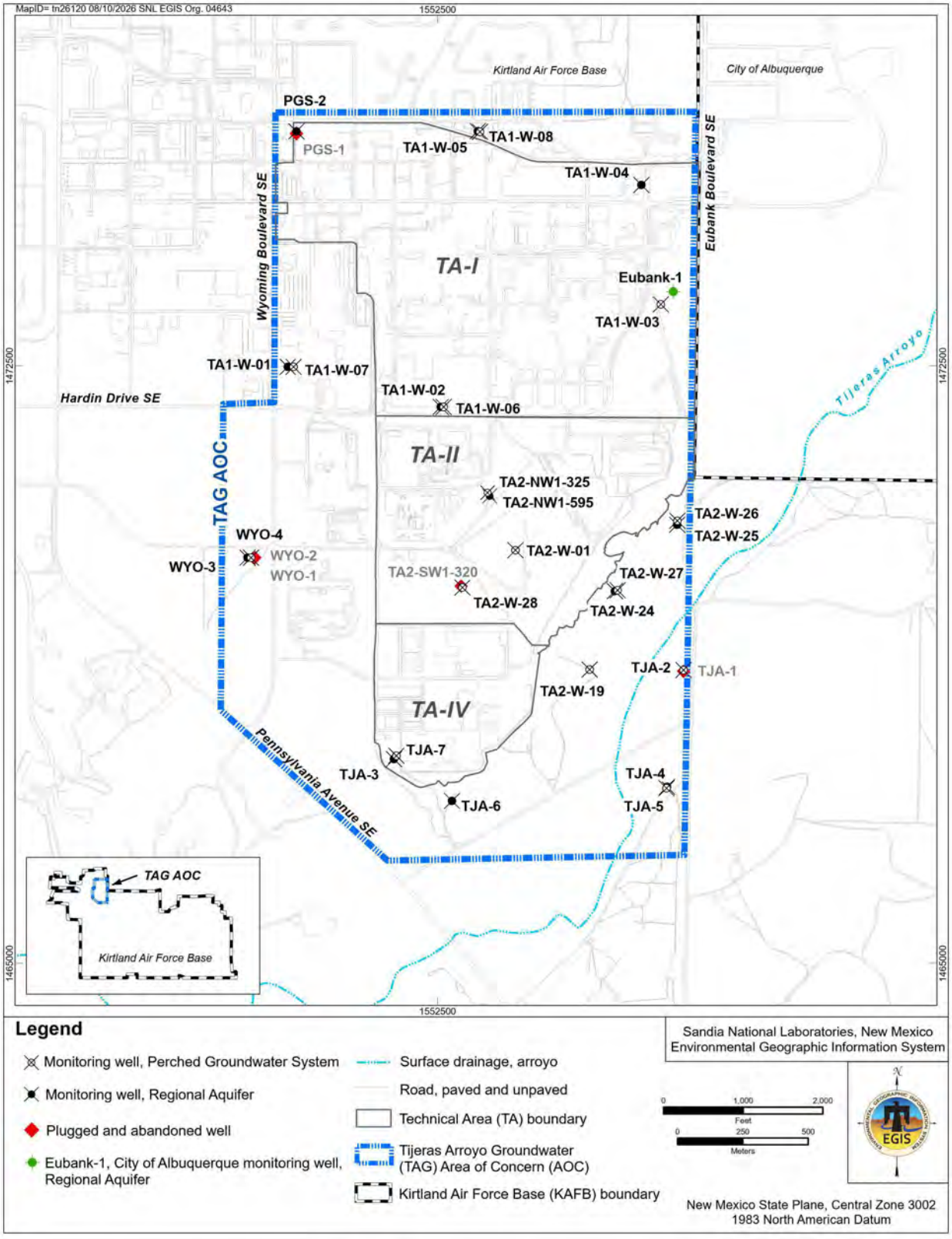


Figure 5-2
Tijeras Arroyo Groundwater Area of Concern Monitoring Well Locations

5.2.2 Monitoring Activities

The CY 2025 TAG AOC monitoring activities included:

- Quarterly water level measurements (Chapter 1.0, Section 1.4.1) and groundwater elevation calculations for 25 TAG AOC monitoring wells. The fourth-quarter water level measurement for TA1-W-01 was not performed because the monitoring well was accidentally damaged by a cement truck in July 2025.
- Semiannual collection and analysis of groundwater samples (Chapter 1.0, Sections 1.4.2 through 1.5) from 11 PGWS monitoring wells in February/March and July/August 2025.
- Annual collection and analysis of groundwater samples (Chapter 1.0, Sections 1.4.2 through 1.5) from 8 Regional Aquifer monitoring wells, including Merging Zone monitoring well TJA-4, in July/August 2025.
- Inspections and maintenance of measuring and sampling equipment. Maintenance included routine equipment checks, calibration, and repair or replacement as necessary.
- Preparation of monitoring well hydrographs (Attachment 5A), analytical results tables (Attachment 5B), and concentration trend plots (Attachment 5C).
- Submittal of the CY 2026 Comprehensive Site-Wide Groundwater Monitoring Plan (SNL/NM, April 2025) to the NMED.

5.2.3 Monitoring Well Network Inspections and Maintenance

Routine TAG AOC monitoring well network inspections were performed during the quarterly water level measurements and CY 2025 sampling events. These inspections focused on the network's physical condition, including protective casings, vaults, well casings, bollards, well covers/caps, concrete pads, padlocks, signage, and well identification markings. The inspection results showed the following:

- Except for TA1-W-01, the network infrastructure was in good condition.
- TA1-W-01, TA1-W-02, TA1-W-06, TA1-W-07, TA2-NW1-325, and TA2-NW1-595 were located near active construction sites and were protected by barriers such as fencing, orange barrels, and tape to prevent damage.
- The protective casing and one of the three bollards at TA1-W-01 were severely damaged by a cement truck in July 2025. Temporary protective measures, including cones and plastic sheeting, were implemented to prevent further damage pending repair.
- Other monitoring wells had minor issues such as damaged paint on the well casings and minor run-on/run-off concerns nearby, but these issues did not pose any risks to well integrity or monitoring activities.

5.2.4 Land Use Control Review

The LUC review focused on verifying that the LUCs implemented to protect human health and the environment at the TAG AOC were in place and functioning as intended. These LUCs include administrative controls such as land and groundwater use restrictions and information management and physical controls such as site access restrictions and locked monitoring wells.

As part of the LUC review, an annual site inspection was performed in October 2025. This inspection included a comprehensive review of the TAG AOC monitoring well network infrastructure and surrounding areas for signs of erosion, subsidence, or other disturbances. It confirmed that all physical controls, except for those at TA1-W-01, were intact and effective.

The administrative controls were maintained throughout CY 2025 via ongoing information management, review of inspection results, and coordination with project owners to ensure that planned activities would not compromise the LUCs or expose humans to nitrate contamination. Additionally, National Environmental Policy Act checklists for future projects were reviewed to ensure that future activities will not impact the TAG AOC.

Communication between KAFB and SNL/NM personnel and contractors continued throughout CY 2025 to ensure coordination regarding activities near the TAG AOC monitoring wells, particularly those near construction zones. No other conditions or events were observed that could affect LUC performance. Overall, the LUCs continue to effectively protect human health and the environment at the TAG AOC.

5.2.5 Monitoring Well Decommissioning and Replacement

No TAG AOC monitoring well was decommissioned or replaced in CY 2025.

5.2.6 Deviation and Mitigation

As Section 5.2.1 indicates, TA1-W-01 was accidentally damaged by a cement truck in July 2025 and has been inaccessible for water level measurement since then. Temporary protective measures are in place to prevent further damage pending repair.

5.3 Calendar Year 2025 Monitoring Results

Sections 5.3.1 through 5.3.2 summarize the CY 2025 TAG AOC monitoring results.

5.3.1 Water Level Results

The water levels in 25 TAG AOC monitoring wells were measured quarterly and used to determine groundwater elevations. Table 5-2 presents the October 2025 groundwater elevation data.

Table 5-2
Groundwater Elevation Data for the Tijeras Arroyo Groundwater Area of Concern Monitoring Wells, October 2025

Well ID	Top of Casing (ft amsl) NAVD 88	Date Measured	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)
Eubank-1	5460.02	2-Oct-2025	542.81	4917.21
PGS-2	5406.93	2-Oct-2025	534.98	4871.95
TA1-W-01	5403.82	Well damaged	Well damaged	Well damaged
TA1-W-02	5416.62	9-Oct-2025	520.75	4895.87
TA1-W-03	5457.03	2-Oct-2025	--	--
TA1-W-04	5460.98	2-Oct-2025	564.61	4896.37
TA1-W-05	5433.84	9-Oct-2025	561.55	4872.29
TA1-W-06	5417.10	2-Oct-2025	311.25	5105.85
TA1-W-07	5404.92	2-Oct-2025	287.55	5117.37
TA1-W-08	5434.19	9-Oct-2025	312.96	5121.23
TA2-NW1-325	5421.94	2-Oct-2025	322.70	5099.24
TA2-NW1-595	5421.26	2-Oct-2025	516.52	4904.74
TA2-W-01	5419.99	2-Oct-2025	333.18	5086.81
TA2-W-19	5351.21	2-Oct-2025	276.74	5074.47
TA2-W-24	5363.66	2-Oct-2025	438.41	4925.25
TA2-W-25	5374.86	2-Oct-2025	462.20	4912.66
TA2-W-26	5375.77	2-Oct-2025	291.72	5084.05
TA2-W-27	5362.85	2-Oct-2025	284.96	5077.89
TA2-W-28	5412.41	2-Oct-2025	323.62	5088.79
TJA-2	5353.20	2-Oct-2025	281.27	5071.93
TJA-3	5390.56	2-Oct-2025	498.58	4891.98
TJA-4	5341.16	2-Oct-2025	300.22	5040.94
TJA-5	5341.33	2-Oct-2025	271.88	5069.45
TJA-6	5343.16	9-Oct-2025	450.82	4892.34
TJA-7	5391.27	2-Oct-2025	306.18	5085.09
WYO-3	5392.09	2-Oct-2025	515.94	4876.15
WYO-4	5392.57	NM	NM	NM

Notes:
1. Green shading denotes monitoring wells screened in the Perched Groundwater System.
2. Purple shading denotes the monitoring well screened in the Merging Zone (below the Perching Horizon and above the Regional Aquifer).
3. No shading denotes monitoring wells screened in the Regional Aquifer.

amsl = above mean sea level
btoc = below top of casing (the measuring point)
ft = foot (feet)
ID = identifier
NAVD 88 = North American Vertical Datum of 1988
NM = not measured
PGS = Parade Ground South
TA1-W = Technical Area-I well
TA2-NW = Technical Area-III northwest well
TA2-W = Technical Area-II well
TJA = Tijeras Arroyo well
WYO = Wyoming Boulevard well
-- = No data, monitoring well was dry

5.3.1.1 Potentiometric Surface

Figure 5-3 is the October 2025 potentiometric surface map of the PGWS in the TAG AOC. The potentiometric surface contours on this figure indicate that the groundwater in the PGWS predominantly flows southeastward. The horizontal hydraulic gradient derived from the potentiometric surface contours ranges from 0.0044 to 0.013 ft/ft. As the merging of the two water-bearing zones near the southeast corner of the TAG AOC indicates, the vertical hydraulic gradient is downward.

Figure 5-4 is the potentiometric surface map of the Regional Aquifer in the TAG AOC. The potentiometric surface contours on this figure indicate that the groundwater in the Regional Aquifer predominantly flows northwest toward the KAFB, VA, and ABCWUA production wells near the northwest corner of KAFB. The horizontal hydraulic gradient derived from the potentiometric surface

contours ranges from 0.0044 to 0.015 ft/ft. The vertical hydraulic gradients are inferred to be mostly downward in response to pumping by the production wells.

5.3.1.2 Hydrographs

The CY 2025 TAG AOC monitoring well hydrographs (Attachment 5A, Figures 5A-1 through 5A-7) show the following water level and groundwater elevation trends:

- No seasonality, such as a response to the summer monsoon rainfall, is apparent for the PGWS (Figures 5A-1 through 5A-3). Water levels in the PGWS have trended downward, and two PGWS monitoring wells (TA1-W-03 and WYO-4) are dry. Artificial recharge to the PGWS has been nearly eliminated; SNL/NM wastewater outfalls and septic waste leach fields/seepage pits are no longer in operation (the greatest discharge ended in 1974, and all discharges ended by 1992). Currently, only small volumes of landscape water and larger volumes of occasional surface water from Tijeras Arroyo could potentially reach the PGWS.
- TJA-4, located in the southeast corner of the TAG AOC, is screened in the Merging Zone above the Regional Aquifer. Although it is categorized as a Regional Aquifer monitoring well due to its water level increasing similarly to those in the other Regional Aquifer monitoring wells, saturation in the Merging Zone is likely influenced by occasional surface water infiltration from Tijeras Arroyo and possibly irrigation at the KAFB Tijeras Arroyo Golf Course located approximately 0.6 mi to the southeast. The upward trend of the water level in TJA-4 has diminished in recent years (Figure 5A-4). The water level in TJA-4 lies between the water table in the PGWS and the water table in the Regional Aquifer. In CY 2025, the lowest groundwater elevation measured at the PGWS monitoring wells was at TJA-5 (Figure 5A-3) and was approximately 30 ft higher than the groundwater elevation at TJA-4. The groundwater elevation at TJA-4, in turn, was approximately 115 ft higher than the highest groundwater elevation measured at the Regional Aquifer monitoring wells, which was at TA2-W-24 (Figure 5A-5).
- Since late 2008, the hydrographs for most of the Regional Aquifer monitoring wells have shown an increasing trend in the water levels (Figures 5A-5 through 5A-7). This trend is likely in response to the ABCWUA's transition to surface water for potable water supplies, reducing reliance on the production wells near the northwest corner of KAFB. In contrast, the water levels in the Regional Aquifer monitoring wells located in the southwest corner of the TAG AOC (TJA-3 and TJA-6) have remained stable (Figure 5A-6).
- Northernmost Regional Aquifer monitoring wells PGS-2 and TA1-W-05 (Figure 5A-7), exhibit seasonal fluctuations linked to increased pumping by nearby production wells during the summer months. In contrast, Regional Aquifer monitoring wells TA1-W-01, TA1-W-02, TA1-W-04, and WYO-3 (Figures 5A-6 and 5A-7) show little seasonal variation, possibly because they are somewhat farther from the production wells than PGS-2 and TA1-W-05.
- TA1-W-01 was accidentally damaged by a cement truck in July 2025, resulting in a missed fourth-quarter water level measurement. As a water-level-only monitoring well, TA1-W-01 has a water level very similar to that in WYO-3, particularly in recent years (Figure 5A-7). With three nearby Regional Aquifer monitoring wells (PGS-2, TA1-W-05, and WYO-3), the potentiometric surface contour is well-defined despite TA1-W-01 being out of service pending repair. PGWS monitoring well TA1-W-07, located adjacent to TA1-W-01 (Figure 5-2), is also a water-level-only monitoring well. In July 2025, the groundwater elevation at TA1-W-07 was approximately 240 ft higher than that at TA1-W-01, reflecting the separation of the PGWS and the Regional Aquifer by more than 200 ft of unsaturated sediments. Consequently, the water levels in these two monitoring wells do not correlate or influence each other.

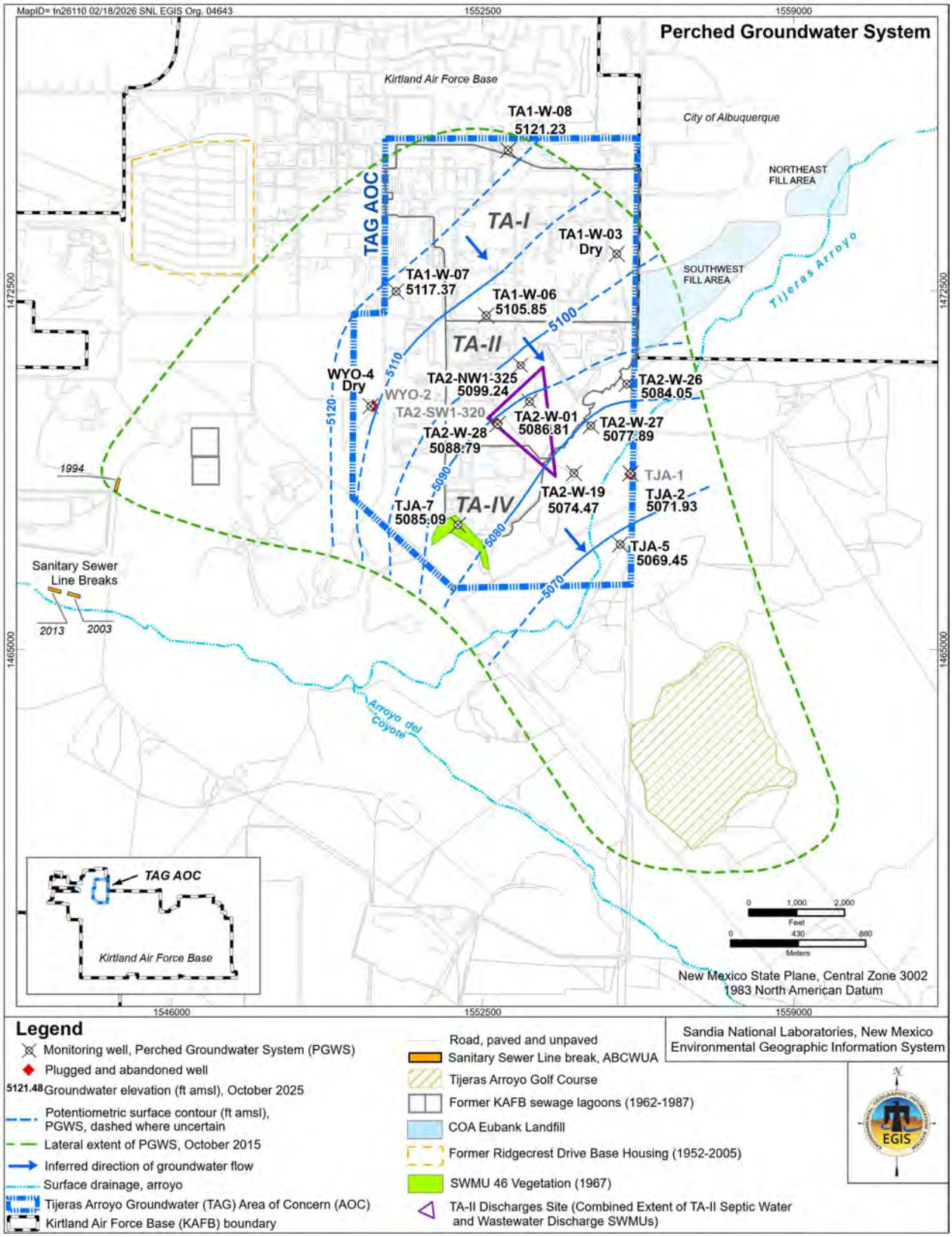


Figure-5-3
Potentiometric Surface of the Perched Groundwater System in the Tijeras Arroyo Groundwater Area of Concern, October 2025

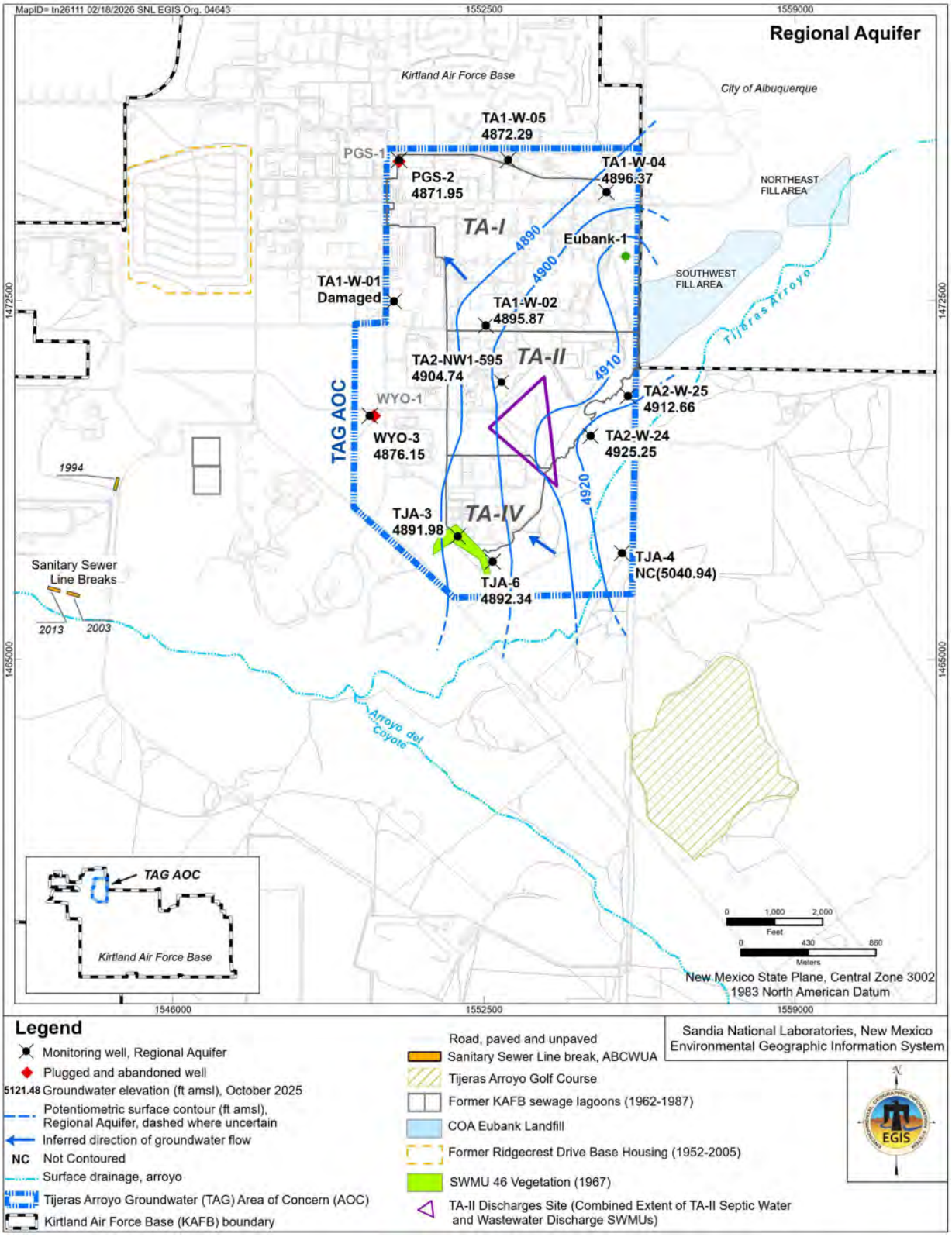


Figure 5-4
Potentiometric Surface of the Regional Aquifer in the Tijeras Arroyo Groundwater Area of Concern, October 2025

5.3.1.3 Perched Groundwater System Dewatering

Table 5-3 presents the annual groundwater elevation decline rates for the PGWS monitoring wells in the TAG AOC and, based on data from the last five years (2021-2025), the year when the water level is predicted to fall below each well screen. The lowest annual decline rates are at northernmost monitoring well TA1-W-08 and southeastern monitoring well TJA-5, with rates of 0.09 and 0.03 ft/yr, respectively. For the remaining PGWS monitoring wells, the annual decline rates range from 0.16 to 0.31 ft/yr.

The Revised TAG CCM/CME Report predicted that all PGWS monitoring wells would go dry (i.e., water level would fall below the well screen) by 2059, except for TJA-5, which would not go dry for the foreseeable future. Since then, TA1-W-03 and WYO-4 have already gone dry. The water levels in all PGWS monitoring wells have declined steadily since 2005 (Attachment 5A, Figures 5A-1 through 5A-3). However, the decline rate has slowed, and the remaining PGWS monitoring wells are now predicted to go dry later than previously predicted.

Based on the annual decline rate for the last five years (2021-2025), Figure 5-5 shows the following:

- By 2029, no additional PGWS monitoring wells besides TA1-W-03 and WYO-4 are predicted to go dry.
- By 2039, 3 PGWS monitoring wells (TA1-W-03, WYO-4, and TA2-W-01) are predicted to go dry.
- By 2049, 5 PGWS monitoring wells (TA1-W-03, WYO-4, TA2-W-01, TA1-W-07, and TA2-NW1-325) are predicted to go dry.
- By 2059, 7 PGWS monitoring wells (TA1-W-03, WYO-4, TA2-W-01, TA1-W-07, TA2-NW1-325, TA2-W-26, and TA2-W-28) are predicted to go dry.
- By 2069, 11 PGWS monitoring wells (TA1-W-03, WYO-4, TA2-W-01, TA1-W-07, TA2-NW1-325, TA2-W-26, TA2-W-28, TA2-W-06, TA2-W-19, TA2-W-27, and TJA-7) are predicted to go dry.

Three PGWS monitoring wells (TA1-W-08, TJA-2, and TJA-5) are predicted not to go dry in the foreseeable future. These monitoring wells are located in the northern and southeastern parts of the TAG AOC. This prediction assumes linear water level decline rates, which may not apply to all PGWS monitoring wells during remedy implementation. For example, the water level in TA1-W-03 declined steadily at approximately 1.7 ft/yr from January 2014 to February 2017, then declined more rapidly at approximately 3.5 ft/yr from February 2017 to October 2018, when the water level fell below the well screen.

In October 2025, the water column depths in the PGWS monitoring wells ranged from 1.5 to 18.2 ft above the bottom of the well screen (Table 5-3). As the PGWS continues to naturally dewater, decisions about installing replacement monitoring wells will be made on a case-by-case basis in accordance with the TAG CMI Plan. One important factor is the thickness of the saturated sediments beneath each well screen, estimated using geophysical logs from paired PGWS and Regional Aquifer monitoring wells (SNL/NM, February 2018) (Table 5-3). At 10 of the 12 PGWS monitoring wells that are currently not dry, the saturated sediment thickness ranges from 1 to 16 ft, showing that the 20-ft-long well screens were installed above the Perching Horizon. These well screens were placed such that the upper portion intercepted the water table at the time of drilling and the lower portion was screened in the saturated sediments. In contrast, the remaining two PGWS monitoring wells (TA2-W-28 and TJA-2) have well screens extending into the Perching Horizon and likely do not have saturated sediments suitable for future well installations.

Water level data from the former KAFB sewage lagoons located east of the TAG AOC indicate that the perched groundwater zone is contracting, with four of the eight monitoring wells having gone dry and the water levels in the remaining four wells continuing to decline (KAFB, November 2025).

Table 5-3
Annual Groundwater Elevation Decline Rates for Perched Groundwater System Monitoring Wells in the Tijeras Arroyo Groundwater Area of Concern

Well ID	Annual Decline Rate for Last Five Years (2021-2025), ft/yr	Water Column above Bottom of Well Screen, October 2025, ft	2025 Prediction: Year When Water Level Falls Below Well Screen	2018 Prediction: Year When Water Level Falls Below Well Screen	Estimated Thickness of Saturated Sediments Beneath Well Screen, ft
TA1-W-03	Dry since 2018	Dry	Dry	2020	5
TA1-W-06	0.21	8.5	2066	2041	6
TA1-W-07	0.16	3.5	2045	2044	1
TA1-W-08	0.09	8.7	2123	2035	6
TA2-NW1-325	0.29	4.4	2040	2030	3
TA2-W-01	0.29	1.5	2030	2025	8
TA2-W-19	0.29	11.5	2064	2046	10
TA2-W-26	0.23	6.3	2053	2028	7
TA2-W-27	0.31	12.3	2065	2044	1
TA2-W-28	0.29	9.5	2057	2044	-3
TJA-2	0.21	15.8	2099	2059	-1
TJA-5	0.03	18.2	Predicted not to go dry	Predicted not to go dry	16
TJA-7	0.20	7.4	2061	2051	2
WYO-4	Dry since 2023	Dry	Dry	2021	3

Notes:
1. 2018 prediction from the Revised TAG CCM/CME Report, Table 3-6.
2. The thickness of the saturated sediments beneath each well screen was estimated using geophysical logs (SNL/NM, February 2018). Negative thickness indicates that the well screen extends into the Perching Horizon (unsaturated).

CCM = Current Conceptual Model
CME = Corrective Measures Evaluation
ft = foot (feet)
ID = identifier
PGWS = Perched Groundwater System
TA1-W = Technical Area-I well
TA2-NW = Technical Area-II northwest well
TA2-W = Technical Area-II well
TAG = Tijeras Arroyo Groundwater
TJA = Tijeras Arroyo well
WYO = Wyoming Boulevard well

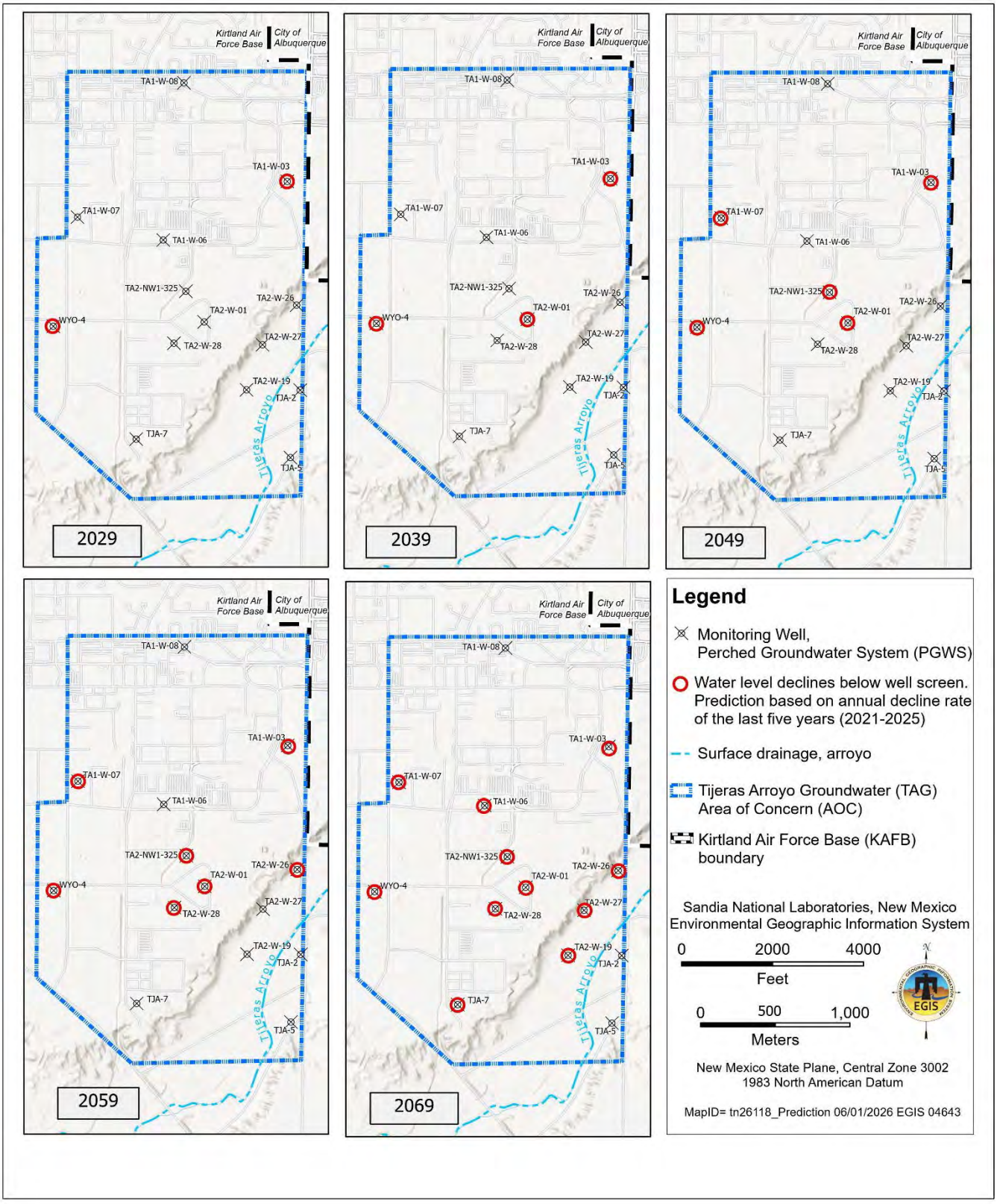


Figure 5-5
Predicted Dewatering of Perched Groundwater System Monitoring Wells as of 2025

5.3.2 Groundwater Sample Analytical Results

The CY 2025 sampling events were conducted in February/March and July/August 2025. Groundwater samples were collected from 19 TAG AOC monitoring wells. Table 5-4 summarizes both sampling events; Table 5-5 lists the sampling parameters for each monitoring well for each sampling event. The sampling parameters included NPN for measuring nitrate, the COC, and the annual sampling parameters requested by the NMED (VOCs, anions, alkalinity, TAL metals plus uranium, gamma spectroscopy short list, gross alpha/beta activity, and tritium) (NMED, July 2023). The tables reflect the CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan (SNL/NM, April 2024).

Table 5-4
Tijeras Arroyo Groundwater Area of Concern Monitoring Well Sampling Events, Calendar Year 2025

Date of Sampling Event	Monitoring Wells Sampled		Monitoring Plan
February/March 2025	TA1-W-06 TA1-W-08 TA2-NW1-325 TA2-W-01 TA2-W-19 TA2-W-26	TA2-W-27 TA2-W-28 TJA-2 TJA-5 TJA-7	CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan
July/August 2025	TA1-W-02 TA1-W-06 TA1-W-08 TA2-NW1-325 TA2-NW1-595 TA2-W-01 TA2-W-19 TA2-W-24 TA2-W-25 TA2-W-26	TA2-W-27 TA2-W-28 TJA-2 TJA-3 TJA-4 TJA-5 TJA-6 TJA-7 WYO-3	CY 2025 Comprehensive Site-Wide Groundwater Monitoring Plan

Notes:
1. Green shading denotes monitoring wells screened in the Perched Groundwater System.
2. Purple shading denotes the monitoring well screened in the Merging Zone (below the Perching Horizon and above the Regional Aquifer).
3. No shading denotes monitoring wells screened in the Regional Aquifer.

CY = calendar year
TA1-W = Technical Area-I well
TA2-NW = Technical Area-II northwest well
TA2-W = Technical Area-II well
TJA = Tijeras Arroyo well
WYO = Wyoming Boulevard well

Table 5-5
Tijeras Arroyo Groundwater Area of Concern Monitoring Well Sampling Parameters, Calendar Year 2025

Analytes	February/March 2025	
NPN	TA1-W-06	TA2-W-28
	TA1-W-08	TA2-W-28 (duplicate)
	TA2-NW1-325	TJA-2
	TA2-W-01	TJA-2 (duplicate)
	TA2-W-19	TJA-5
	TA2-W-26	TJA-5 (duplicate)
	TA2-W-27	TJA-7
	TA2-W-27 (duplicate)	
Analytes	**July/August 2025**	
NPN VOCs Anions (bromide, chloride, fluoride, sulfate) Alkalinity TAL metals plus uranium (as mass) Gamma spectroscopy short list* Gross alpha/beta activity Tritium	TA1-W-02	TA2-W-26
	TA1-W-02 (duplicate)	TA2-W-26 (duplicate)
	TA1-W-06	TA2-W-27
	TA1-W-08	TA2-W-28
	TA2-NW1-325	TJA-2
	TA2-NW1-595	TJA-3
	TA2-W-01	TJA-4
	TA2-W-19	TJA-5
	TA2-W-19 (duplicate)	TJA-6
	TA2-W-24	TJA-6 (duplicate)
	TA2-W-25	TJA-7
	TA2-W-25 (duplicate)	WYO-3

Notes:
1. Green shading denotes monitoring wells screened in the Perched Groundwater System.
2. Purple shading denotes the monitoring well screened in the Merging Zone (below the Perching Horizon and above the Regional Aquifer).
3. No shading denotes monitoring wells screened in the Regional Aquifer.
4. For the July/August 2025 sampling event, environmental duplicate samples were analyzed for NPN only.

*Gamma spectroscopy short list consists of americium-241, cesium-137, cobalt-60, and potassium-40.
NPN = nitrate plus nitrite
TAL = Target Analyte List
TA1-W = Technical Area-I well
TA2-NW = Technical Area-II northwest well
TA2-W = Technical Area-II well
TJA = Tijeras Arroyo well
VOC = volatile organic compound
WYO = Wyoming Boulevard well

Sections 5.3.2.1 through 5.3.2.2 summarize the analytical results. Attachment 5B presents the analytical results tables (Tables 5B-1 through 5B-4) and the final field water quality parameter measurements (Table 5B-7). Attachment 5C (Figures 5C-1 through 5C-6) presents concentration trend plots for the monitoring wells where NPN concentrations exceeded the EPA MCL. Data Package 4 contains the data validation reports and analytical laboratory data packages.

5.3.2.1 Constituent of Concern

Table 5B-1 presents the NPN results.

- NPN exceeded the EPA MCL of 10 mg/L in the environmental/environmental duplicate samples collected from six TAG AOC monitoring wells – five PGWS monitoring wells (TA2-W-19, TA2-W-28, TJA-2, TJA-5, and TJA-7) and the Merging Zone monitoring well (TJA-4).
- The maximum NPN concentration among the PGWS monitoring wells was 23.0 mg/L in the August 2025 TJA-7 environmental sample.
- The NPN concentration at the Merging Zone monitoring well was 30.4 mg/L in the August 2025 TJA-4 environmental sample.
- These six monitoring wells have historically had NPN concentrations above the EPA MCL. Although NPN was detected in the samples collected from the other PGWS monitoring wells, the concentrations remained below the EPA MCL. The NPN concentrations at the other Regional Aquifer monitoring wells have never exceeded the EPA MCL.

Figures 5C-1 through 5C-6 present the NPN concentration trend plots for TA2-W-19, TA2-W-28, TJA-2, TJA-4, TJA-5, and TJA-7, respectively. These plots show the following:

- TA2-W-19 (Figure 5C-1): The NPN concentrations were 12.2 and 12.0/11.7 mg/L in March and August 2025, respectively. The overall NPN concentration trend is increasing slightly, with no significant trend for the last five years (2021-2025).
- TA2-W-28 (Figure 5C-2): The NPN concentrations were 16.9/18.4 and 18.4 mg/L in March and August 2025, respectively. The overall NPN concentration trend is decreasing, with no significant trend for the last five years (2021-2025).
- TJA-2 (Figure 5C-3): The NPN concentrations were 11.0/12.7 and 12.6 mg/L in March and August 2025, respectively. The overall NPN concentration trend is increasing slightly, with no significant trend for the last five years (2021-2025).
- TJA-4 (Figure 5C-4): The NPN concentration was 30.4 mg/L in August 2025. The overall NPN concentration trend is increasing slightly, with no significant trend for the last five years (2021-2025).
- TJA-5 (Figure 5C-5): The NPN concentrations were 11.6/11.3 and 11.4 mg/L in March and August 2025, respectively. The overall NPN concentration trend has been decreasing since 2018.
- TJA-7 (Figure 5C-6): The NPN concentrations were 21.8 and 23.0 mg/L in March and August 2025, respectively. The overall NPN concentration trend is decreasing slightly, with no significant trend for the last five years (2021-2025).

Figure 5-6 shows the NPN distribution for the July/August 2025 sampling event. The NPN concentrations (shown in red font) exceeded the EPA MCL at five PGWS monitoring wells (TA2-W-19, TA2-W-28, TJA-2, TJA-5, and TJA-7).

- The NPN at TJA-7 is likely associated with historical discharges from the Old Acid Waste Line (SWMU 46).
- The NPN at TA2-W-19, TA2-W-28, and TJA-2 is likely associated with historical discharges at the Technical Area-II Discharges site.
- The NPN at TJA-5 is unlikely to be associated with SNL/NM wastewater or septic water discharges because TCE and tetrachloroethene (PCE), which were present in historical wastewater discharges at the Technical Area-II Discharges site and SWMU (SNL/NM, February 2018), have not been detected at this monitoring well. The NPN may, however, be associated with the infiltration of stormwater that contains sewage from properties located upstream of KAFB and/or naturally occurring nitrate.

To date, the maximum NPN concentration in the PGWS is 33.3 mg/L, measured in the November 2010 TJA-7 environmental duplicate sample.

Merging Zone monitoring well TJA-4 has historically exhibited the highest NPN concentration among all the TAG AOC monitoring wells. To date, the maximum NPN concentration in the Merging Zone is 39.7 mg/L, measured in the June 2019 TJA-4 environmental duplicate sample. The elevated NPN concentration at TJA-4 likely results from a combination of geogenic nitrate in vadose zone sediments beneath the active Tijeras Arroyo channel and anthropogenic sources upgradient of the TAG AOC, such as fertilizer use at the KAFB Tijeras Arroyo Golf Course. Releases from SNL/NM SWMUs are not suspected contributors, as TCE and PCE have not been detected at TJA-4. Based on the presence of the sweetener Neotame, Linhoff interpreted that the nitrate in TJA-4 groundwater samples likely originates from a mixture of arroyo floodplain vadose zone nitrate and anthropogenic nitrate (Linhoff, July 2022).

Figure 5-6 does not show a 10-mg/L NPN isoconcentration contour for the PGWS in the TAG AOC because the nitrate concentrations at some KAFB monitoring wells screened in the PGWS south and southeast of the TAG AOC (e.g., ST105-MW006 and KAFB-0623) have historically been higher (KAFB, August 2022; KAFB, December 2025).

The NPN concentrations at all the other Regional Aquifer monitoring wells have not exceeded the EPA MCL. To date, the maximum NPN concentration in the Regional Aquifer is 4.47 mg/L, measured in the August 2016 TA2-NW1-595 environmental duplicate sample.

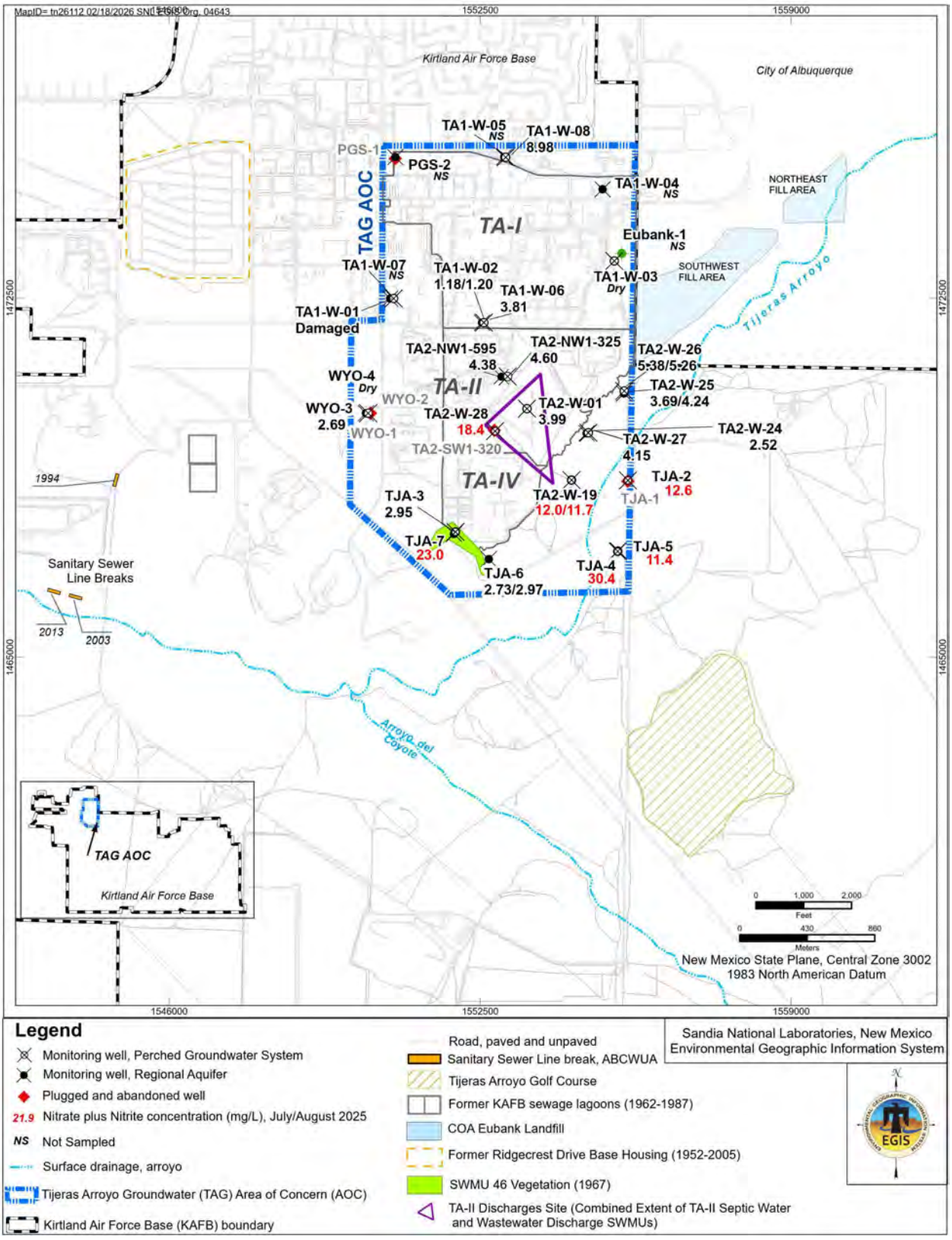


Figure 5-6
Nitrate Plus Nitrite Distribution in the Perched Groundwater System and Regional Aquifer in the Tijeras Arroyo Groundwater Area of Concern, July/August 2025

5.3.2.2 Annual Sampling Parameters

Table 5B-2 presents the detected VOC results; Table 5B-3 lists the corresponding MDLs.

Table 5B-4 presents the anion and alkalinity results.

Table 5B-5 presents the TAL metals and uranium results.

Table 5B-6 presents the gamma spectroscopy short list, gross alpha/beta activity, and tritium results. Gross alpha activity was measured in accordance with 40 CFR Part 141 and used as a radiological screening tool. Naturally occurring uranium was measured independently (uranium [as mass] concentration determined by metals analysis), and the gross alpha activity measurements were corrected by subtracting the total uranium activity from the uncorrected gross alpha activity results. An SNL/NM health physicist reviewed the results to screen for radiological anomalies and verify that levels were within acceptable limits.

The annual sampling parameter results are consistent with historical results, indicating stability of the general groundwater quality in the TAG AOC.

5.4 Calendar Year 2025 Quality Control Results

Sections 5.4.1 through 5.4.2 summarize the CY 2025 TAG AOC field and laboratory QC sample results and their impact on the environmental/environmental duplicate sample results (Chapter 1.0, Section 1.6).

5.4.1 Field Quality Control Samples

The field QC samples (Chapter 1.0, Section 1.6.1) included environmental duplicate, equipment blank, field blank, and trip blank samples.

5.4.1.1 Environmental Duplicate Samples

The environmental duplicate samples (Chapter 1.0, Section 1.6.1.1) were analyzed for NPN (Table 5-5). RPDs were calculated for NPN, which was detected in both the environmental and environmental duplicate samples. The sample pairs for both CY 2025 sampling events showed good agreement based on the RPD goal of less than 35 for inorganic compounds.

- February/March 2025 Sampling Event: Environmental duplicate samples were collected from TA2-W-27, TA2-W-28, TJA-2, and TJA-5. The RPDs for NPN ranged from 1 to 14.
- July/August 2025 Sampling Event: Environmental duplicate samples were collected from TA1-W-02, TA2-W-19, TA2-W-25, TA2-W-26, and TJA-6. The RPDs for NPN ranged from 2 to 14.

5.4.1.2 Equipment Blank Samples

The equipment blank samples (Chapter 1.0, Section 1.6.1.2) were collected before sampling began and were analyzed for all analytes (Table 5-5).

- February/March 2025 Sampling Event: Four equipment blank samples associated with TA2-W-27, TA2-W-28, TJA-2, and TJA-5 were collected. NPN was not detected in the equipment blank samples.
- July/August 2025 Sampling Event: Five equipment blank samples associated with TA2-W-02, TA2-W-19, TA2-W-25, TA2-W-26, and TJA-6 were collected. Acetone, alkalinity, aluminum, bromodichloromethane, chloride, chloroform, copper, dibromochloromethane, iron, lead, manganese, methylene chloride, nickel, NPN, sodium, sulfate, and toluene, and zinc were detected in the equipment blank samples. Their results did not affect the environmental/environmental duplicate sample results because they were not detected in the associated environmental/environmental duplicate samples, were detected in such samples at concentrations greater than five times the equipment blank sample result, or were qualified during data validation as not detected, except for toluene and zinc at TA1-W-02.
  - Toluene and zinc in the TA1-W-02 environmental sample were qualified during data validation as not detected because they were detected below the PQL in the associated equipment blank sample.

5.4.1.3 Field Blank Samples

The field blank samples (Chapter 1.0, Section 1.6.1.3) were analyzed for VOCs.

- February/March 2025 Sampling Event: This sampling event did not require field blank samples because the environmental/environmental duplicate samples were analyzed for NPN only (Table 5-5).
- July/August 2025 Sampling Event: Five field blank samples were collected at TA1-W-08, TA2-NW1-325, TA2-NW1-595, TJA-3, and TJA-5. Acetone, bromodichloromethane, chloroform, dibromochloromethane, and methylene chloride were detected in the field blank samples. Their results did not affect the environmental sample results because they were either not detected in the associated environmental samples or were qualified during data validation as not detected, except for chloroform at TA2-NW1-325.
  - Chloroform in the TA2-NW1-325 environmental sample was qualified during data validation as not detected because it was detected below the PQL in the associated field blank sample.

For each sampling event, a field blank sample was collected from the DI water used for decontamination and equipment blank sample collection and was analyzed for all analytes (Table 5-5). The field blank results were used to internally verify the quality of the DI water but were not used during data validation to qualify environmental or field QC sample results.

5.4.1.4 Trip Blank Samples

The trip blank samples (Chapter 1.0, Section 1.6.1.4) were analyzed for VOCs.

- February/March 2025 Sampling Event: This sampling event did not require trip blank samples because the environmental/environmental duplicate samples were analyzed for NPN only (Table 5-5).
- July/August 2025 Sampling Event: A total of 25 trip blank samples were submitted and analyzed. Methylene chloride was detected in the trip blank samples.
  - The environmental sample result of methylene chloride at nine TAG AOC monitoring wells was qualified during data validation as not detected because methylene chloride was detected below the PQL in the associated trip blank samples.

5.4.2 Laboratory Quality Control Samples

The laboratory QC samples (Chapter 1.0, Section 1.6.2) included laboratory control, method blank, matrix spike and matrix spike duplicate, surrogate spike, and replicate samples.

The laboratory QC sample results led to the following qualifications of the environmental/environmental duplicate sample results:

- February/March 2025 Sampling Event: None.
- July/August 2025 Sampling Event:
  - The environmental sample result of methylene chloride at TA2-NW1-01 and TA2-W-27 was qualified during data validation as not detected because methylene chloride was detected below the PQL in the associated method blank samples.
  - The environmental sample result of manganese at TA1-W-08 was qualified during data validation as rejected because the manganese result for the interference check sample was outside acceptance criteria.
  - The environmental sample result of copper at TA2-W-26 and TJA-2 was qualified during data validation as not detected because copper was detected below the PQL in the associated method blank samples.

5.5 Field Notes and Observations

All CY 2025 TAG AOC monitoring activities were performed and documented in accordance with the TAG CMI Plan.

During the February/March 2025 sampling event, TA2-NW1-325 purged dry before the minimum purge volume was removed. It was allowed to recover and was sampled the following workday to ensure collection of the most representative groundwater sample possible given the low yield. TA2-W-01, TA2-W-26, and TJA-7 were purged of extra volume to meet the stability criteria before sample collection.

During the July/August 2025 sampling event, TA2-NW1-325 purged dry before the minimum purge volume was removed. It was allowed to recover and was sampled the following workday to ensure collection of the most representative groundwater sample possible given the low yield. TA2-W-01, TA2-W-26, TA2-W-28, TJA-4, and TJA-5 were purged of extra volume to meet the stability criteria before sample collection.

5.6 Waste Management

The purge and decontamination wastewater and solid waste generated by the field activities were managed as Chapter 1.0, Section 1.4.6 describes. A total of approximately 1,533 gal of wastewater (511 gal from the February/March 2025 sampling event and 1,022 gal from the July/August 2025 sampling event) were discharged to the sanitary sewer in CY 2025.

5.7 Summary of Calendar Year 2025 Results

MNA is being implemented as the remedy for the groundwater contamination in the TAG AOC. The CY 2025 monitoring activities included quarterly water level measurements and groundwater elevation calculations for 25 TAG AOC monitoring wells, semiannual groundwater sampling at 11 PGWS monitoring wells, and annual groundwater sampling at 8 Regional Aquifer monitoring wells, including Merging Zone monitoring well TJA-4. The analytical results showed that NPN concentrations exceeded the EPA MCL of 10 mg/L at five PGWS monitoring wells (TA2-W-19, TA2-W-28, TJA-2, TJA-5, and TJA-7) and the Merging Zone monitoring well (TJA-4).

The water level results showed the following:

- The water levels in the PGWS monitoring wells continue to decline, with TA1-W-03 and WYO-4 currently dry.
- Based on five-year water level trends, 11 of the 14 PGWS monitoring wells (TA1-W-03, WYO-4, TA2-W-01, TA1-W-07, TA2-NW1-325, TA2-W-26, TA2-W-28, TA2-W-06, TA2-W-19, TA2-W-27, and TJA-7) are predicted to go dry by 2069. Only the remaining three PGWS monitoring wells (TA1-W-08, TJA-2, and TJA-5), which are located in the northern and southeastern parts of the TAG AOC, are predicted to retain water beyond 2069. This sustained decline reflects a natural reduction in the thickness of the saturated sediments beneath the well screens, consistent with progressive PGWS dewatering.
- In contrast, the water levels in the 13 Regional Aquifer monitoring wells, including Merging Zone monitoring well TJA-4, are steadily rising. This trend is likely due to the ABCWUA reducing its reliance on the production wells near the northwest corner of KAFB. Local recharge also influences the water level in TJA-4.

As Table 5-6 indicates, the NPN concentration trends at four of the five PGWS monitoring wells with elevated nitrate concentrations (TA2-W-19, TA2-W-28, TJA-2, and TJA-7) have remained stable over the last five years (2021–2025), supporting the expectation that the concentrations will decrease below the EPA MCL as these monitoring wells go dry between 2057 and 2099. TJA-5, influenced by local recharge, shows a decreasing NPN concentration trend and is predicted not to go dry in the foreseeable future. These findings demonstrate progress toward meeting the remedial objectives (Section 5.1.2) and thereby reducing risks to human health and the environment.

Except for TA1-W-01, the TAG AOC monitoring well network infrastructure is in good condition. TA1-W-01 was accidentally damaged by a cement truck in July 2025 and is out of service pending repair. Overall, the LUCs continue to effectively protect human health and the environment at the TAG AOC.

Table 5-6
NPN Concentration Trends and Predicted Well-Drying Years for Perched Groundwater System Monitoring Wells Exceeding the EPA MCL

Well ID	Maximum NPN Concentration to Date, mg/L	Maximum NPN Concentration in CY 2025, mg/L	NPN Concentration Trend Overall	NPN Concentration Trend (2021-2025)	2025 Prediction: Year Monitoring Well Goes Dry
TA2-W-19	13.8	12.2	Increasing	Stable	2064
TA2-W-28	27.8	18.4	Decreasing	Stable	2057
TJA-2	13.9	12.7	Increasing	Stable	2099
TJA-5	21.7	11.6	Decreasing	Decreasing	See note
TJA-7	33.3	23.0	Decreasing	Stable	2061

Notes:
Monitoring well TJA-5 is located in the southeast corner of the TAG AOC and is impacted by recent recharges. It is predicted not to go dry in the foreseeable future.
AOC = Area of Concern
CY = calendar year
EPA = Environmental Protection Agency
ID = identifier
MCL = maximum contaminant level
mg/L = milligrams per liter
NPN = nitrate plus nitrite
PGWS = Perched Groundwater System
TA2-W = Technical Area-II well
TAG = Tijeras Arroyo Groundwater
TJA = Tijeras Arroyo well

5.8 Calendar Year 2025 Community Relations

CY 2025 community relations for the TAG AOC consisted of one public meeting held on April 29, 2025 (Chapter 1.0, Section 1.7.2) and posting of the *Annual Groundwater Monitoring Report, Calendar Year 2024* (SNL/NM, July 2025) on the SNL/NM Environmental Reports web page.

- The public meeting slides are posted here: https://www.sandia.gov/app/uploads/sites/194/2025/09/Spring-2025-Public-Meeting-Posters.pdf
- The *Annual Groundwater Monitoring Report, Calendar Year 2024* is posted here: https://www.sandia.gov/news/publications/environmental-reports/

5.9 Recommendation and Future Activities

Remedy implementation at the TAG AOC began on January 1, 2025. The Revised TAG CCM/CME Report predicted that 13 of the 14 PGWS monitoring wells would go dry by 2059. While the PGWS is dewatering as anticipated, the rate has slowed, with 11 of the 14 PGWS monitoring wells now predicted to go dry by 2069. Five PGWS monitoring wells have consistently had NPN concentrations exceeding the EPA MCL; however, the NPN concentration trends at these monitoring wells have been stable or decreasing over the last five years. Based on these findings, remedy implementation will continue in accordance with the TAG CMI Plan.

The CY 2026 TAG AOC remedy implementation activities will include:

- Groundwater monitoring, including quarterly water level measurements and semiannual/annual groundwater sample collection and analysis, in accordance with the CY 2026 Comprehensive Site-Wide Groundwater Monitoring Plan.
- Measuring and sampling equipment inspections and maintenance.
- Monitoring well network inspections and maintenance.
- Monitoring well decommissioning and replacement.
- An LUC review.
- TA1-W-01 repair or replacement by January 31, 2028 per the NMED's request.
- Submittal of the CY 2027 Annual Groundwater Monitoring Plan (Chapter 1.0, Section 1.7.1) to the NMED in April 2026.
- Remedy progress reporting in the CY 2026 Annual Groundwater Monitoring and Corrective Measures Progress Report.

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6.0 References

Code of Federal Regulations. (December 1975, as updated). *Protection of Environment, National Primary Drinking Water Regulations*, 40 CFR Part 141. https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-141

GRAM and Lettis. (December 1995). *Conceptual Geological Model of the Sandia National Laboratories and Kirtland Air Force Base*. GRAM, Inc., and William Lettis & Associates, Inc. [two volumes prepared for the Site-Wide Hydrogeologic Characterization Project].

Hawley, J.W., and Haase, C.S. (1992). *Hydrogeologic Framework of the Northern Albuquerque Basin*, Open-File Report 387, New Mexico Bureau of Mines & Mineral Resources, New Mexico Institute of Mining & Technology. https://geoinfo.nmt.edu/publications/openfile/downloads/300-399/387/ofr_387.pdf

Karlstrom, K.E., Connell, S.D., Ferguson, C.A., Read, A.S., Osborn, G.R., Kirby, E., Abbott, J., Hitchcock, C., Kelson, K., Noller, J., Sawyer, T., Ralser, S., Love, D.W., Nyman, M., and Bauer, P.W. (2000). June 1, 1994, Geology of Tijeras quadrangle, Bernalillo County, New Mexico, New Mexico Bureau of Mines & Natural Resources Open File Map Series, OF-GM-4, scale 1:24,000 [map last modified 28 February 2000].

Kirtland Air Force Base. (September 2020). *Work Plan for Kirtland AFB WYO-4 Area of Concern RCRA Facility Investigation, Revision 2*.

Kirtland Air Force Base. (August 2022). *Stage 2 Abatement Plan Modification ST-105 – Nitrate Impacted Groundwater*.

Kirtland Air Force Base. (November 2025). *Final FY 2025 Groundwater Monitoring Report, WP-026 – Base Sewage Lagoons and Golf Course Pond (SWMU WP-026)*.

Kirtland Air Force Base. (December 2025). *Final Fiscal Year 2025 Long-Term Monitoring Report, ST-105 – Nitrate Impacted Groundwater*.

Linhoff, B. S. (July 2022). Deciphering Natural and Anthropogenic Nitrate and Recharge Sources in Arid Region Groundwater, *Science of the Total Environment*, Volume 848 (2022) 157345. http://dx.doi.org/10.1016/j.scitotenv.2022.157345

Lozinsky, R.P. (1994). Cenozoic stratigraphy, sandstone petrology, and depositional history of the Albuquerque basin, central New Mexico. *Basins of the Rio Grande Rift: Structure, Stratigraphy, and Tectonic Setting*, Special Paper 291, pp. 73-82. Geological Society of America. https://doi.org/10.1130/SPE291-p73

New Mexico Environment Department. (April 2004). *Compliance Order on Consent Pursuant to the New Mexico Hazardous Waste Act 74-4-10: Sandia National Laboratories Consent Order*. https://www.env.nm.gov/wp-content/uploads/sites/12/2019/10/SNL_CONSENTORDER_April-29-2004_FINAL.pdf

New Mexico Environment Department. (October 2009, as modified). *Hazardous Waste Permit, EPA ID No. NM5890110518, to the U.S. Department of Energy and Sandia Corporation, for Sandia National Laboratories, Located in Bernalillo County New Mexico* [October 2015].

New Mexico Environment Department. (January 2015, as modified). *Resource Conservation and Recovery Act Facility Operating Permit for Sandia National Laboratories, EPA ID No. NM5890110518*.

New Mexico Environment Department. (January 2023). *Approval, Final Remedy Decision and Response to Public Comment on Class 3 Permit Modification for Corrective Measures for Tijeras Arroyo Groundwater Area of Concern, Sandia National Laboratories, EPA ID# NM5890110518 HWB-SNL-16-020* [January 6, 2023 letter from R. Shean, New Mexico Environment Department, Hazardous Waste Bureau to D. Hauck, U.S. Department of Energy, National Nuclear Security Administration, Sandia Field Office and P. Shoemaker, Sandia National Laboratories, New Mexico].

New Mexico Environment Department. (July 2023). *Approval with Modification, Comprehensive Site-Wide Groundwater Monitoring Plan, Calendar Year 2024, Sandia National Laboratories, EPA ID# NM5890110518, HWB-SNL-23-012* [July 6, 2023 letter from R. Maestas, New Mexico Environment Department, Hazardous Waste Bureau to D. Hauck, U.S. Department of Energy, National Nuclear Security Administration, Sandia Field Office and R. Keith, Sandia National Laboratories, New Mexico].

New Mexico Environment Depart. (May 2024). *Correction: Final Remedy Selection On Class 3 Permit Modification for Corrective Measures for Burn Site Groundwater Area of Concern, Sandia National Laboratories, EPA ID# NM5890110518, HWB-SNL-23-001)* [May 6, 2024 letter from R. Maestas, New Mexico Environment Department, Hazardous Waste Bureau to D. Hauck, U.S. Department of Energy, National Nuclear Security Administration, Sandia Field Office and G. Roselle, Sandia National Laboratories, New Mexico].

New Mexico Environment Department. (July 2025a). *Approval, Comprehensive Site-Wide Groundwater Monitoring Plan, Calendar Year 2026, Sandia National Laboratories, EPA ID# NM5890110518, HWB-SNL-25-007* [July 21, 2025 letter from JD Nance, New Mexico Environment Department, Hazardous Waste Bureau to D. Hauck, U.S. Department of Energy, National Nuclear Security Administration, Sandia Field Office and G. Roselle, Sandia National Laboratories, New Mexico].

New Mexico Environment Department. (July 2025b). *Approval, Well TAV-INJ1 Decommissioning Report, May 2025, Sandia National Laboratories, New Mexico, EPA ID#NM5890110518, HWB-SNL-25-009* [July 17, 2025 letter from JD Nance, New Mexico Environment Department, Hazardous Waste Bureau to D. Hauck, U.S. Department of Energy, National Nuclear Security Administration, Sandia Field Office and G. Roselle, Sandia National Laboratories, New Mexico].

New Mexico Environment Department. (August 2025). *Approval, Burn Site Groundwater Corrective Measures Implementation Plan, December 2024, Sandia National Laboratories, EPA ID#NM5890110518, HWB-SNL-24-016* [August 21, 2025 letter from JD Nance, New Mexico Environment Department Hazardous Waste Bureau to D. Hauck, U.S. Department of Energy, National Nuclear Security Administration, Sandia Field Office and G. Roselle, Sandia National Laboratories, New Mexico].

New Mexico Water Quality Control Commission. (December 2018). *Environmental Protection, Water Quality, Ground and Surface Water Protection Regulations*, 20.6.2 NMAC. https://www.srca.nm.gov/parts/title20/20.006.0002.html

Rice, E.W., Baird, R.B., Eaton, A.D., and Clesceri, L.S. (2012). *Standard Methods for the Examination of Water and Wastewater*, 23rd ed. American Public Health Association, American Water Works Association, and Water Environment Federation.

Sandia National Laboratories, New Mexico. (February 1998). *Revised Site-Wide Hydrogeologic Characterization Project, Calendar Year 1995 Annual Report, Revised February 1998*.

Sandia National Laboratories, New Mexico. (March 2012, as modified). *Long-Term Monitoring and Maintenance Plan for the Mixed Waste Landfill*.

Sandia National Laboratories, New Mexico. (June 2014). *Annual Groundwater Monitoring Report, Calendar Year 2013*.

Sandia National Laboratories, New Mexico. (September 2015). *Current Conceptual Model for Technical Area-V Groundwater Area of Concern at Sandia National Laboratories, New Mexico*.

Sandia National Laboratories, New Mexico. (December 2017). *Aquifer Pumping Test Report for the Burn Site Groundwater Area of Concern*.

Sandia National Laboratories, New Mexico. (February 2018). *Revised Tijeras Arroyo Groundwater Current Conceptual Model and Corrective Measures Evaluation Report*.

Sandia National Laboratories, New Mexico. (June 2022). *Annual Groundwater Monitoring Report, Calendar Year 2021*.

Sandia National Laboratories, New Mexico. (January 2023). *Burn Site Groundwater Current Conceptual Model and Corrective Measures Evaluation Report, January 2023*.

Sandia National Laboratories, New Mexico. (June 2023), *Tijeras Arroyo Groundwater Corrective Measures Implementation Plan (Revised)*.

Sandia National Laboratories, New Mexico. (April 2024). *Comprehensive Site-Wide Groundwater Monitoring Plan, Calendar Year 2025*.

Sandia National Laboratories, New Mexico. (May 2024). *Technical Area-V Groundwater Area of Concern Current Conceptual Model and Corrective Measures Evaluation Report*.

Sandia National Laboratories, New Mexico. (April 2025). *Comprehensive Site-Wide Groundwater Monitoring Plan, Calendar Year 2026.*

Sandia National Laboratories, New Mexico. (May 2025). *Well TAV-INJ1 Decommissioning Report*.

Sandia National Laboratories, New Mexico. (July 2025). *Annual Groundwater Monitoring Report, Calendar Year 2024*.

Thorn, C.R., McAda, D.P., and Kernodle, J.M. (1993). *Geohydrologic Framework and Hydrologic Conditions in the Albuquerque Basin, Central New Mexico*, Water Resources Investigation Report 93-4149. U.S. Geological Survey. https://pubs.usgs.gov/wri/1993/4149/report.pdf

U.S. Army Corps of Engineers, Albuquerque District. (1979). *Special Flood Hazard Information: Tijeras Arroyo and Arroyo del Coyote, Kirtland AFB, New Mexico*.

U.S. Department of Energy. (1997). *EML Procedures Manual*, 28th ed., Vol. 1, Rev. 0, HASL-300.

U.S. Environmental Protection Agency. (1980). *Prescribed Procedures for Measurement of Radioactivity in Drinking Water*, EPA-600/4-80-032.

U.S. Environmental Protection Agency. (1984). *Methods for Chemical Analysis of Water and Wastes*, EPA 600-4-79-020.

U.S. Environmental Protection Agency. (1986a). *RCRA Ground-Water Monitoring Technical Enforcement Guidance Document*, OSWER-9950.1.

U.S. Environmental Protection Agency. (1986b, as updated). *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, 3rd ed., Rev.1.

U.S. Environmental Protection Agency. (March 2018). *2018 Edition of the Drinking Water Standards and Health Advisories Tables,* EPA 822-F-18-0001.

Van Hart, D. (June 2003). *Geologic Investigation: An Update of Subsurface Geology on Kirtland Air Force Base, New Mexico,* SAND2003-1869. Sandia National Laboratories. https://www.osti.gov/servlets/purl/913520/

Walvoord, M.A., F.M. Phillips, D.A. Stonestrom, R.D. Evans, P.C. Hartsough, B.D. Newman, and R.G. Striegl (November 2003). *A Reservoir of Nitrate Beneath Desert Soils*, Science, Vol. 302, November 7, 2003.

Attachment 1A
Sandia National Laboratories, New Mexico Precipitation Data

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Attachment 1A Precipitation Data

Figure 1A-1 Precipitation Data for Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 1A-5

Figure 1A-2 Annual Precipitation Data for Sandia National Laboratories, New Mexico, January 2016–December 2025 ..... 1A-6

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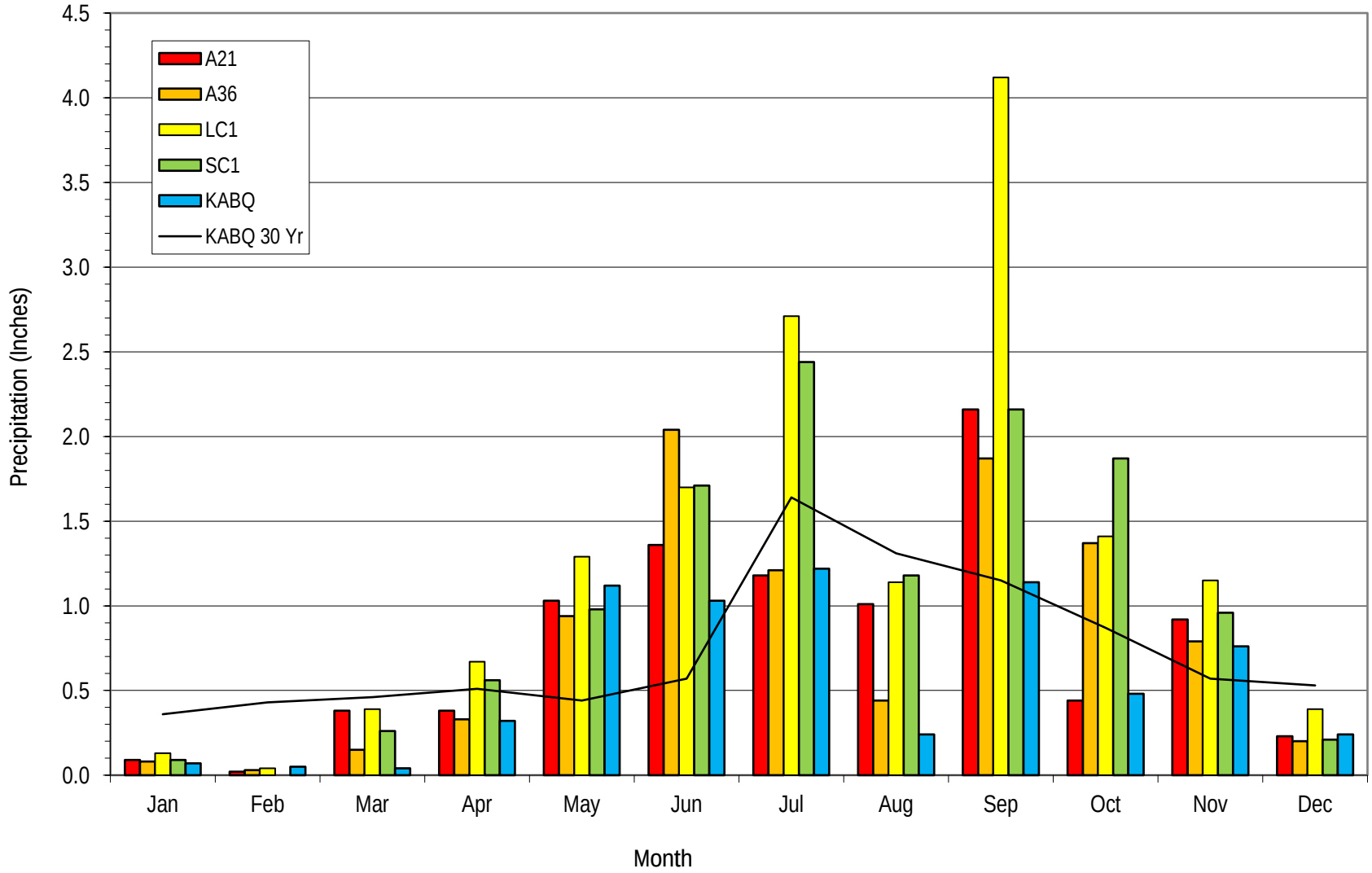


Figure 1A-1
Precipitation Data for Sandia National Laboratories, New Mexico, Calendar Year 2025

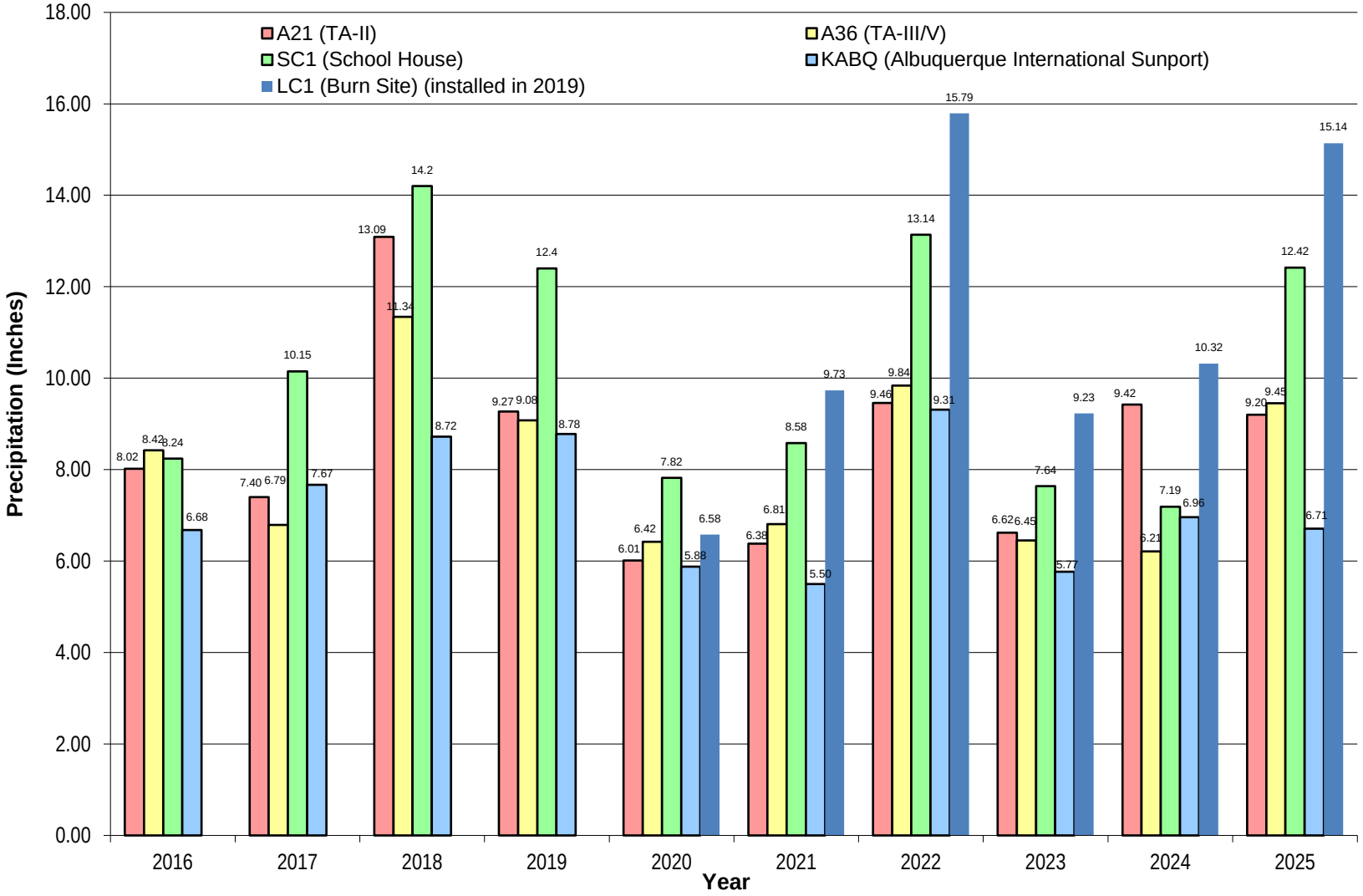


Figure 1A-2
Annual Precipitation Data for Sandia National Laboratories, New Mexico, January 2016–December 2025

Attachment 1B
Kirtland Air Force Base Production Well Data

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Attachment 1B Production Well Data

Figure 1B-1 Groundwater Pumped by Kirtland Air Force Base Production Wells, Calendar Year 2025 ..... 1B-5

Figure 1B-2 Groundwater Pumped by Kirtland Air Force Base Production Wells Monthly, Calendar Year 2025 ..... 1B-6

Figure 1B-3 Groundwater Pumped by Kirtland Air Force Base Production Wells Annually, 2015-2025 ..... 1B-7

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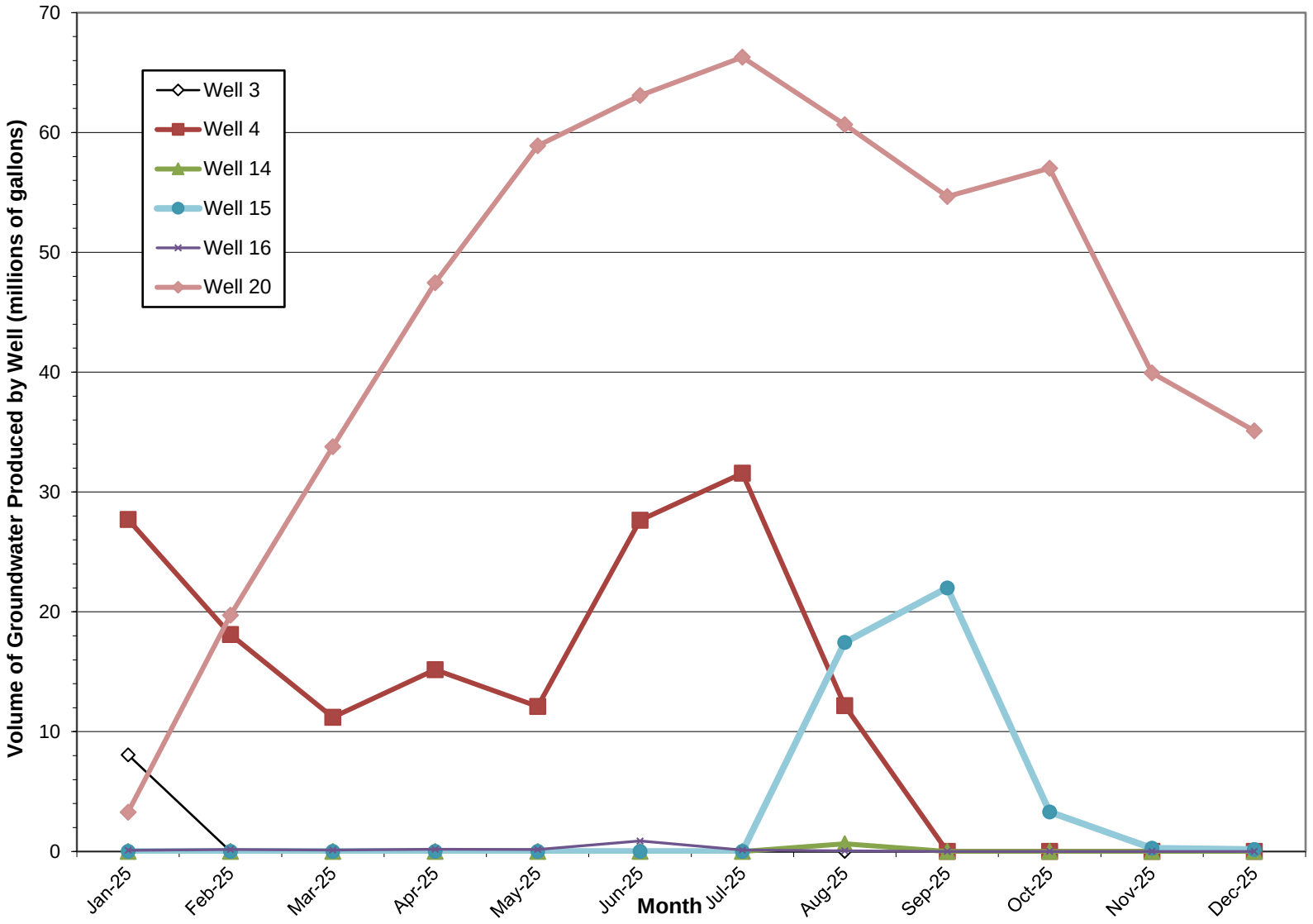


Figure 1B-1
Groundwater Pumped by Kirtland Air Force Base Production Wells, Calendar Year 2025

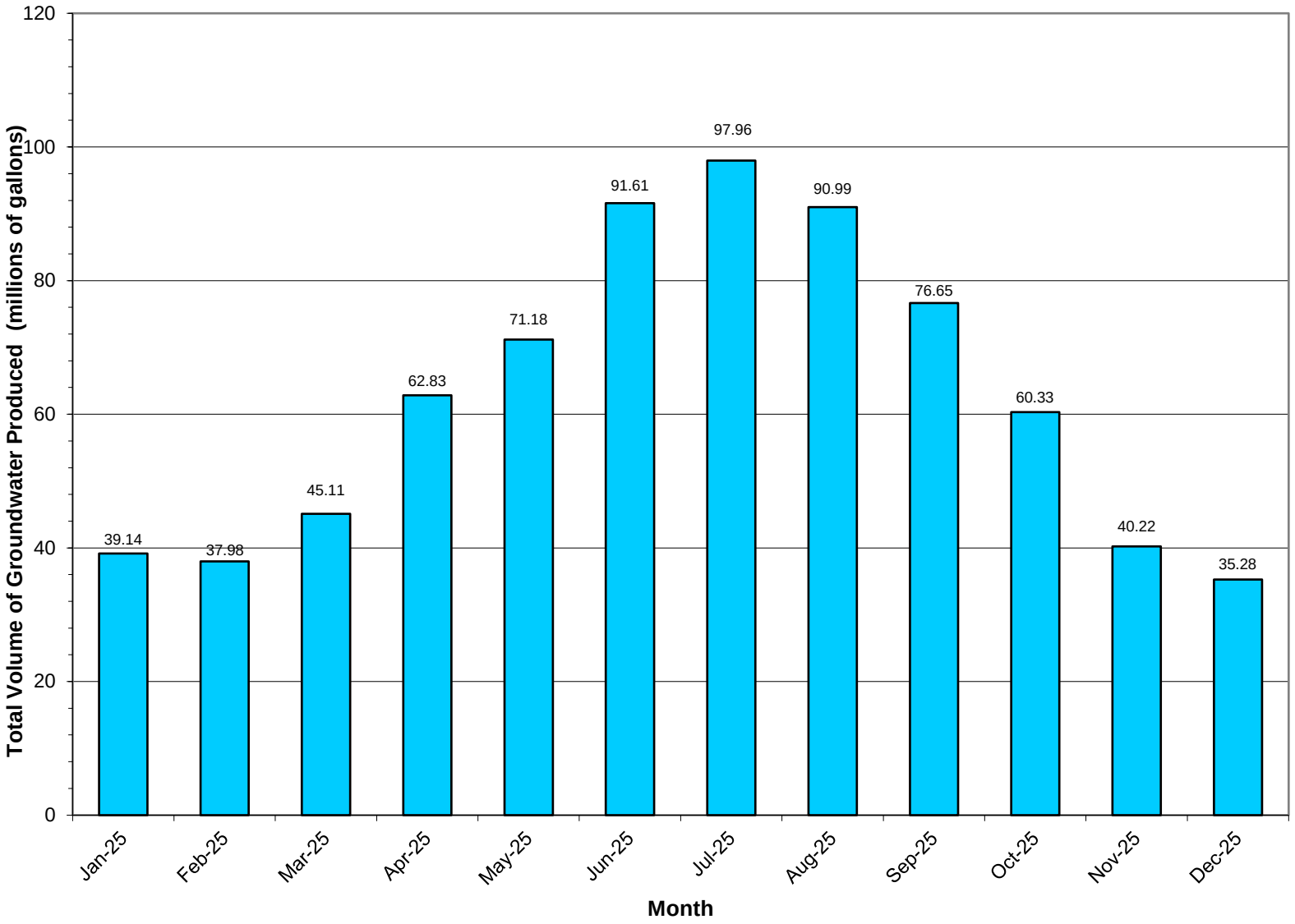


Figure 1B-2
Groundwater Pumped by Kirtland Air Force Base Production Wells Monthly, Calendar Year 2025

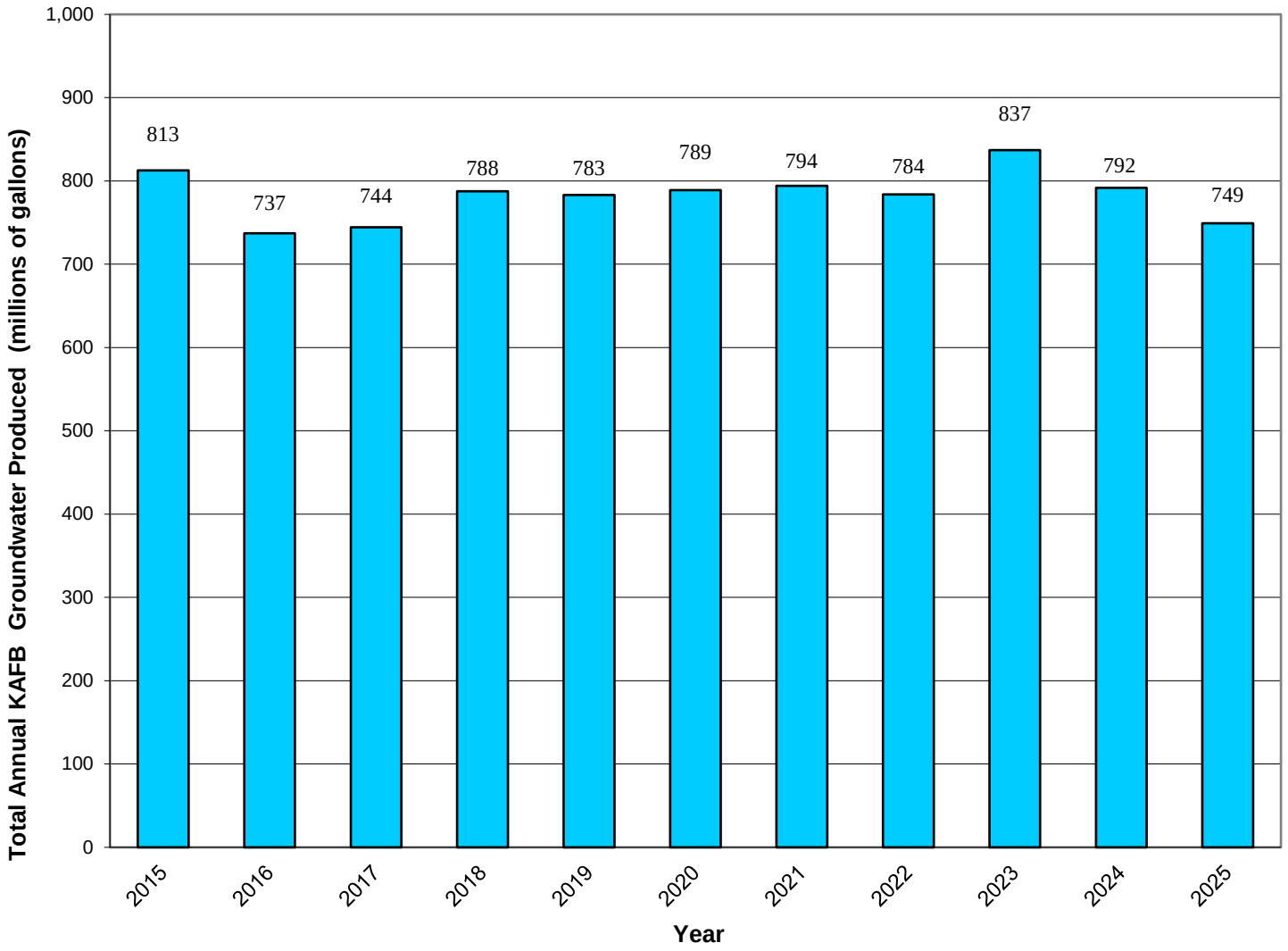


Figure 1B-3
Groundwater Pumped by Kirtland Air Force Base Production Wells Annually, 2015–2025

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Attachment 2A
Groundwater Monitoring Program
Monitoring Well Hydrographs

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Attachment 2A Hydrographs

Figure 2A-1 Hydrograph for Monitoring Well Greystone-MW2 ..... 2A-5

Figure 2A-2 Hydrograph for Monitoring Wells MRN-2 and MRN-3D 2A-6

Figure 2A-3 Hydrograph for Monitoring Wells NWTA3-MW3D, PL-2, and PL-4 ..... 2A-7

Figure 2A-4 Hydrograph for Monitoring Wells SFR-2S and TRE-1 ..... 2A-8

Figure 2A-5 Hydrograph for Monitoring Well SFR-4T 2A-9

Figure 2A-6 Hydrograph for Monitoring Wells SWTA3-MW2, SWTA3-MW3, and SWTA3-MW4 ..... 2A-10

Figure 2A-7 Hydrograph for Monitoring Well OBS-MW1 ..... 2A-11

Figure 2A-8 Hydrograph for Monitoring Well CCBA-MW2 ..... 2A-12

Figure 2A-9 Hydrograph for Monitoring Well CTF-MW1 ..... 2A-13

Figure 2A-10 Hydrograph for Monitoring Well CYN-MW5 ..... 2A-14

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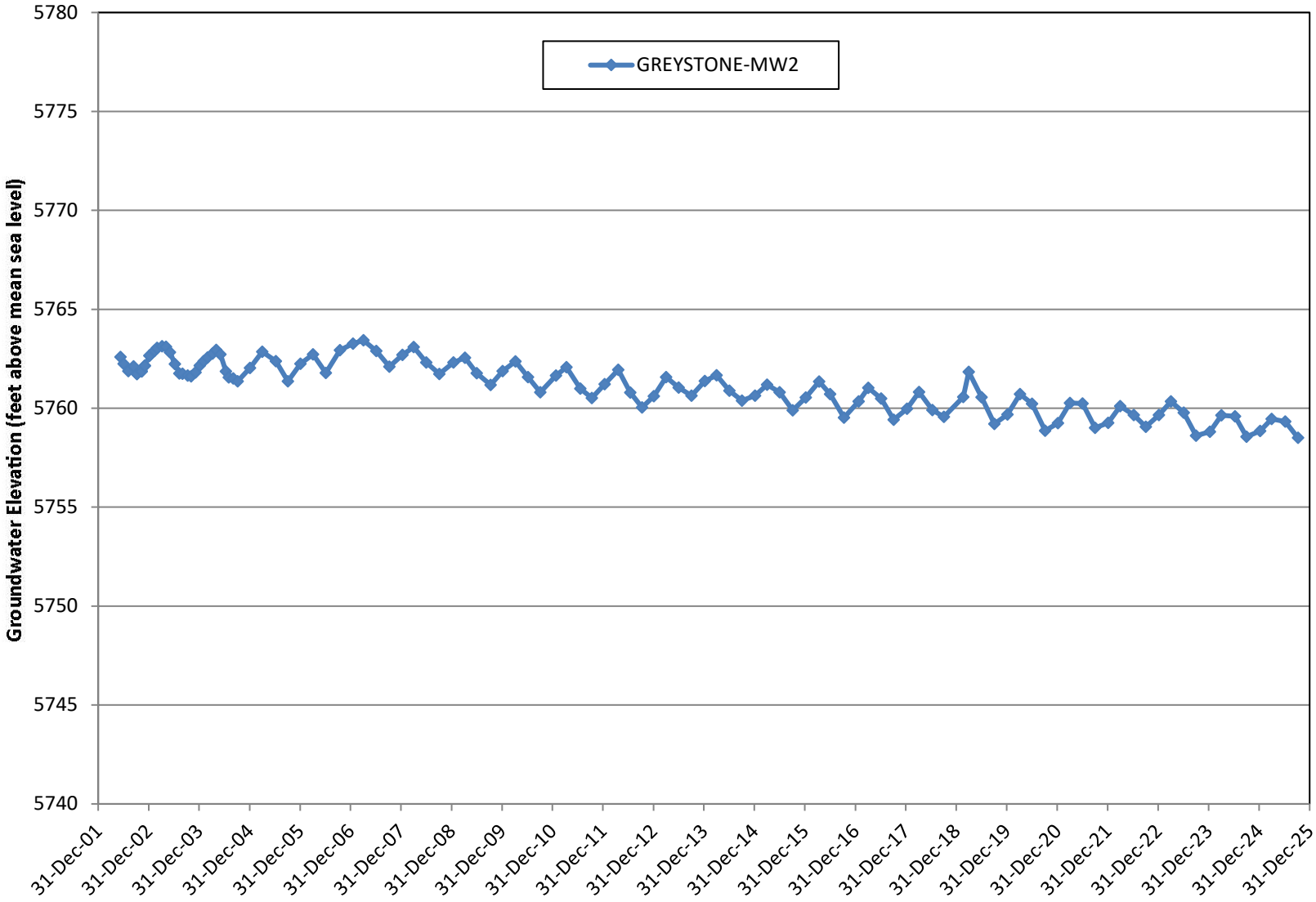


Figure 2A-1
Hydrograph for Monitoring Well Greystone-MW2

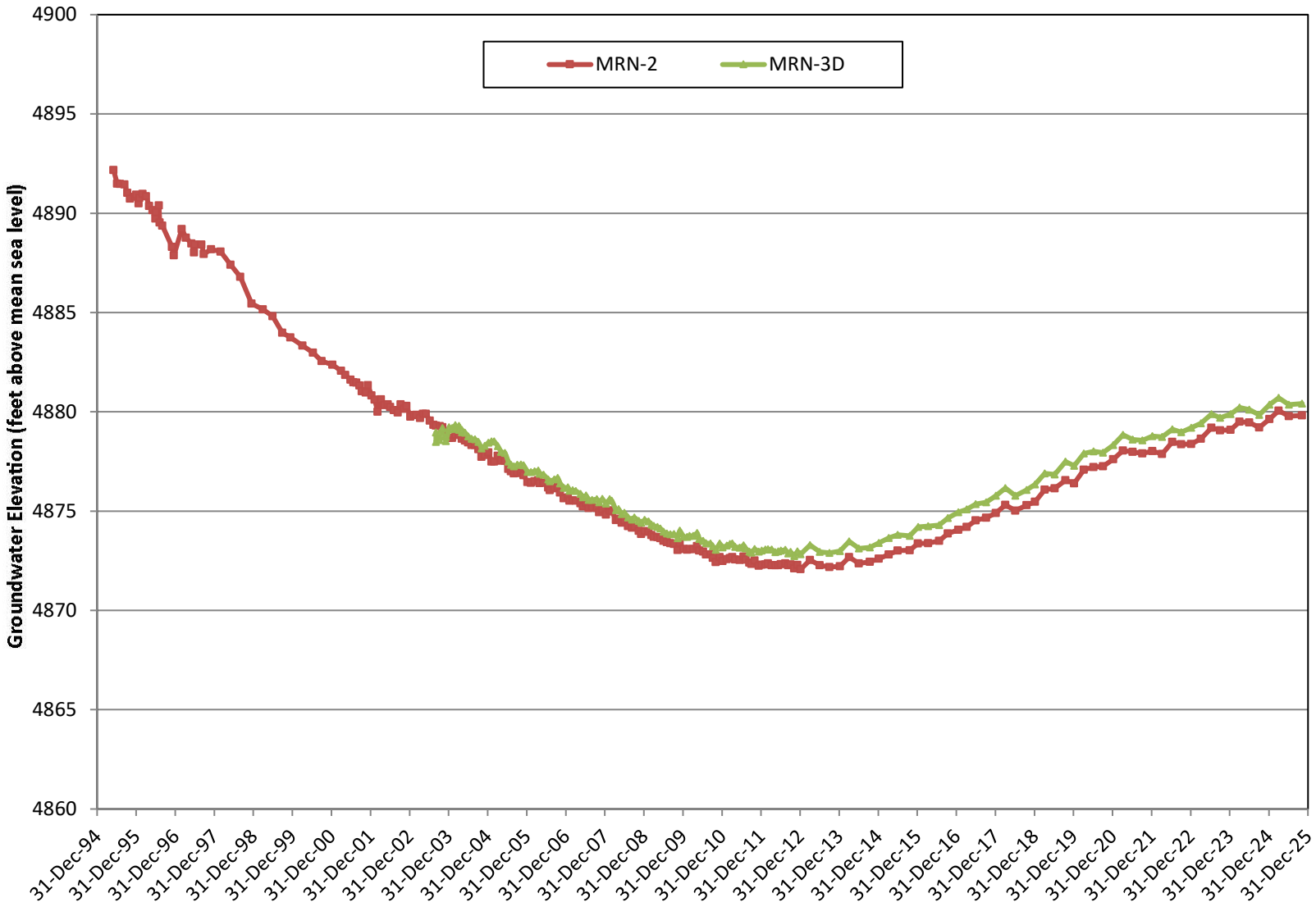


Figure 2A-2
Hydrograph for Monitoring Wells MRN-2 and MRN-3D

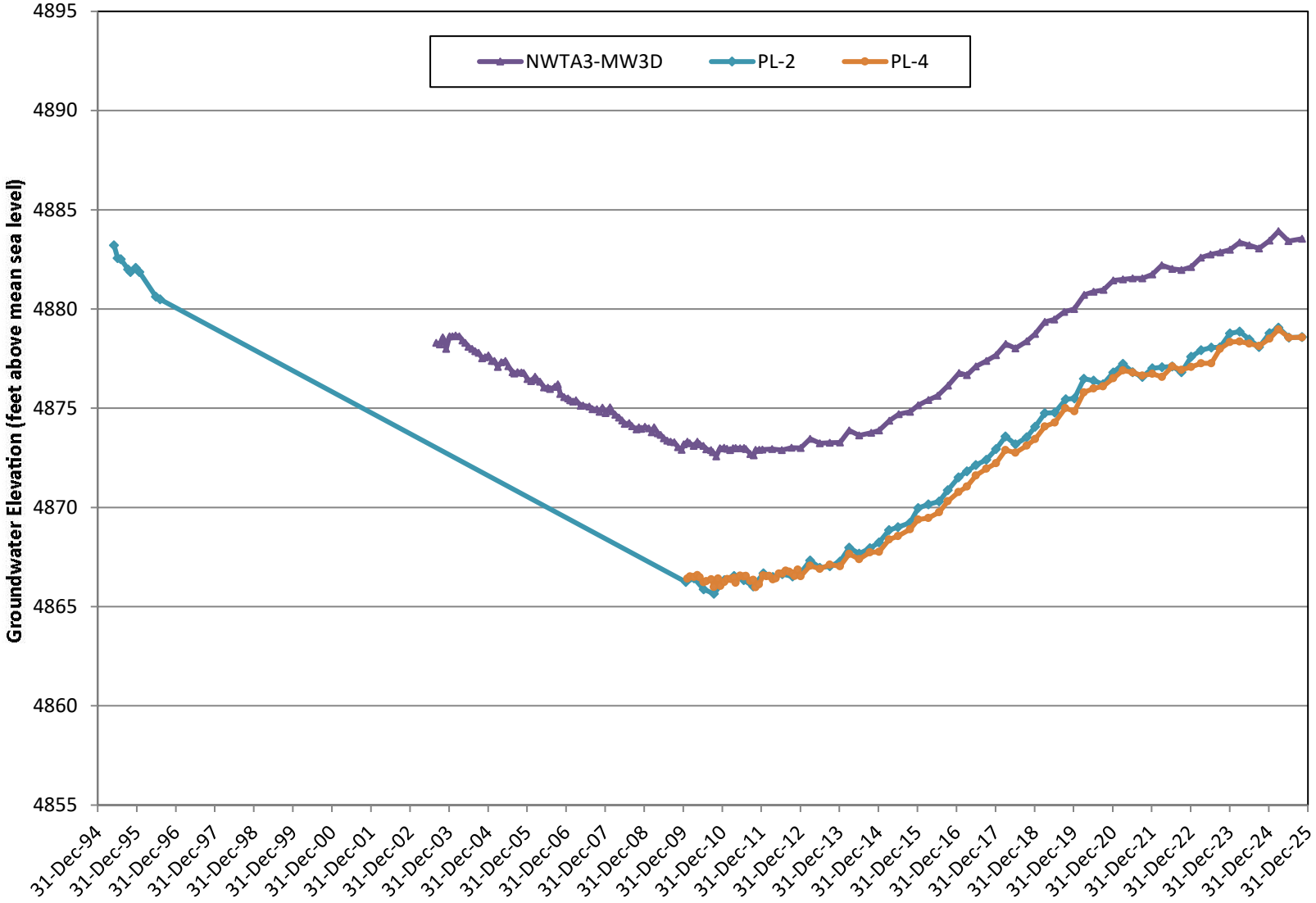


Figure 2A-3
Hydrograph for Monitoring Wells NWTA3-MW3D, PL-2, and PL-4

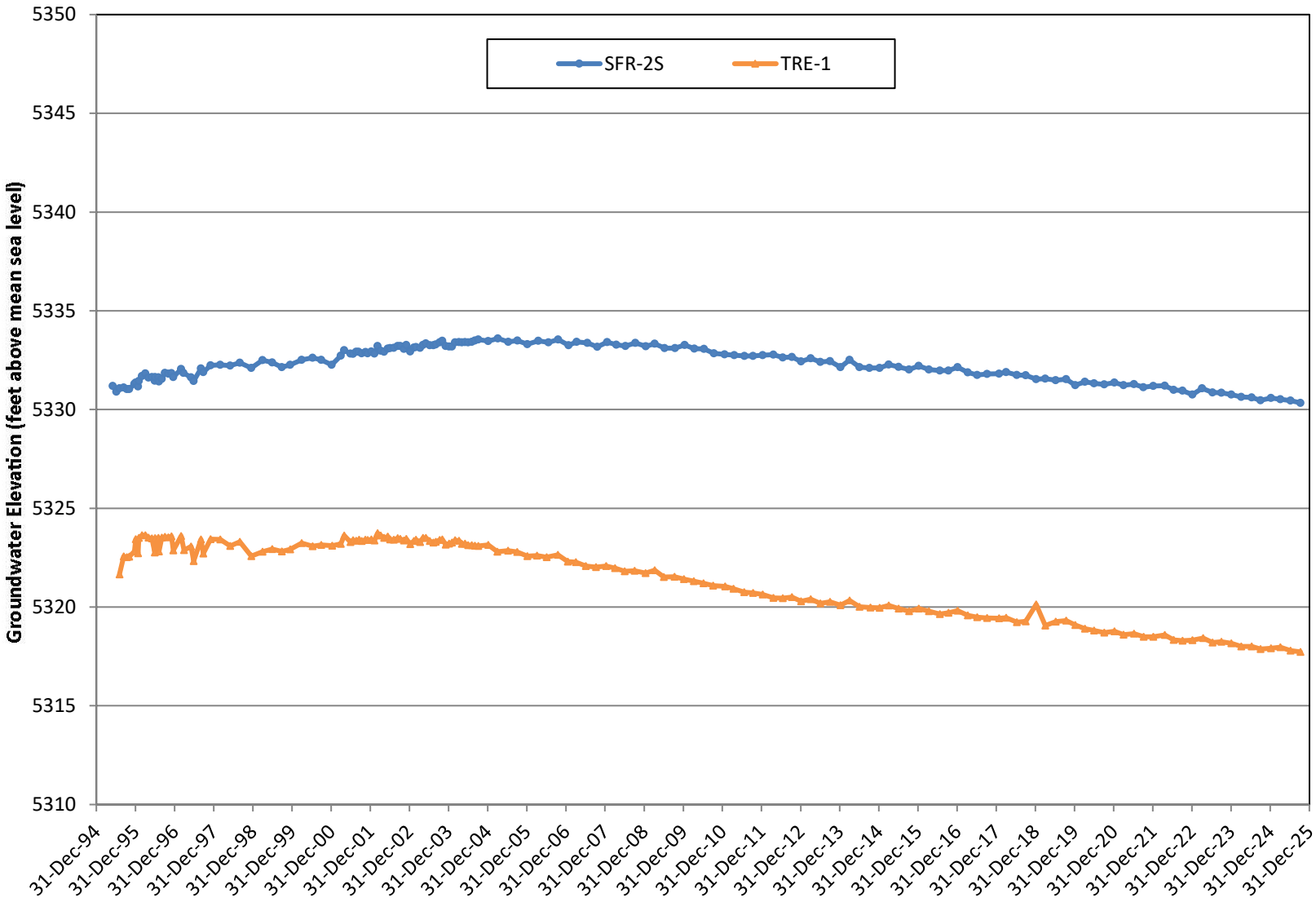


Figure 2A-4
Hydrograph for Monitoring Wells SFR-2S and TRE-1

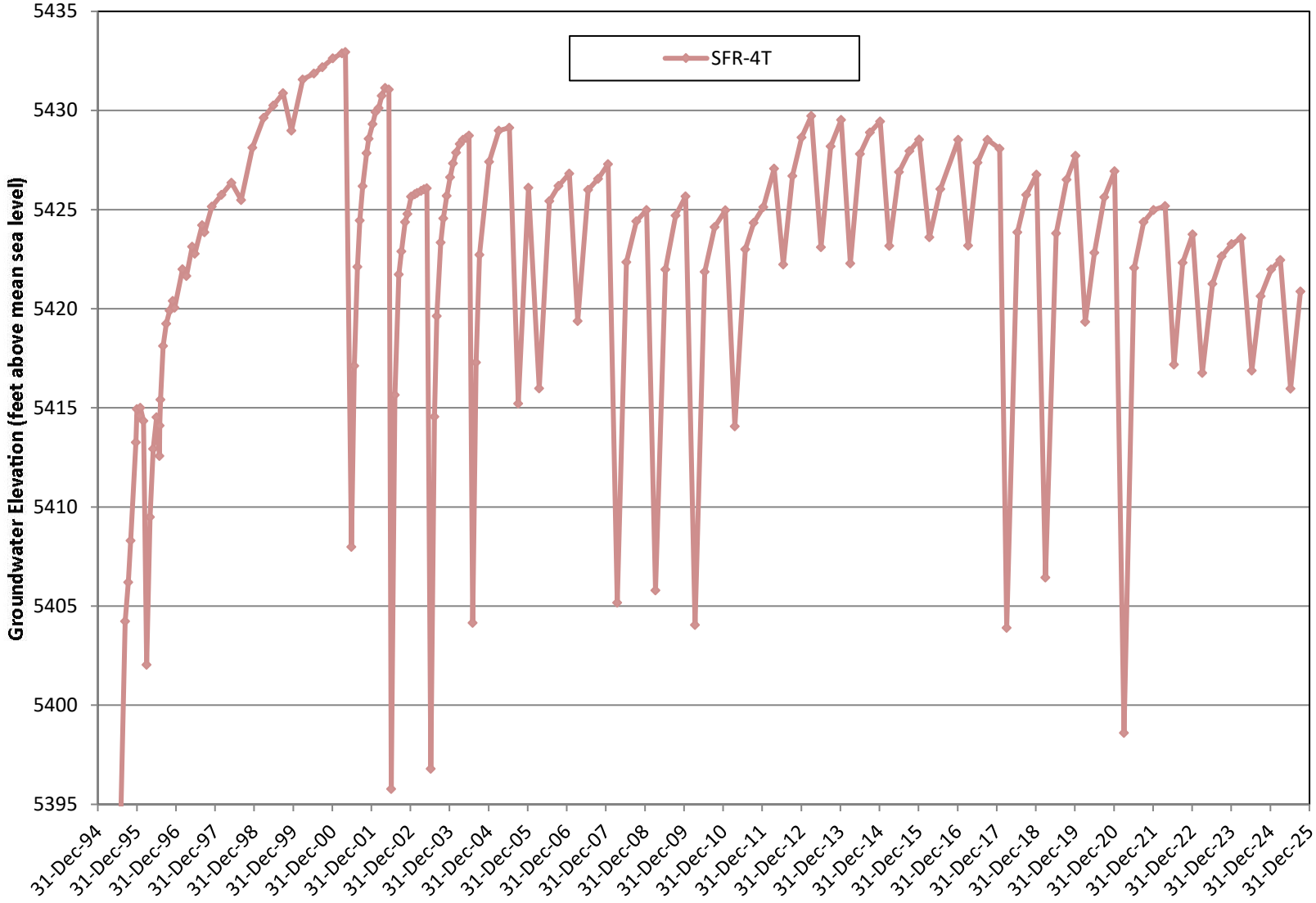


Figure 2A-5
Hydrograph for Monitoring Well SFR-4T

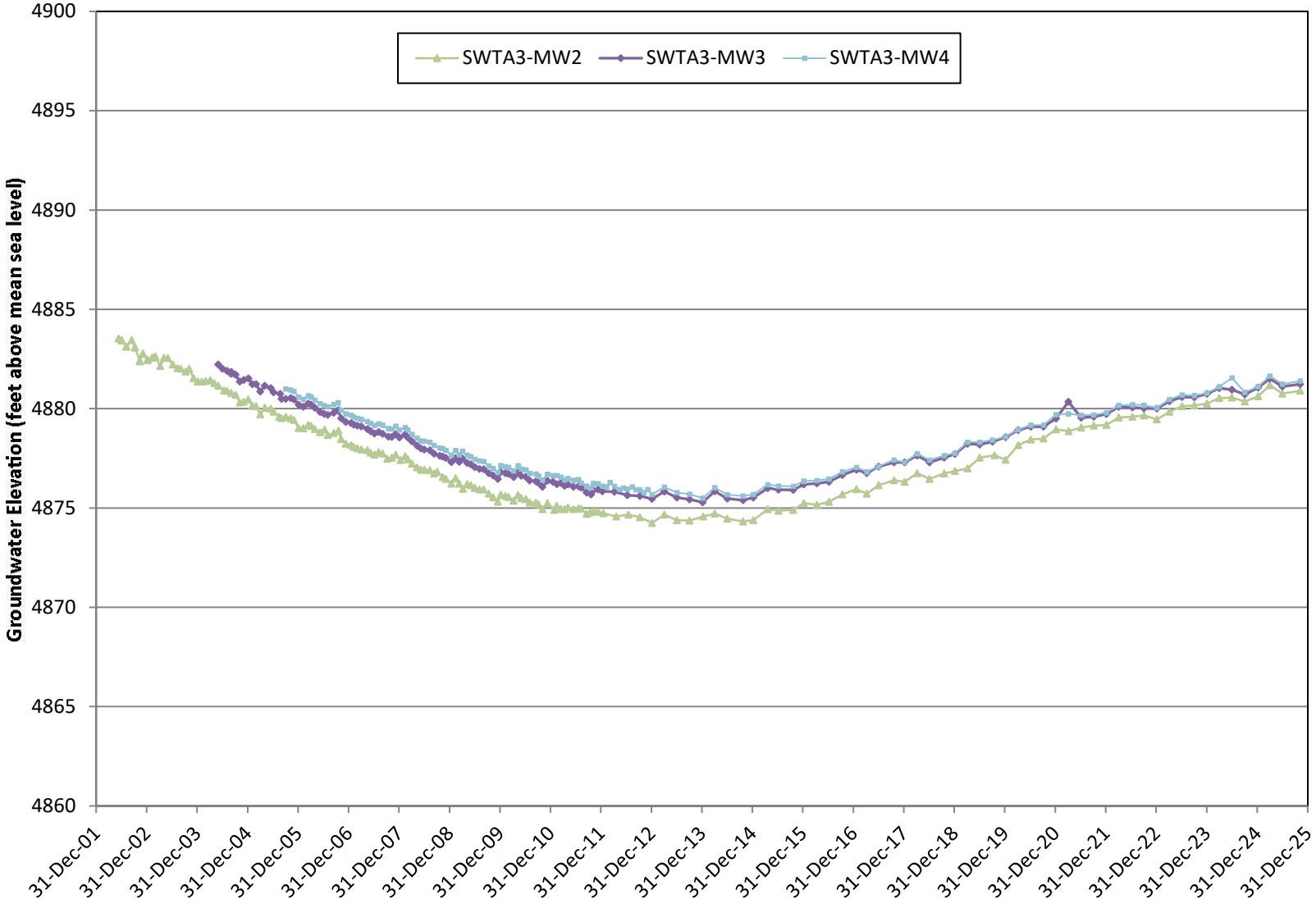


Figure 2A-6
Hydrograph for Monitoring Wells SWTA3-MW2, SWTA3-MW3, and SWTA3-MW4

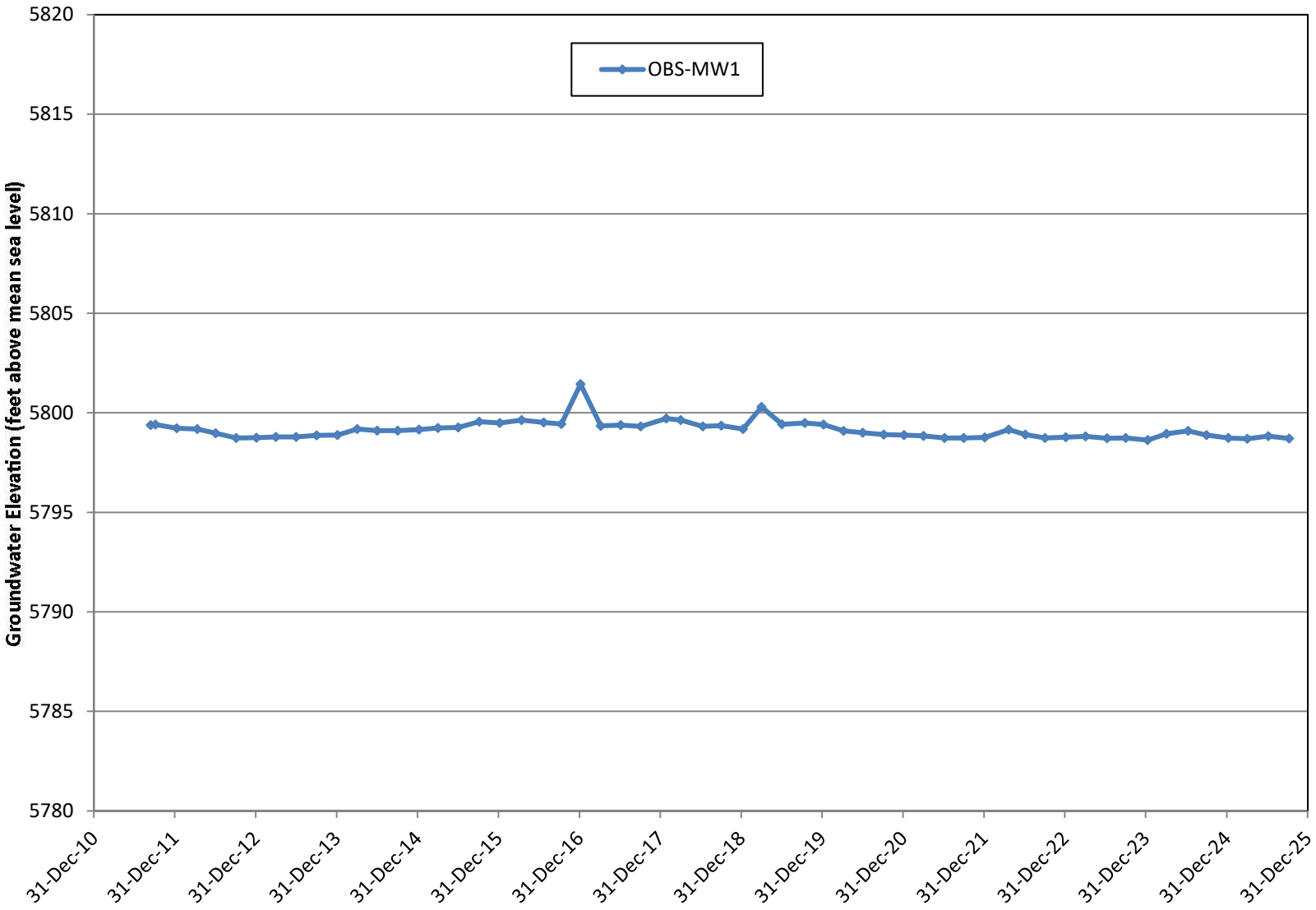


Figure 2A-7
Hydrograph for Monitoring Well OBS-MW1

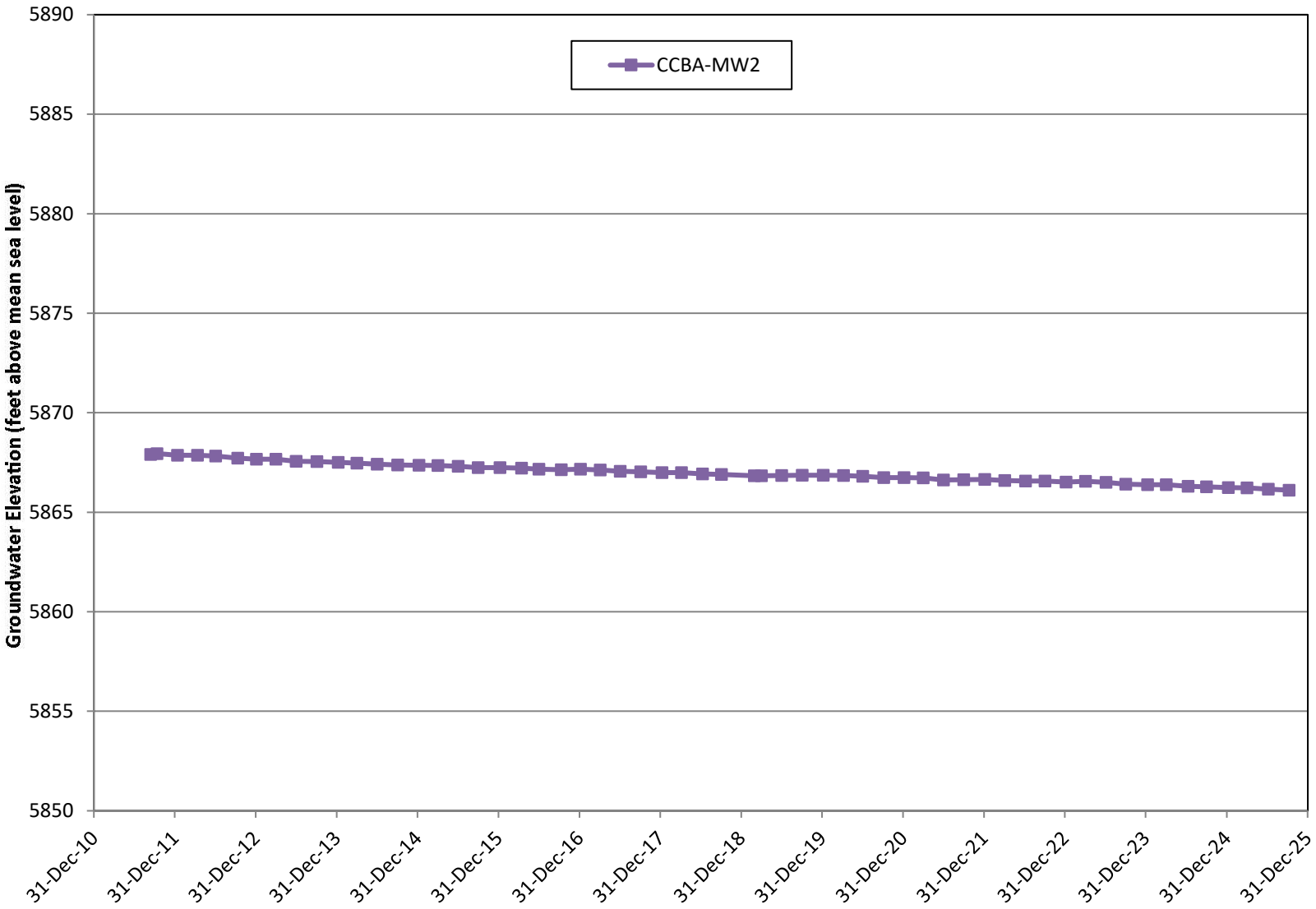


Figure 2A-8
Hydrograph for Monitoring Well CCBA-MW2

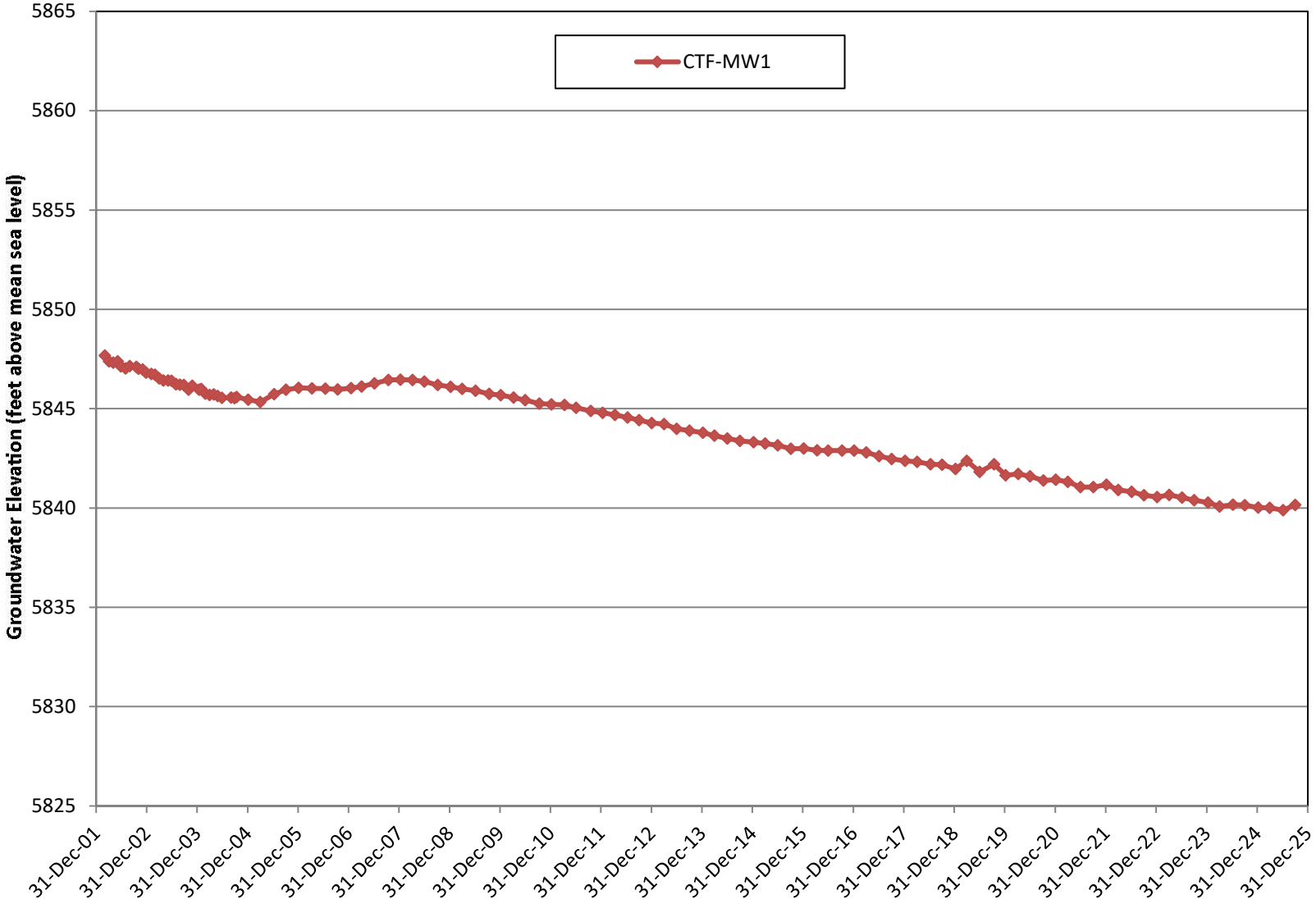


Figure 2A-9
Hydrograph for Monitoring Well CTF-MW1

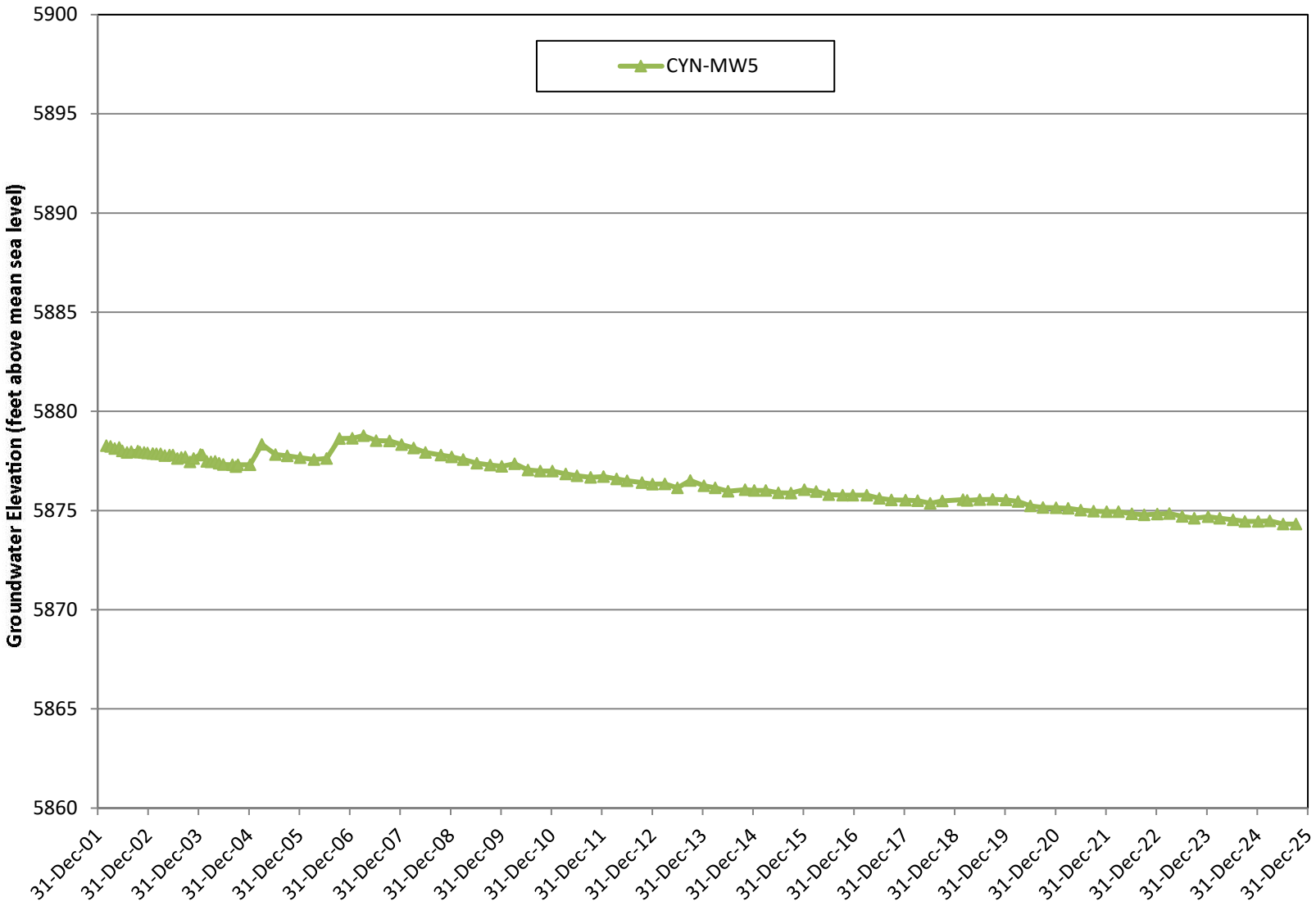


Figure 2A-10
Hydrograph for Monitoring Well CYN-MW5

Attachment 2B
Groundwater Monitoring Program
Analytical Results Tables

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Attachment 2B Analytical Results Tables

Table 2B-1 Summary of Detected Volatile Organic Compounds and High Explosive Compounds, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 2B-5

Table 2B-2 Method Detection Limits for Volatile Organic Compounds and High Explosive Compounds, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 2B-6

Table 2B-3 Summary of Nitrate Plus Nitrite Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 2B-7

Table 2B-4 Summary of Alkalinity, Anion, Total Organic Halogen, Total Phenol, and Total Cyanide Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 2B-9

Table 2B-5 Summary of Mercury Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 2B-15

Table 2B-6 Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 2B-17

Table 2B-7 Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, and Radium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 2B-38

Table 2B-8 Summary of Field Water Quality Parameter Measurements, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 2B-45

Notes for Groundwater Monitoring Program Analytical Results Tables 2B-46

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Table 2B-1
Summary of Detected Volatile Organic Compounds and High Explosive Compounds, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (µg/L)	MDL[b] (µg/L)	PQL[c] (µg/L)	MCL/MAC[d] (µg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
Coyote Springs 24-Apr-25	Methylene Chloride	1.08	0.500	5.00	5.00	5.00	B, J	5.00UJ	124125-001	SW846-8260D
CCBA-MW2 30-Apr-25	Methylene Chloride	2.88	0.500	5.00	5.00	5.00	B, J	5.00UJ	124136-001	SW846-8260D
CYN-MW5 01-May-25	Methylene Chloride	2.89	0.500	5.00	5.00	5.00	B, J	5.00UJ	124141-001	SW846-8260D
Greystone-MW2 29-Apr-25	Methylene Chloride	2.74	0.500	5.00	5.00	5.00	B, J	5.00UJ	124133-001	SW846-8260D
Greystone-MW2 (Duplicate) 29-Apr-25	Methylene Chloride	2.64	0.500	5.00	5.00	5.00	B, J	5.00UJ	124134-001	SW846-8260D
MRN-2 15-Apr-25	Methylene Chloride	2.28	0.500	5.00	5.00	5.00	B, J	5.00UJ	124102-001	SW846-8260D
MRN-2 (Duplicate) 15-Apr-25	Methylene Chloride	2.24	0.500	5.00	5.00	5.00	B, J	5.00UJ	124103-001	SW846-8260D
MRN-3D 16-Apr-25	Methylene Chloride	3.72	0.500	5.00	5.00	5.00	B, J	5.00UJ	124105-001	SW846-8260D
NWTA3-MW3D 14-Apr-25	Methylene Chloride	2.16	0.500	5.00	5.00	5.00	B, J	5.00UJ	124097-001	SW846-8260D
OBS-MW1 24-Apr-25	Methylene Chloride	0.720	0.500	5.00	5.00	5.00	J	5.00UJ	124122-001	SW846-8260D
OBS-MW1 (Duplicate) 24-Apr-25	Methylene Chloride	0.700	0.500	5.00	5.00	5.00	J	5.00UJ	124123-001	SW846-8260D
PL-2 17-Apr-25	Methylene Chloride	0.860	0.500	5.00	5.00	5.00	B, J, N	5.00UJ	124109-001	SW846-8260D
	1,2,3-Trichlorobenzene	0.340	0.333	1.00	NE	NE	J		124109-001	SW846-8260D
PL-4 17-Apr-25	Methylene Chloride	0.890	0.500	5.00	5.00	5.00	B, J, N	5.00UJ	124111-001	SW846-8260D
SFR-2S 23-Apr-25	Methylene Chloride	0.750	0.500	5.00	5.00	5.00	J	5.00UJ	124117-001	SW846-8260D
SFR-4T 22-Apr-25	Methylene Chloride	0.830	0.500	5.00	5.00	5.00	B, J, N	5.00UJ	124115-001	SW846-8260D
SWTA3-MW2 08-Apr-25	Methylene Chloride	1.45	0.500	5.00	5.00	5.00	B, J	5.00UJ	124090-001	SW846-8260D
	Naphthalene	0.390	0.333	1.00	NE	30.0	J		124090-001	SW846-8260D
	1,2,3-Trichlorobenzene	0.350	0.333	1.00	NE	NE	J		124090-001	SW846-8260D
SWTA3-MW3 09-Apr-25	Methylene Chloride	1.31	0.500	5.00	5.00	5.00	B, J	5.00UJ	124093-001	SW846-8260D
SWTA3-MW4 10-Apr-25	Methylene Chloride	1.32	0.500	5.00	5.00	5.00	B, J	5.00UJ	124095-001	SW846-8260D
TRE-1 21-Apr-25	Chloroform	0.680	0.333	1.00	80.0	100	J		124113-001	SW846-8260D
	Methylene Chloride	0.870	0.500	5.00	5.00	5.00	B, J, N	5.00UJ	124113-001	SW846-8260D

See notes at end of tables.

Table 2B-2
Method Detection Limits for Volatile Organic Compounds and High Explosive Compounds, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Analyte	MDL[b] (µg/L)	Analytical Method[g]	Analyte	MDL[b] (µg/L)	Analytical Method[g]
1,1,1,2-Tetrachloroethane	0.333	SW846-8260D	Ethylbenzene	0.333	SW846-8260D
1,1,1-Trichloroethane	0.333	SW846-8260D	Hexachlorobutadiene	0.333	SW846-8260D
1,1,2,2-Tetrachloroethane	0.333	SW846-8260D	Isopropylbenzene	0.333	SW846-8260D
1,1,2-Trichloroethane	0.333	SW846-8260D	Methylene chloride	0.500	SW846-8260D
1,1-Dichloroethane	0.333	SW846-8260D	Naphthalene	0.333	SW846-8260D
1,1-Dichloroethene	0.333	SW846-8260D	Styrene	0.333	SW846-8260D
1,1-Dichloropropene	0.333	SW846-8260D	Tert-butyl methyl ether	0.333	SW846-8260D
1,2,3-Trichlorobenzene	0.333	SW846-8260D	Tetrachloroethene	0.333	SW846-8260D
1,2,3-Trichloropropane	0.333	SW846-8260D	Toluene	0.333	SW846-8260D
1,2,4-Trichlorobenzene	0.333	SW846-8260D	Trichloroethene	0.333	SW846-8260D
1,2,4-Trimethylbenzene	0.333	SW846-8260D	Trichlorofluoromethane	0.333	SW846-8260D
1,2-Dibromo-3-chloropropane	0.333	SW846-8260D	Vinyl chloride	0.333	SW846-8260D
1,2-Dibromoethane	0.333	SW846-8260D	cis-1,2-Dichloroethene	0.333	SW846-8260D
1,2-Dichlorobenzene	0.333	SW846-8260D	cis-1,3-Dichloropropene	0.333	SW846-8260D
1,2-Dichloroethane	0.333	SW846-8260D	m-,p-Xylene	0.500	SW846-8260D
1,2-Dichloropropane	0.333	SW846-8260D	n-Butylbenzene	0.333	SW846-8260D
1,3,5-Trimethylbenzene	0.500	SW846-8260D	n-Propylbenzene	0.333	SW846-8260D
1,3-Dichlorobenzene	0.333	SW846-8260D	o-Xylene	0.333	SW846-8260D
1,3-Dichloropropane	0.333	SW846-8260D	sec-Butylbenzene	0.333	SW846-8260D
1,4-Dichlorobenzene	0.333	SW846-8260D	tert-Butylbenzene	0.333	SW846-8260D
2,2-Dichloropropane	0.333	SW846-8260D	trans-1,2-Dichloroethene	0.333	SW846-8260D
2-Chlorotoluene	0.333	SW846-8260D	trans-1,3-Dichloropropene	0.333	SW846-8260D
4-Chlorotoluene	0.333	SW846-8260D	1,3,5-Trinitrobenzene	0.0825 – 0.0879	SW846-8330B
4-Isopropyltoluene	0.333	SW846-8260D	1,3-Dinitrobenzene	0.0825 – 0.0879	SW846-8330B
Benzene	0.333	SW846-8260D	2,4,6-Trinitrotoluene	0.0825 – 0.0879	SW846-8330B
Bromobenzene	0.333	SW846-8260D	2,4-Dinitrotoluene	0.0825 – 0.0879	SW846-8330B
Bromochloromethane	0.333	SW846-8260D	2,6-Dinitrotoluene	0.0825 – 0.0879	SW846-8330B
Bromodichloromethane	0.333	SW846-8260D	2-Amino-4,6-dinitrotoluene	0.0825 – 0.0879	SW846-8330B
Bromoform	0.333	SW846-8260D	2-Nitrotoluene	0.0846 – 0.0901	SW846-8330B
Carbon tetrachloride	0.333	SW846-8260D	3-Nitrotoluene	0.0825 – 0.0879	SW846-8330B
Chlorobenzene	0.333	SW846-8260D	4-Amino-2,6-dinitrotoluene	0.0825 – 0.0879	SW846-8330B
Chloroethane	0.333	SW846-8260D	4-Nitrotoluene	0.155 – 0.165	SW846-8330B
Chloroform	0.333	SW846-8260D	HMX	0.0825 – 0.0879	SW846-8330B
Chloromethane	0.333	SW846-8260D	Nitrobenzene	0.0825 – 0.0879	SW846-8330B
Dibromochloromethane	0.333	SW846-8260D	Pentaerythritol tetranitrate	0.103 – 0.110	SW846-8330B
Dibromomethane	0.333	SW846-8260D	RDX	0.0825 – 0.0879	SW846-8330B
Dichlorodifluoromethane	0.355	SW846-8260D	Tetryl	0.0825 – 0.0879	SW846-8330B

See notes at end of tables.

Table 2B-3
Summary of Nitrate Plus Nitrite Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)	Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
Coyote Spring 24-Apr-25	Nitrate plus nitrite	0.658	0.0170	0.0500	10.0		J	124125-005	EPA 353.2
CCBA-MW2 30-Apr-25	Nitrate plus nitrite	3.52	0.0850	0.250	10.0			124136-005	EPA 353.2
CTF-MW1 28-Apr-25	Nitrate plus nitrite	8.25	0.170	0.500	10.0			124129-005	EPA 353.2
CYN-MW5 01-May-25	Nitrate plus nitrite	2.36	0.170	0.500	10.0			124141-005	EPA 353.2
CYN-MW5 (Duplicate) 01-May-25	Nitrate plus nitrite	2.36	0.170	0.500	10.0			124142-005	EPA 353.2
Greystone-MW2 29-Apr-25	Nitrate plus nitrite	4.71	0.170	0.500	10.0			124133-005	EPA 353.2
Greystone-MW2 (Duplicate) 29-Apr-25	Nitrate plus nitrite	4.92	0.170	0.500	10.0			124134-005	EPA 353.2
MRN-2 15-Apr-25	Nitrate plus nitrite	3.85	0.170	0.500	10.0			124102-005	EPA 353.2
MRN-2 (Duplicate) 15-Apr-25	Nitrate plus nitrite	3.88	0.170	0.500	10.0			124103-005	EPA 353.2
MRN-3D 16-Apr-25	Nitrate plus nitrite	2.72	0.170	0.500	10.0			124105-005	EPA 353.2
NWTA3-MW3D 14-Apr-25	Nitrate plus nitrite	0.890	0.0850	0.250	10.0			124097-005	EPA 353.2
OBS-MW1 24-Apr-25	Nitrate plus nitrite	2.02	0.0850	0.250	10.0			124122-005	EPA 353.2
OBS-MW1(Duplicate) 24-Apr-25	Nitrate plus nitrite	2.07	0.0850	0.250	10.0			124123-005	EPA 353.2
PL-2 17-Apr-25	Nitrate plus nitrite	3.00	0.170	0.500	10.0			124109-005	EPA 353.2
PL-4 17-Apr-25	Nitrate plus nitrite	5.62	0.170	0.500	10.0			124111-005	EPA 353.2
SFR-2S 23-Apr-25	Nitrate plus nitrite	0.958	0.0170	0.0500	10.0		J	124117-006	EPA 353.2
SFR-4T 22-Apr-25	Nitrate plus nitrite	0.253	0.0170	0.0500	10.0		J	124115-006	EPA 353.2
SWTA3-MW2 08-Apr-25	Nitrate plus nitrite	1.04	0.0850	0.250	10.0			124090-006	EPA 353.2

See notes at end of tables.

Table 2B-3 (concluded)
Summary of Nitrate Plus Nitrite Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)	Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
SWTA3-MW3 09-Apr-25	Nitrate plus nitrite	0.665	0.0170	0.0500	10.0			124093-006	EPA 353.2
SWTA3-MW4 10-Apr-25	Nitrate plus nitrite	1.08	0.0850	0.250	10.0			124095-006	EPA 353.2
TRE-1 21-Apr-25	Nitrate plus nitrite	2.56	0.0850	0.250	10.0			124113-006	EPA 353.2

See notes at end of tables.

Table 2B-4
Summary of Alkalinity, Anion, Total Organic Halogen, Total Phenol, and Total Cyanide Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
Coyote Springs	Total Organic Halogens	0.0565	0.00333	0.0100	NE	NE	H	J-	124125-002	SW846-9020B
24-Apr-25	Bromide	2.01	0.268	0.800	NE	NE			124125-007	SW846-9056A
	Chloride	**466**	6.70	20.0	NE	250		J	124125-007	SW846-9056A
	Fluoride	**1.71**	0.0330	0.100	4.00	1.60			124125-007	SW846-9056A
	Sulfate	139	13.3	40.0	NE	600		J	124125-007	SW846-9056A
	Alkalinity as CaCO3	978	0.725	2.00	NE	NE			124125-004	SM 2320B
	Total Phenol	0.00284	0.00167	0.00500	NE	0.005	J	J-	124125-003	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	U	0.005UJ	124125-006	SW846-9012B
CCBA-MW2	Total Organic Halogens	ND	0.00333	0.0100	NE	NE	U		124136-002	SW846-9020B
30-Apr-25	Bromide	0.555	0.0670	0.200	NE	NE			124136-007	SW846-9056A
	Chloride	36.5	0.670	2.00	NE	250			124136-007	SW846-9056A
	Fluoride	1.58	0.0330	0.100	4.00	1.60			124136-007	SW846-9056A
	Sulfate	92.1	1.33	4.00	NE	600			124136-007	SW846-9056A
	Alkalinity as CaCO3	179	0.725	2.00	NE	NE			124136-004	SM 2320B
	Total Phenol	**0.0102**	0.00167	0.00500	NE	0.005			124136-003	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	N, U	UJ	124136-006	SW846-9012B
CTF-MW1	Total Organic Halogens	0.0111	0.00333	0.0100	NE	NE			124129-002	SW846-9020B
28-Apr-25	Bromide	0.524	0.0670	0.200	NE	NE			124129-007	SW846-9056A
	Chloride	35.6	0.670	2.00	NE	250			124129-007	SW846-9056A
	Fluoride	1.49	0.0330	0.100	4.00	1.60			124129-007	SW846-9056A
	Sulfate	78.1	1.33	4.00	NE	600			124129-007	SW846-9056A
	Alkalinity as CaCO3	197	0.725	2.00	NE	NE			124129-004	SM 2320B
	Total Phenol	**0.00829**	0.00167	0.00500	NE	0.005		J-	124129-003	SW846 9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	U	0.005UJ	124129-006	SW846-9012B
CYN-MW5	Total Organic Halogens	ND	0.00333	0.0100	NE	NE	U		124141-002	SW846-9020B
01-May-25	Bromide	0.177	0.0670	0.200	NE	NE	J		124141-007	SW846-9056A
	Chloride	16.4	0.134	0.400	NE	250		J	124141-007	SW846-9056A
	Fluoride	0.295	0.0330	0.100	4.00	1.60			124141-007	SW846-9056A
	Sulfate	30.0	0.266	0.800	NE	600		J	124141-007	SW846-9056A
	Alkalinity as CaCO3	141	0.725	2.00	NE	NE			124141-004	SM 2320B
	Total Phenol	**0.0166**	0.00167	0.00500	NE	0.005		J+	124141-003	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	N, U	UJ	124141-006	SW846-9012B

See notes at end of tables.

Table 2B-4 (continued)
Summary of Alkalinity, Anion, Total Organic Halogen, Total Phenol, and Total Cyanide Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
CYN-MW5	Total Organic Halogens	0.00488	0.00333	0.0100	NE	NE	J	0.01U	124142-002	SW846-9020B
(Duplicate)	Bromide	0.168	0.0670	0.200	NE	NE	J		124142-007	SW846-9056A
01-May-25	Chloride	16.5	0.134	0.400	NE	250		J	124142-007	SW846-9056A
	Fluoride	0.300	0.0330	0.100	4.00	1.60			124142-007	SW846-9056A
	Sulfate	30.4	0.266	0.800	NE	600		J	124142-007	SW846-9056A
	Alkalinity as CaCO3	140	0.725	2.00	NE	NE			124142-004	SM 2320B
	Total Phenol	ND	0.00167	0.00500	NE	0.005	U	0.005UJ	124142-003	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	N, U	UJ	124142-006	SW846-9012B
Greystone-MW2	Total Organic Halogens	ND	0.00333	0.0100	NE	NE	U		124133-002	SW846-9020B
29-Apr-25	Bromide	0.772	0.134	0.400	NE	NE			124133-007	SW846-9056A
	Chloride	123	1.34	4.00	NE	250			124133-007	SW846-9056A
	Fluoride	0.872	0.0330	0.100	4.00	1.60			124133-007	SW846-9056A
	Sulfate	53.3	2.66	8.00	NE	600			124133-007	SW846-9056A
	Alkalinity as CaCO3	398	0.725	2.00	NE	NE			124133-004	SM 2320B
	Total Phenol	**0.0243**	0.00167	0.00500	NE	0.005		J+	124133-003	SW846-9066
	Total Cyanide	0.0244	0.00167	0.00500	0.200	0.200	N	J-	124133-006	SW846-9012B
Greystone-MW2	Total Organic Halogens	0.0112	0.00333	0.0100	NE	NE	H	J+	124134-002	SW846-9020B
(Duplicate)	Bromide	0.762	0.134	0.400	NE	NE			124134-007	SW846-9056A
29-Apr-25	Chloride	125	1.34	4.00	NE	250			124134-007	SW846-9056A
	Fluoride	0.868	0.0330	0.100	4.00	1.60			124134-007	SW846-9056A
	Sulfate	54.1	2.66	8.00	NE	600			124134-007	SW846-9056A
	Alkalinity as CaCO3	392	0.725	2.00	NE	NE			124134-004	SM 2320B
	Total Phenol	**0.0175**	0.00167	0.00500	NE	0.005		J+	124134-003	SW846-9066
	Total Cyanide	0.0147	0.00167	0.00500	0.200	0.200	N	J-	124134-006	SW846-9012B
MRN-2	Total Organic Halogens	ND	0.00333	0.0100	NE	NE	H, U	UJ	124102-002	SW846-9020B
15-Apr-25	Bromide	0.175	0.0670	0.200	NE	NE	J		124102-007	SW846-9056A
	Chloride	12.8	0.268	0.800	NE	250			124102-007	SW846-9056A
	Fluoride	0.613	0.0330	0.100	4.00	1.60			124102-007	SW846-9056A
	Sulfate	49.6	0.532	1.60	NE	600			124102-007	SW846-9056A
	Alkalinity as CaCO3	158	0.725	2.00	NE	NE			124102-004	SM 2320B
	Total Phenol	ND	0.00167	0.00500	NE	0.005	U	UJ	124102-003	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	N, U	0.005UJ	124102-006	SW846-9012B

See notes at end of tables.

Table 2B-4 (continued)
Summary of Alkalinity, Anion, Total Organic Halogen, Total Phenol, and Total Cyanide Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
MRN-2	Total Organic Halogens	ND	0.00333	0.0100	NE	NE	H, U	UJ	124103-002	SW846-9020B
(Duplicate)	Bromide	0.182	0.0670	0.200	NE	NE	J		124103-007	SW846-9056A
15-Apr-25	Chloride	12.8	0.268	0.800	NE	250			124103-007	SW846-9056A
	Fluoride	0.637	0.0330	0.100	4.00	1.60			124103-007	SW846-9056A
	Sulfate	49.9	0.532	1.60	NE	600			124103-007	SW846-9056A
	Alkalinity as CaCO3	155	0.725	2.00	NE	NE			124103-004	SM 2320B
	Total Phenol	ND	0.00167	0.00500	NE	0.005	U	UJ	124103-003	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	N, U	0.005UJ	124103-006	SW846-9012B
MRN-3D	Total Organic Halogens	0.0107	0.00333	0.0100	NE	NE	H	J-	124105-002	SW846-9020B
16-Apr-25	Bromide	0.191	0.0670	0.200	NE	NE	J		124105-007	SW846-9056A
	Chloride	13.4	0.335	1.00	NE	250			124105-007	SW846-9056A
	Fluoride	0.425	0.0330	0.100	4.00	1.60			124105-007	SW846-9056A
	Sulfate	67.9	0.665	2.00	NE	600			124105-007	SW846-9056A
	Alkalinity as CaCO3	154	0.725	2.00	NE	NE			124105-004	SM 2320B
	Total Phenol	ND	0.00167	0.00500	NE	0.005	U	UJ	124105-003	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	N, U	0.005UJ	124105-006	SW846-9012B
NWTA3-MW3D	Total Organic Halogens	0.00816	0.00333	0.0100	NE	NE	B, J	0.01U	124097-002	SW846-9020B
14-Apr-25	Bromide	0.172	0.0670	0.200	NE	NE	J		124097-007	SW846-9056A
	Chloride	10.7	0.268	0.800	NE	250			124097-007	SW846-9056A
	Fluoride	0.759	0.0330	0.100	4.00	1.60			124097-007	SW846-9056A
	Sulfate	52.3	0.532	1.60	NE	600			124097-007	SW846-9056A
	Alkalinity as CaCO3	139	0.725	2.00	NE	NE			124097-004	SM 2320B
	Total Phenol	ND	0.00167	0.00500	NE	0.005	U	UJ	124097-003	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	N, U	0.005UJ	124097-006	SW846-9012B
OBS-MW1	Total Organic Halogens	ND	0.00333	0.0100	NE	NE	U		124122-002	SW846-9020B
24-Apr-25	Bromide	0.420	0.0670	0.200	NE	NE			124122-007	SW846-9056A
	Chloride	26.4	0.670	2.00	NE	250			124122-007	SW846-9056A
	Fluoride	**2.15**	0.0330	0.100	4.00	1.60			124122-007	SW846-9056A
	Sulfate	87.9	1.33	4.00	NE	600			124122-007	SW846-9056A
	Alkalinity as CaCO3	176	0.725	2.00	NE	NE			124122-004	SM 2320B
	Total Phenol	ND	0.00167	0.00500	NE	0.005	U		124122-003	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	N, U	UJ	124122-006	SW846-9012B

See notes at end of tables.

Table 2B-4 (continued)
Summary of Alkalinity, Anion, Total Organic Halogen, Total Phenol, and Total Cyanide Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
OBS-MW1 (Duplicate) 24-Apr-25	Total Organic Halogens	0.00514	0.00333	0.0100	NE	NE	J	0.01U	124123-002	SW846-9020B
	Bromide	0.422	0.0670	0.200	NE	NE			124123-007	SW846-9056A
	Chloride	26.8	0.670	2.00	NE	250			124123-007	SW846-9056A
	Fluoride	**2.16**	0.0330	0.100	4.00	1.60			124123-007	SW846-9056A
	Sulfate	88.7	1.33	4.00	NE	600			124123-007	SW846-9056A
	Alkalinity as CaCO3	176	0.725	2.00	NE	NE			124123-004	SM 2320B
	Total Phenol	ND	0.00167	0.00500	NE	0.005	U		124123-003	SW846-9066
	Total Cyanide	0.0363	0.00167	0.00500	0.200	0.200	N	J-	124123-006	SW846-9012B
PL-2 17-Apr-25	Total Organic Halogens	ND	0.00333	0.0100	NE	NE	U		124109-002	SW846-9020B
	Bromide	0.194	0.0670	0.200	NE	NE	J		124109-007	SW846-9056A
	Chloride	14.5	0.335	1.00	NE	250			124109-007	SW846-9056A
	Fluoride	0.453	0.0330	0.100	4.00	1.60			124109-007	SW846-9056A
	Sulfate	71.4	0.665	2.00	NE	600			124109-007	SW846-9056A
	Alkalinity as CaCO3	151	0.725	2.00	NE	NE			124109-004	SM 2320B
	Total Phenol	ND	0.00167	0.00500	NE	0.005	U	UJ	124109-003	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	N, U	0.005UJ	124109-006	SW846-9012B
PL-4 17-Apr-25	Total Organic Halogens	ND	0.00333	0.0100	NE	NE	U		124111-002	SW846-9020B
	Bromide	0.227	0.0670	0.200	NE	NE			124111-007	SW846-9056A
	Chloride	15.4	0.335	1.00	NE	250			124111-007	SW846-9056A
	Fluoride	0.333	0.0330	0.100	4.00	1.60			124111-007	SW846-9056A
	Sulfate	68.1	0.665	2.00	NE	600			124111-007	SW846-9056A
	Alkalinity as CaCO3	163	0.725	2.00	NE	NE			124111-004	SM 2320B
	Total Phenol	ND	0.00167	0.00500	NE	0.005	U	UJ	124111-003	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	N, U	0.005UJ	124111-006	SW846-9012B
SFR-2S 23-Apr-25	Total Organic Halogens	0.0108	0.00333	0.0100	NE	NE			124117-003	SW846-9020B
	Bromide	0.665	0.0670	0.200	NE	NE			124117-008	SW846-9056A
	Chloride	120	3.35	10.0	NE	250			124117-008	SW846-9056A
	Fluoride	**1.67**	0.0330	0.100	4.00	1.60			124117-008	SW846-9056A
	Sulfate	74.0	0.665	2.00	NE	600			124117-008	SW846-9056A
	Alkalinity as CaCO3	367	0.725	2.00	NE	NE			124117-005	SM 2320B
	Total Phenol	ND	0.00167	0.00500	NE	0.005	U		124117-004	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	N, U	0.005UJ	124117-007	SW846-9012B

See notes at end of tables.

Table 2B-4 (continued)
Summary of Alkalinity, Anion, Total Organic Halogen, Total Phenol, and Total Cyanide Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
SFR-4T	Total Organic Halogens	ND	0.00333	0.0100	NE	NE	H, U	UJ	124115-003	SW846-9020B
22-Apr-25	Bromide	1.69	0.134	0.400	NE	NE			124115-008	SW846-9056A
	Chloride	205	13.4	40.0	NE	250		J	124115-008	SW846-9056A
	Fluoride	**2.78**	0.0660	0.200	4.00	1.60			124115-008	SW846-9056A
	Sulfate	**2000**	26.6	80.0	NE	600		J	124115-008	SW846-9056A
	Alkalinity as CaCO3	106	0.725	2.00	NE	NE			124115-005	SM 2320B
	Total Phenol	ND	0.00167	0.00500	NE	0.005	U		124115-004	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	N, U	0.005UJ	124115-007	SW846-9012B
SWTA3-MW2	Total Organic Halogens	ND	0.00333	0.0100	NE	NE	U		124090-003	SW846-9020B
08-Apr-25	Bromide	0.188	0.0670	0.200	NE	NE	J		124090-008	SW846-9056A
	Chloride	18.2	0.335	1.00	NE	250			124090-008	SW846-9056A
	Fluoride	1.00	0.0330	0.100	4.00	1.60			124090-008	SW846-9056A
	Sulfate	52.6	0.665	2.00	NE	600			124090-008	SW846-9056A
	Alkalinity as CaCO3	177	0.725	2.00	NE	NE			124090-005	SM 2320B
	Total Phenol	ND	0.00167	0.00500	NE	0.005	U	UJ	124090-004	SW846-9066
	Total Cyanide	0.0214	0.00167	0.00500	0.200	0.200	*	J	124090-007	SW846-9012B
SWTA3-MW3	Total Organic Halogens	ND	0.00333	0.0100	NE	NE	U		124093-003	SW846-9020B
09-Apr-25	Bromide	0.184	0.0670	0.200	NE	NE	J		124093-008	SW846-9056A
	Chloride	14.0	0.335	1.00	NE	250			124093-008	SW846-9056A
	Fluoride	1.29	0.0330	0.100	4.00	1.60			124093-008	SW846-9056A
	Sulfate	59.6	0.665	2.00	NE	600			124093-008	SW846-9056A
	Alkalinity as CaCO3	176	0.725	2.00	NE	NE			124093-005	SM 2320B
	Total Phenol	ND	0.00167	0.00500	NE	0.005	U	UJ	124093-004	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	N, U	0.005UJ	124093-007	SW846-9012B
SWTA3-MW4	Total Organic Halogens	ND	0.00333	0.0100	NE	NE	U		124095-003	SW846-9020B
10-Apr-25	Bromide	0.191	0.0670	0.200	NE	NE	J		124095-008	SW846-9056A
	Chloride	15.0	0.335	1.00	NE	250			124095-008	SW846-9056A
	Fluoride	**1.62**	0.0330	0.100	4.00	1.60			124095-008	SW846-9056A
	Sulfate	48.9	0.665	2.00	NE	600			124095-008	SW846-9056A
	Alkalinity as CaCO3	169	0.725	2.00	NE	NE			124095-005	SM 2320B
	Total Phenol	ND	0.00167	0.00500	NE	0.005	U	UJ	124095-004	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	N, U	0.005UJ	124095-007	SW846-9012B

See notes at end of tables.

Table 2B-4 (concluded)
Summary of Alkalinity, Anion, Total Organic Halogen, Total Phenol, and Total Cyanide Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
TRE-1	Total Organic Halogens	0.00577	0.00333	0.0100	NE	NE	J		124113-003	SW846-9020B
21-Apr-25	Bromide	0.836	0.0670	0.200	NE	NE			124113-008	SW846-9056A
	Chloride	134	1.34	4.00	NE	250			124113-008	SW846-9056A
	Fluoride	**1.69**	0.0330	0.100	4.0	1.60			124113-008	SW846-9056A
	Sulfate	106	2.66	8.00	NE	600			124113-008	SW846-9056A
	Alkalinity as CaCO3	477	0.725	2.00	NE	NE			124113-005	SM 2320B
	Total Phenol	**0.00601**	0.00167	0.00500	NE	0.005	B	J+	124113-004	SW846-9066
	Total Cyanide	ND	0.00167	0.00500	0.200	0.200	N, U	0.005UJ	124113-007	SW846-9012B

See notes at end of tables.

Table 2B-5
Summary of Mercury Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)	Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
Coyote Springs 24-Apr-25	ND	0.0000670	0.000200	0.002	U		124125-009	SW846-7470A
CCBA-MW2 30-Apr-25	ND	0.0000670	0.000200	0.002	U	UJ	124136-009	SW846-7470A
CTF-MW1 28-Apr-25	ND	0.0000670	0.000200	0.002	U		124129-009	SW846-7470A
CYN-MW5 01-May-25	ND	0.0000670	0.000200	0.002	U	UJ	124141-009	SW846-7470A
CYN-MW5 (Duplicate) 01-May-25	ND	0.0000670	0.000200	0.002	U	UJ	124142-009	SW846-7470A
Greystone-MW2 29-Apr-25	ND	0.0000670	0.000200	0.002	U		124133-009	SW846-7470A
Greystone-MW2 (Duplicate) 29-Apr-25	ND	0.0000670	0.000200	0.002	U		124134-009	SW846-7470A
MRN-2 15-Apr-25	ND	0.0000670	0.000200	0.002	U		124102-009	SW846-7470A
MRN-2 (Duplicate) 15-Apr-25	ND	0.0000670	0.000200	0.002	U		124103-009	SW846-7470A
MRN-3D 16-Apr-25	ND	0.0000670	0.000200	0.002	U		124105-009	SW846-7470A
NWTA3-MW3D 14-Apr-25	ND	0.0000670	0.000200	0.002	U		124097-009	SW846-7470A
OBS-MW1 24-Apr-25	ND	0.0000670	0.000200	0.002	U		124122-009	SW846-7470A
OBS-MW1 (Duplicate) 24-Apr-25	ND	0.0000670	0.000200	0.002	U		124123-009	SW846-7470A
PL-2 17-Apr-25	ND	0.0000670	0.000200	0.002	U		124109-009	SW846-7470A
PL-4 17-Apr-25	ND	0.0000670	0.000200	0.002	U		124111-009	SW846-7470A
SFR-2S 23-Apr-25	ND	0.0000670	0.000200	0.002	U		124117-010	SW846-7470A
SFR-4T 22-Apr-25	ND	0.0000670	0.000200	0.002	U		124115-010	SW846-7470A

See notes at end of tables.

Table 2B-5 (concluded)
Summary of Mercury Results, Groundwater Monitoring Program,
Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)	Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
SWTA3-MW2 08-Apr-25	ND	0.0000670	0.000200	0.002	U		124090-010	SW846-7470A
SWTA3-MW3 09-Apr-25	ND	0.0000670	0.000200	0.002	U		124093-010	SW846-7470A
SWTA3-MW4 10-Apr-25	ND	0.0000670	0.000200	0.002	U		124095-010	SW846-7470A
TRE-1 21-Apr-25	ND	0.0000670	0.000200	0.002	U		124113-010	SW846-7470A

See notes at end of tables.

Table 2B-6
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
Coyote Springs	Aluminum	0.205	0.0193	0.0500	NE	5.00			124125-008	SW846-6020B
24-Apr-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124125-008	SW846-6020B
	Arsenic	0.00744	0.00200	0.00500	0.010	0.010			124125-008	SW846-6020B
	Barium	0.0365	0.000670	0.00400	2.00	2.00			124125-008	SW846-6020B
	Beryllium	**0.00639**	0.000200	0.000500	0.004	0.004			124125-008	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124125-008	SW846-6020B
	Calcium	273	0.800	2.00	NE	NE			124125-008	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124125-008	SW846-6020B
	Cobalt	0.00833	0.000300	0.00100	NE	0.050			124125-008	SW846-6020B
	Copper	0.000768	0.000300	0.00200	1.30	1.00	J		124125-008	SW846-6020B
	Iron	0.0864	0.0330	0.100	NE	1.00	J		124125-008	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124125-008	SW846-6020B
	Magnesium	61.7	0.100	0.300	NE	NE			124125-008	SW846-6020B
	Manganese	**1.36**	0.0100	0.0500	NE	0.200		J	124125-008	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124125-008	SW846-7470A
	Nickel	0.0216	0.000600	0.00200	NE	0.200			124125-008	SW846-6020B
	Potassium	27.5	0.0800	0.300	NE	NE			124125-008	SW846-6020B
	Selenium	ND	0.00150	0.00500	0.050	0.050	U		124125-008	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124125-008	SW846-6020B
	Sodium	391	0.800	2.50	NE	NE			124125-008	SW846-6020B
	Thallium	0.00117	0.000600	0.00200	0.002	0.002	J		124125-008	SW846-6020B
	Vanadium	ND	0.00330	0.0200	NE	NE	U		124125-008	SW846-6020B
	Zinc	0.0423	0.00330	0.0200	NE	10.0			124125-008	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
CCBA-MW2	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124136-008	SW846-6020B
30-Apr-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124136-008	SW846-6020B
	Arsenic	0.00300	0.00200	0.00500	0.010	0.010	J		124136-008	SW846-6020B
	Barium	0.0509	0.000670	0.00400	2.00	2.00			124136-008	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124136-008	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124136-008	SW846-6020B
	Calcium	71.6	0.800	2.00	NE	NE			124136-008	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124136-008	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124136-008	SW846-6020B
	Copper	ND	0.000300	0.00200	1.30	1.00	U		124136-008	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124136-008	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124136-008	SW846-6020B
	Magnesium	13.4	0.0100	0.0300	NE	NE			124136-008	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124136-008	SW846-6020B
	Mercury	0.000232	0.0000670	0.000200	0.002	0.002		J	124136-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	NE	0.200	U		124136-008	SW846-6020B
	Potassium	1.36	0.0800	0.300	NE	NE			124136-008	SW846-6020B
	Selenium	0.00449	0.00150	0.00500	0.050	0.050	J		124136-008	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124136-008	SW846-6020B
	Sodium	46.5	0.0800	0.250	NE	NE			124136-008	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124136-008	SW846-6020B
	Vanadium	0.0109	0.00330	0.0200	NE	NE	J		124136-008	SW846-6020B
	Zinc	0.00392	0.00330	0.0200	NE	10.0	J		124136-008	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
CTF-MW1	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124129-008	SW846-6020B
28-Apr-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124129-008	SW846-6020B
	Arsenic	0.00240	0.00200	0.00500	0.010	0.010	J		124129-008	SW846-6020B
	Barium	0.0464	0.000670	0.00400	2.00	2.00			124129-008	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124129-008	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124129-008	SW846-6020B
	Calcium	88.7	0.800	2.00	NE	NE			124129-008	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124129-008	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124129-008	SW846-6020B
	Copper	0.000498	0.000300	0.00200	1.30	1.00	J		124129-008	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124129-008	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124129-008	SW846-6020B
	Magnesium	19.0	0.0100	0.0300	NE	NE			124129-008	SW846-6020B
	Manganese	0.00274	0.00100	0.00500	NE	0.200	J		124129-008	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124129-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	NE	0.200	U		124129-008	SW846-6020B
	Potassium	1.80	0.0800	0.300	NE	NE			124129-008	SW846-6020B
	Selenium	0.00448	0.00150	0.00500	0.050	0.050	J		124129-008	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124129-008	SW846-6020B
	Sodium	33.2	0.0800	0.250	NE	NE			124129-008	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124129-008	SW846-6020B
	Vanadium	ND	0.00330	0.0200	NE	NE	U		124129-008	SW846-6020B
	Zinc	ND	0.00330	0.0200	NE	10.0	U		124129-008	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
CYN-MW5	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124141-008	SW846-6020B
01-May-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124141-008	SW846-6020B
	Arsenic	0.00641	0.00200	0.00500	0.010	0.010			124141-008	SW846-6020B
	Barium	0.179	0.000670	0.00400	2.00	2.00			124141-008	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124141-008	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124141-008	SW846-6020B
	Calcium	52.5	0.800	2.00	NE	NE			124141-008	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124141-008	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124141-008	SW846-6020B
	Copper	0.000391	0.000300	0.00200	1.30	1.00	J		124141-008	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124141-008	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124141-008	SW846-6020B
	Magnesium	9.04	0.0100	0.0300	NE	NE			124141-008	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124141-008	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U	UJ	124141-008	SW846-7470A
	Nickel	0.00109	0.000600	0.00200	NE	0.200	J		124141-008	SW846-6020B
	Potassium	2.29	0.0800	0.300	NE	NE			124141-008	SW846-6020B
	Selenium	ND	0.00150	0.00500	0.050	0.050	U		124141-008	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124141-008	SW846-6020B
	Sodium	13.3	0.0800	0.250	NE	NE			124141-008	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124141-008	SW846-6020B
	Vanadium	ND	0.00330	0.0200	NE	NE	U		124141-008	SW846-6020B
	Zinc	0.00372	0.00330	0.0200	NE	10.0	J		124141-008	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
CYN-MW5 (Duplicate) 01-May-25	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124142-008	SW846-6020B
	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124142-008	SW846-6020B
	Arsenic	0.00661	0.00200	0.00500	0.010	0.010			124142-008	SW846-6020B
	Barium	0.184	0.000670	0.00400	2.00	2.00			124142-008	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124142-008	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124142-008	SW846-6020B
	Calcium	51.9	0.800	2.00	NE	NE			124142-008	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124142-008	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124142-008	SW846-6020B
	Copper	0.00120	0.000300	0.00200	1.30	1.00	J		124142-008	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124142-008	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124142-008	SW846-6020B
	Magnesium	9.00	0.0100	0.0300	NE	NE			124142-008	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124142-008	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U	UJ	124142-008	SW846-7470A
	Nickel	0.00127	0.000600	0.00200	NE	0.200	J		124142-008	SW846-6020B
	Potassium	2.31	0.0800	0.300	NE	NE			124142-008	SW846-6020B
	Selenium	ND	0.00150	0.00500	0.050	0.050	U		124142-008	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124142-008	SW846-6020B
	Sodium	13.0	0.0800	0.250	NE	NE			124142-008	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124142-008	SW846-6020B
	Vanadium	ND	0.00330	0.0200	NE	NE	U		124142-008	SW846-6020B
	Zinc	0.00371	0.00330	0.0200	NE	10.0	J		124142-008	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
Greystone-MW2	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124133-008	SW846-6020B
29-Apr-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124133-008	SW846-6020B
	Arsenic	0.00367	0.00200	0.00500	0.010	0.010	J		124133-008	SW846-6020B
	Barium	0.131	0.000670	0.00400	2.00	2.00			124133-008	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124133-008	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124133-008	SW846-6020B
	Calcium	138	0.800	2.00	NE	NE			124133-008	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124133-008	SW846-6020B
	Cobalt	0.000439	0.000300	0.00100	NE	0.050	J		124133-008	SW846-6020B
	Copper	0.000370	0.000300	0.00200	1.30	1.00	J	0.002U	124133-008	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124133-008	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124133-008	SW846-6020B
	Magnesium	26.4	0.0100	0.0300	NE	NE			124133-008	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124133-008	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124133-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	NE	0.200	U		124133-008	SW846-6020B
	Potassium	4.90	0.0800	0.300	NE	NE			124133-008	SW846-6020B
	Selenium	0.00208	0.00150	0.00500	0.050	0.050	J		124133-008	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124133-008	SW846-6020B
	Sodium	89.5	0.800	2.50	NE	NE			124133-008	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124133-008	SW846-6020B
	Vanadium	0.00472	0.00330	0.0200	NE	NE	J		124133-008	SW846-6020B
	Zinc	ND	0.00330	0.0200	NE	10.0	U		124133-008	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
Greystone-MW2	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124134-008	SW846-6020B
(Duplicate)	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124134-008	SW846-6020B
29-Apr-25	Arsenic	0.00392	0.00200	0.00500	0.010	0.010	J		124134-008	SW846-6020B
	Barium	0.135	0.000670	0.00400	2.00	2.00			124134-008	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124134-008	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124134-008	SW846-6020B
	Calcium	138	0.800	2.00	NE	NE			124134-008	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124134-008	SW846-6020B
	Cobalt	0.000413	0.000300	0.00100	NE	0.050	J		124134-008	SW846-6020B
	Copper	ND	0.000300	0.00200	1.30	1.00	U		124134-008	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124134-008	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124134-008	SW846-6020B
	Magnesium	28.0	0.0100	0.0300	NE	NE			124134-008	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124134-008	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124134-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	NE	0.200	U		124134-008	SW846-6020B
	Potassium	5.06	0.0800	0.300	NE	NE			124134-008	SW846-6020B
	Selenium	0.00166	0.00150	0.00500	0.050	0.050	J		124134-008	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124134-008	SW846-6020B
	Sodium	90.8	0.800	2.50	NE	NE			124134-008	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124134-008	SW846-6020B
	Vanadium	0.00486	0.00330	0.0200	NE	NE	J		124134-008	SW846-6020B
	Zinc	ND	0.00330	0.0200	NE	10.0	U		124134-008	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
MRN-2	Aluminum	ND	0.0193	0.0500	NE	5.00	U	UJ	124102-008	SW846-6020B
15-Apr-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124102-008	SW846-6020B
	Arsenic	ND	0.00200	0.00500	0.010	0.010	U		124102-008	SW846-6020B
	Barium	0.0590	0.000670	0.00400	2.00	2.00			124102-008	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U	UJ	124102-008	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124102-008	SW846-6020B
	Calcium	48.8	0.0800	0.200	NE	NE		J-	124102-008	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U	UJ	124102-008	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124102-008	SW846-6020B
	Copper	0.000362	0.000300	0.00200	1.30	1.00	B, J	0.002UJ	124102-008	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U	UJ	124102-008	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124102-008	SW846-6020B
	Magnesium	16.2	0.0100	0.0300	NE	NE		J-	124102-008	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U	UJ	124102-008	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124102-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	NE	0.200	U	UJ	124102-008	SW846-6020B
	Potassium	3.37	0.0800	0.300	NE	NE			124102-008	SW846-6020B
	Selenium	ND	0.00150	0.00500	0.050	0.050	U		124102-008	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124102-008	SW846-6020B
	Sodium	23.9	0.0800	0.250	NE	NE		J-	124102-008	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124102-008	SW846-6020B
	Uranium	0.00279	0.0000670	0.000200	0.03	0.03			124102-008	SW846-6020B
	Vanadium	0.0105	0.00330	0.0200	NE	NE	J	J-	124102-008	SW846-6020B
	Zinc	ND	0.00330	0.0200	NE	10.0	U		124102-008	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
MRN-2 (Duplicate)	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124103-008	SW846-6020B
15-Apr-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124103-008	SW846-6020B
	Arsenic	ND	0.00200	0.00500	0.010	0.010	U		124103-008	SW846-6020B
	Barium	0.0587	0.000670	0.00400	2.00	2.00			124103-008	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124103-008	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124103-008	SW846-6020B
	Calcium	48.1	0.0800	0.200	NE	NE			124103-008	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124103-008	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124103-008	SW846-6020B
	Copper	ND	0.000300	0.00200	1.30	1.00	U		124103-008	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124103-008	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124103-008	SW846-6020B
	Magnesium	16.2	0.0100	0.0300	NE	NE			124103-008	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124103-008	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124103-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	NE	0.200	U		124103-008	SW846-6020B
	Potassium	3.35	0.0800	0.300	NE	NE			124103-008	SW846-6020B
	Selenium	ND	0.00150	0.00500	0.050	0.050	U		124103-008	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124103-008	SW846-6020B
	Sodium	23.5	0.0800	0.250	NE	NE			124103-008	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124103-008	SW846-6020B
	Uranium	0.00289	0.0000670	0.000200	0.03	0.03			124103-008	SW846-6020B
	Vanadium	0.0106	0.00330	0.0200	NE	NE	J		124103-008	SW846-6020B
	Zinc	ND	0.00330	0.0200	NE	10.0	U		124103-008	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
MRN-3D	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124105-008	SW846-6020B
16-Apr-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124105-008	SW846-6020B
	Arsenic	ND	0.00200	0.00500	0.010	0.010	U		124105-008	SW846-6020B
	Barium	0.100	0.000670	0.00400	2.00	2.00			124105-008	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124105-008	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124105-008	SW846-6020B
	Calcium	59.4	0.800	2.00	NE	NE			124105-008	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124105-008	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124105-008	SW846-6020B
	Copper	ND	0.000300	0.00200	1.30	1.00	U		124105-008	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124105-008	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124105-008	SW846-6020B
	Magnesium	14.0	0.0100	0.0300	NE	NE			124105-008	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124105-008	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124105-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	NE	0.200	U		124105-008	SW846-6020B
	Potassium	4.03	0.0800	0.300	NE	NE			124105-008	SW846-6020B
	Selenium	ND	0.00150	0.00500	0.050	0.050	U		124105-008	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124105-008	SW846-6020B
	Sodium	27.9	0.0800	0.250	NE	NE			124105-008	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124105-008	SW846-6020B
	Uranium	0.00332	0.0000670	0.000200	0.03	0.03			124105-008	SW846-6020B
	Vanadium	0.00838	0.00330	0.0200	NE	NE	J		124105-008	SW846-6020B
	Zinc	0.0114	0.00330	0.0200	NE	10.0	J		124105-008	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
NWTA3-MW3D	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124097-008	SW846-6020B
14-Apr-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124097-008	SW846-6020B
	Arsenic	ND	0.00200	0.00500	0.010	0.010	U		124097-008	SW846-6020B
	Barium	0.0885	0.000670	0.00400	2.00	2.00			124097-008	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124097-008	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124097-008	SW846-6020B
	Calcium	38.7	0.0800	0.200	NE	NE			124097-008	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124097-008	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124097-008	SW846-6020B
	Copper	ND	0.000300	0.00200	1.30	1.00	U		124097-008	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124097-008	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124097-008	SW846-6020B
	Magnesium	8.10	0.0100	0.0300	NE	NE			124097-008	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124097-008	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124097-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	NE	0.200	U		124097-008	SW846-6020B
	Potassium	3.60	0.0800	0.300	NE	NE			124097-008	SW846-6020B
	Selenium	ND	0.00150	0.00500	0.050	0.050	U		124097-008	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124097-008	SW846-6020B
	Sodium	37.4	0.0800	0.250	NE	NE			124097-008	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124097-008	SW846-6020B
	Uranium	0.00332	0.0000670	0.000200	0.03	0.03			124097-008	SW846-6020B
	Vanadium	0.00885	0.00330	0.0200	NE	NE	J		124097-008	SW846-6020B
	Zinc	ND	0.00330	0.0200	NE	10.0	U		124097-008	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
OBS-MW1	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124122-008	SW846-6020B
24-Apr-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124122-008	SW846-6020B
	Arsenic	ND	0.00200	0.00500	0.010	0.010	U		124122-008	SW846-6020B
	Barium	0.0182	0.000670	0.00400	2.00	2.00			124122-008	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124122-008	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124122-008	SW846-6020B
	Calcium	76.7	0.800	2.00	NE	NE			124122-008	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124122-008	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124122-008	SW846-6020B
	Copper	0.000503	0.000300	0.00200	1.30	1.00	J	0.002U	124122-008	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124122-008	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124122-008	SW846-6020B
	Magnesium	16.9	0.0100	0.0300	NE	NE			124122-008	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124122-008	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124122-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	NE	0.200	U		124122-008	SW846-6020B
	Potassium	1.65	0.0800	0.300	NE	NE			124122-008	SW846-6020B
	Selenium	0.00366	0.00150	0.00500	0.050	0.050	J		124122-008	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124122-008	SW846-6020B
	Sodium	24.1	0.0800	0.250	NE	NE			124122-008	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124122-008	SW846-6020B
	Vanadium	ND	0.00330	0.0200	NE	NE	U		124122-008	SW846-6020B
	Zinc	ND	0.00330	0.0200	NE	10.0	U		124122-008	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
OBS-MW1 (Duplicate) 24-Apr-25	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124123-008	SW846-6020B
	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124123-008	SW846-6020B
	Arsenic	ND	0.00200	0.00500	0.010	0.010	U		124123-008	SW846-6020B
	Barium	0.0192	0.000670	0.00400	2.00	2.00			124123-008	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124123-008	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124123-008	SW846-6020B
	Calcium	76.2	0.800	2.00	NE	NE			124123-008	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124123-008	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124123-008	SW846-6020B
	Copper	ND	0.000300	0.00200	1.30	1.00	U		124123-008	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124123-008	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124123-008	SW846-6020B
	Magnesium	17.4	0.0100	0.0300	NE	NE			124123-008	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124123-008	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124123-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	NE	0.200	U		124123-008	SW846-6020B
	Potassium	1.72	0.0800	0.300	NE	NE			124123-008	SW846-6020B
	Selenium	0.00319	0.00150	0.00500	0.050	0.050	J		124123-008	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124123-008	SW846-6020B
	Sodium	24.8	0.0800	0.250	NE	NE			124123-008	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124123-008	SW846-6020B
	Vanadium	ND	0.00330	0.0200	NE	NE	U		124123-008	SW846-6020B
	Zinc	ND	0.00330	0.0200	NE	10.0	U		124123-008	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
PL-2	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124109-008	SW846-6020B
17-Apr-25	Antimony	0.00153	0.00100	0.00300	0.006	0.006	J		124109-008	SW846-6020B
	Arsenic	ND	0.00200	0.00500	0.010	0.010	U		124109-008	SW846-6020B
	Barium	0.0765	0.000670	0.00400	2.00	2.00			124109-008	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124109-008	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124109-008	SW846-6020B
	Calcium	66.2	0.800	2.00	NE	NE			124109-008	SW846-6020B
	Chromium	0.00374	0.00300	0.0100	0.100	0.050	J		124109-008	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124109-008	SW846-6020B
	Copper	ND	0.000300	0.00200	1.30	1.00	U		124109-008	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124109-008	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124109-008	SW846-6020B
	Magnesium	10.6	0.0100	0.0300	NE	NE			124109-008	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124109-008	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124109-008	SW846-7470A
	Nickel	0.00410	0.000600	0.00200	NE	0.200			124109-008	SW846-6020B
	Potassium	3.74	0.0800	0.300	NE	NE			124109-008	SW846-6020B
	Selenium	ND	0.00150	0.00500	0.050	0.050	U		124109-008	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124109-008	SW846-6020B
	Sodium	31.0	0.0800	0.250	NE	NE			124109-008	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124109-008	SW846-6020B
	Uranium	0.00365	0.0000670	0.000200	0.03	0.03			124109-008	SW846-6020B
	Vanadium	0.00778	0.00330	0.0200	NE	NE	J		124109-008	SW846-6020B
	Zinc	0.0122	0.00330	0.0200	NE	10.0	J		124109-008	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
PL-4	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124111-008	SW846-6020B
17-Apr-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124111-008	SW846-6020B
	Arsenic	ND	0.00200	0.00500	0.010	0.010	U		124111-008	SW846-6020B
	Barium	0.0698	0.000670	0.00400	2.00	2.00			124111-008	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124111-008	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124111-008	SW846-6020B
	Calcium	65.4	0.800	2.00	NE	NE			124111-008	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124111-008	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124111-008	SW846-6020B
	Copper	0.000354	0.000300	0.00200	1.30	1.00	J		124111-008	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124111-008	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124111-008	SW846-6020B
	Magnesium	12.1	0.0100	0.0300	NE	NE			124111-008	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124111-008	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124111-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	NE	0.200	U		124111-008	SW846-6020B
	Potassium	4.66	0.0800	0.300	NE	NE			124111-008	SW846-6020B
	Selenium	0.00174	0.00150	0.00500	0.050	0.050	J		124111-008	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124111-008	SW846-6020B
	Sodium	24.1	0.0800	0.250	NE	NE			124111-008	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124111-008	SW846-6020B
	Uranium	0.00328	0.0000670	0.000200	0.03	0.03			124111-008	SW846-6020B
	Vanadium	0.00551	0.00330	0.0200	NE	NE	J		124111-008	SW846-6020B
	Zinc	ND	0.00330	0.0200	NE	10.0	U		124111-008	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
SFR-2S	Aluminum	0.0238	0.0193	0.0500	NE	5.00	J		124117-009	SW846-6020B
23-Apr-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124117-009	SW846-6020B
	Arsenic	ND	0.00200	0.00500	0.010	0.010	U		124117-009	SW846-6020B
	Barium	0.0541	0.000670	0.00400	2.00	2.00			124117-009	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124117-009	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124117-009	SW846-6020B
	Calcium	128	0.800	2.00	NE	NE			124117-009	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124117-009	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124117-009	SW846-6020B
	Copper	0.00229	0.000300	0.00200	1.30	1.00			124117-009	SW846-6020B
	Iron	0.0394	0.0330	0.100	NE	1.00	J		124117-009	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124117-009	SW846-6020B
	Magnesium	35.0	0.0100	0.0300	NE	NE			124117-009	SW846-6020B
	Manganese	0.00165	0.00100	0.00500	NE	0.200	J	J-	124117-009	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124117-009	SW846-7470A
	Nickel	0.00472	0.000600	0.00200	NE	0.200			124117-009	SW846-6020B
	Potassium	7.18	0.0800	0.300	NE	NE			124117-009	SW846-6020B
	Selenium	0.00195	0.00150	0.00500	0.050	0.050	J		124117-009	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124117-009	SW846-6020B
	Sodium	83.7	0.800	2.50	NE	NE			124117-009	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124117-009	SW846-6020B
	Vanadium	0.00489	0.00330	0.0200	NE	NE	J		124117-009	SW846-6020B
	Zinc	0.00491	0.00330	0.0200	NE	10.0	J		124117-009	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
SFR-4T	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124115-009	SW846-6020B
22-Apr-25	Antimony	0.00151	0.00100	0.00300	0.006	0.006	J		124115-009	SW846-6020B
	Arsenic	0.00299	0.00200	0.00500	0.010	0.010	J		124115-009	SW846-6020B
	Barium	0.00832	0.000670	0.00400	2.00	2.00			124115-009	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124115-009	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124115-009	SW846-6020B
	Calcium	71.2	0.800	2.00	NE	NE			124115-009	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124115-009	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124115-009	SW846-6020B
	Copper	0.00696	0.000300	0.00200	1.30	1.00			124115-009	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124115-009	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124115-009	SW846-6020B
	Magnesium	3.54	0.0100	0.0300	NE	NE			124115-009	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124115-009	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124115-009	SW846-7470A
	Nickel	0.000685	0.000600	0.00200	NE	0.200	J		124115-009	SW846-6020B
	Potassium	2.40	0.0800	0.300	NE	NE			124115-009	SW846-6020B
	Selenium	ND	0.00150	0.00500	0.050	0.050	U		124115-009	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124115-009	SW846-6020B
	Sodium	910	8.00	25.0	NE	NE			124115-009	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124115-009	SW846-6020B
	Vanadium	ND	0.00330	0.0200	NE	NE	U		124115-009	SW846-6020B
	Zinc	0.0196	0.00330	0.0200	NE	10.0	J		124115-009	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
SWTA3-MW2	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124090-009	SW846-6020B
08-Apr-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124090-009	SW846-6020B
	Arsenic	0.00238	0.00200	0.00500	0.010	0.010	J		124090-009	SW846-6020B
	Barium	0.0726	0.000670	0.00400	2.00	2.00			124090-009	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124090-009	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124090-009	SW846-6020B
	Calcium	46.5	0.0800	0.200	NE	NE			124090-009	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124090-009	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124090-009	SW846-6020B
	Copper	ND	0.000300	0.00200	1.30	1.00	U		124090-009	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124090-009	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124090-009	SW846-6020B
	Magnesium	14.1	0.0100	0.0300	NE	NE			124090-009	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124090-009	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124090-009	SW846-7470A
	Nickel	ND	0.000600	0.00200	NE	0.200	U		124090-009	SW846-6020B
	Potassium	4.61	0.0800	0.300	NE	NE			124090-009	SW846-6020B
	Selenium	ND	0.00150	0.00500	0.050	0.050	U		124090-009	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124090-009	SW846-6020B
	Sodium	40.2	0.0800	0.250	NE	NE			124090-009	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124090-009	SW846-6020B
	Uranium	0.00321	0.0000670	0.000200	0.03	0.03			124090-009	SW846-6020B
	Vanadium	0.00887	0.00330	0.0200	NE	NE	J		124090-009	SW846-6020B
	Zinc	ND	0.00330	0.0200	NE	10.0	U		124090-009	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
SWTA3-MW3	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124093-009	SW846-6020B
09-Apr-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124093-009	SW846-6020B
	Arsenic	0.00217	0.00200	0.00500	0.010	0.010	J		124093-009	SW846-6020B
	Barium	0.0579	0.000670	0.00400	2.00	2.00			124093-009	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124093-009	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124093-009	SW846-6020B
	Calcium	39.5	0.0800	0.200	NE	NE			124093-009	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124093-009	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124093-009	SW846-6020B
	Copper	ND	0.000300	0.00200	1.30	1.00	U		124093-009	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124093-009	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124093-009	SW846-6020B
	Magnesium	11.2	0.0100	0.0300	NE	NE			124093-009	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124093-009	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124093-009	SW846-7470A
	Nickel	ND	0.000600	0.00200	NE	0.200	U		124093-009	SW846-6020B
	Potassium	5.01	0.0800	0.300	NE	NE			124093-009	SW846-6020B
	Selenium	ND	0.00150	0.00500	0.050	0.050	U		124093-009	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124093-009	SW846-6020B
	Sodium	54.2	0.800	2.50	NE	NE			124093-009	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124093-009	SW846-6020B
	Uranium	0.00247	0.0000670	0.000200	0.03	0.03			124093-009	SW846-6020B
	Vanadium	0.00989	0.00330	0.0200	NE	NE	J		124093-009	SW846-6020B
	Zinc	ND	0.00330	0.0200	NE	10.0	U		124093-009	SW846-6020B

See notes at end of tables.

Table 2B-6 (continued)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
SWTA3-MW4	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124095-009	SW846-6020B
10-Apr-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124095-009	SW846-6020B
	Arsenic	0.00237	0.00200	0.00500	0.010	0.010	J		124095-009	SW846-6020B
	Barium	0.0532	0.000670	0.00400	2.00	2.00			124095-009	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124095-009	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124095-009	SW846-6020B
	Calcium	38.3	0.0800	0.200	NE	NE			124095-009	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124095-009	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124095-009	SW846-6020B
	Copper	ND	0.000300	0.00200	1.30	1.00	U		124095-009	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124095-009	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124095-009	SW846-6020B
	Magnesium	10.8	0.0100	0.0300	NE	NE			124095-009	SW846-6020B
	Manganese	ND	0.00100	0.00500	NE	0.200	U		124095-009	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124095-009	SW846-7470A
	Nickel	ND	0.000600	0.00200	NE	0.200	U		124095-009	SW846-6020B
	Potassium	4.65	0.0800	0.300	NE	NE			124095-009	SW846-6020B
	Selenium	ND	0.00150	0.00500	0.050	0.050	U		124095-009	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124095-009	SW846-6020B
	Sodium	52.5	0.800	2.50	NE	NE			124095-009	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124095-009	SW846-6020B
	Uranium	0.00230	0.0000670	0.000200	0.03	0.03			124095-009	SW846-6020B
	Vanadium	0.0106	0.00330	0.0200	NE	NE	J		124095-009	SW846-6020B
	Zinc	ND	0.00330	0.0200	NE	10.0	U		124095-009	SW846-6020B

See notes at end of tables.

Table 2B-6 (concluded)
Summary of Target Analyte List Metals and Uranium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	MCL/MAC[d] (mg/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
TRE-1	Aluminum	ND	0.0193	0.0500	NE	5.00	U		124113-009	SW846-6020B
21-Apr-25	Antimony	ND	0.00100	0.00300	0.006	0.006	U		124113-009	SW846-6020B
	Arsenic	ND	0.00200	0.00500	0.010	0.010	U		124113-009	SW846-6020B
	Barium	0.0431	0.000670	0.00400	2.00	2.00			124113-009	SW846-6020B
	Beryllium	ND	0.000200	0.000500	0.004	0.004	U		124113-009	SW846-6020B
	Cadmium	ND	0.000300	0.00100	0.005	0.005	U		124113-009	SW846-6020B
	Calcium	171	0.800	2.00	NE	NE			124113-009	SW846-6020B
	Chromium	ND	0.00300	0.0100	0.100	0.050	U		124113-009	SW846-6020B
	Cobalt	ND	0.000300	0.00100	NE	0.050	U		124113-009	SW846-6020B
	Copper	0.000407	0.000300	0.00200	1.30	1.00	J		124113-009	SW846-6020B
	Iron	ND	0.0330	0.100	NE	1.00	U		124113-009	SW846-6020B
	Lead	ND	0.000500	0.00200	0.010	0.015	U		124113-009	SW846-6020B
	Magnesium	37.0	0.0100	0.0300	NE	NE			124113-009	SW846-6020B
	Manganese	0.00147	0.00100	0.00500	NE	0.200	J	J-	124113-009	SW846-6020B
	Mercury	ND	0.0000670	0.000200	0.002	0.002	U		124113-009	SW846-7470A
	Nickel	ND	0.000600	0.00200	NE	0.200	U		124113-009	SW846-6020B
	Potassium	6.81	0.0800	0.300	NE	NE			124113-009	SW846-6020B
	Selenium	0.00239	0.00150	0.00500	0.050	0.050	J		124113-009	SW846-6020B
	Silver	ND	0.000300	0.00100	NE	0.050	U		124113-009	SW846-6020B
	Sodium	110	0.800	2.50	NE	NE			124113-009	SW846-6020B
	Thallium	ND	0.000600	0.00200	0.002	0.002	U		124113-009	SW846-6020B
	Vanadium	0.00472	0.00330	0.0200	NE	NE	J		124113-009	SW846-6020B
	Zinc	ND	0.00330	0.0200	NE	10.0	U		124113-009	SW846-6020B

See notes at end of tables.

Table 2B-7
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, and Radium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	MCL/MAC[d]		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
Coyote Spring	Americium-241	1.54 ± 11.7	19.0	8.95	NE	NE	U	BD	124125-010	EPA 901.1
24-Apr-25	Cesium-137	-0.0320 ± 2.53	4.64	2.10	NE	NE	U	BD	124125-010	EPA 901.1
	Cobalt-60	2.35 ± 3.34	5.62	2.46	NE	NE	U	BD	124125-010	EPA 901.1
	Potassium-40	15.9 ± 67.5	49.6	21.2	NE	NE	U	BD	124125-010	EPA 901.1
	Gross Alpha	-1.72	NA	NA	15 pCi/L	NE	NA	None	124125-011	EPA 900.0/SW846-9310
	Gross Beta	31.6 ± 6.39	9.08	4.39	4 mrem/yr	NE			124125-011	EPA 900.0/SW846-9310
	Uranium-233/234	10.8 ± 1.03	0.0727	0.0331	NE	NE			124125-014	HASL-300
	Uranium-235/236	0.314 ± 0.0695	0.0518	0.0218	NE	NE			124125-014	HASL-300
	Uranium-238	2.31 ± 0.255	0.0601	0.0268	NE	NE			124125-014	HASL-300
	Radium-226	0.537 ± 0.294	0.257	0.0781	5 pCi/L	5 pCi/L		J	124125-012	EPA 903.1M
	Radium-228	1.08 ± 0.466	0.487	0.223	5 pCi/L	5 pCi/L		J	124125-013	EPA 904.0/SW846-9320M
CCBA-MW2	Americium-241	-1.82 ± 8.25	13.5	6.38	NE	NE	U	BD	124136-010	EPA 901.1
30-Apr-25	Cesium-137	1.20 ± 3.29	5.94	2.74	NE	NE	U	BD	124136-010	EPA 901.1
	Cobalt-60	0.875 ± 3.33	6.40	2.85	NE	NE	U	BD	124136-010	EPA 901.1
	Potassium-40	-31.6 ± 55.5	77.4	35.2	NE	NE	U	BD	124136-010	EPA 901.1
	Gross Alpha	-0.44	NA	NA	15 pCi/L	NE	NA	None	124136-011	EPA 900.0/SW846-9310
	Gross Beta	3.78 ± 0.932	1.39	0.670	4 mrem/yr	NE		J	124136-011	EPA 900.0/SW846-9310
	Uranium-233/234	6.49 ± 0.717	0.0796	0.0347	NE	NE			124136-014	HASL-300
	Uranium-235/236	0.207 ± 0.0673	0.0679	0.0277	NE	NE			124136-014	HASL-300
	Uranium-238	1.56 ± 0.216	0.0791	0.0345	NE	NE			124136-014	HASL-300
	Radium-226	0.980 ± 0.383	0.310	0.113	5 pCi/L	5 pCi/L			124136-012	EPA 903.1M
	Radium-228	0.869 ± 0.451	0.530	0.238	5 pCi/L	5 pCi/L		J	124136-013	EPA 904.0/SW846-9320M
CTF-MW1	Americium-241	0.341 ± 6.17	9.27	4.37	NE	NE	U	BD	124129-010	EPA 901.1
28-Apr-25	Cesium-137	0.971 ± 4.60	8.95	4.02	NE	NE	U	BD	124129-010	EPA 901.1
	Cobalt-60	-0.991 ± 5.34	10.2	4.36	NE	NE	U	BD	124129-010	EPA 901.1
	Potassium-40	61.4 ± 124	87.6	36.3	NE	NE	U	BD	124129-010	EPA 901.1
	Gross Alpha	-1.78	NA	NA	15 pCi/L	NE	NA	None	124129-011	EPA 900.0/SW846-9310
	Gross Beta	4.62 ± 1.14	1.69	0.822	4 mrem/yr	NE		J	124129-011	EPA 900.0/SW846-9310
	Uranium-233/234	23.1 ± 2.07	0.0606	0.0275	NE	NE			124129-014	HASL-300
	Uranium-235/236	0.686 ± 0.104	0.0432	0.0182	NE	NE			124129-014	HASL-300
	Uranium-238	3.39 ± 0.339	0.0501	0.0223	NE	NE			124129-014	HASL-300
	Radium-226	2.06 ± 0.714	0.424	0.168	5 pCi/L	5 pCi/L			124129-012	EPA 903.1M
	Radium-228	0.869 ± 0.426	0.495	0.224	5 pCi/L	5 pCi/L		J	124129-013	EPA 904.0/SW846-9320M

See notes at end of tables.

Table 2B-7 (continued)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, and Radium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	MCL/MAC[d]		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
CYN-MW5 01-May-25	Americium-241	2.22 ± 7.08	12.0	5.66	NE	NE	U	BD	124141-010	EPA 901.1
	Cesium-137	-0.789 ± 2.73	4.84	2.16	NE	NE	U	BD	124141-010	EPA 901.1
	Cobalt-60	-2.69 ± 3.34	4.23	1.72	NE	NE	U	BD	124141-010	EPA 901.1
	Potassium-40	-29.0 ± 46.4	79.9	36.0	NE	NE	U	BD	124141-010	EPA 901.1
	Gross Alpha	-0.44	NA	NA	15 pCi/L	NE	NA	None	124141-011	EPA 900.0/SW846-9310
	Gross Beta	4.12 ± 0.710	1.00	0.485	4 mrem/yr	NE			124141-011	EPA 900.0/SW846-9310
	Uranium-233/234	0.863 ± 0.112	0.0443	0.0195	NE	NE			124141-014	HASL-300
	Uranium-235/236	0.0481 ± 0.0244	0.0376	0.0155	NE	NE		J	124141-014	HASL-300
	Uranium-238	0.199 ± 0.0442	0.0440	0.0194	NE	NE			124141-014	HASL-300
	Radium-226	0.525 ± 0.268	0.211	0.0643	5 pCi/L	5 pCi/L		J	124141-012	EPA 903.1M
	Radium-228	1.16 ± 0.518	0.472	0.200	5 pCi/L	5 pCi/L		NJ+	124141-013	EPA 904.0/SW846-9320M
CYN-MW5 (Duplicate) 01-May-25	Americium-241	1.01 ± 6.47	11.7	5.51	NE	NE	U	BD	124142-010	EPA 901.1
	Cesium-137	1.26 ± 2.91	5.50	2.49	NE	NE	U	BD	124142-010	EPA 901.1
	Cobalt-60	1.61 ± 2.96	6.10	2.66	NE	NE	U	BD	124142-010	EPA 901.1
	Potassium-40	69.8 ± 58.1	56.7	24.4	NE	NE	X	R	124142-010	EPA 901.1
	Gross Alpha	0.15	NA	NA	15 pCi/L	NE	NA	None	124142-011	EPA 900.0/SW846-9310
	Gross Beta	3.76 ± 0.716	1.04	0.506	4 mrem/yr	NE			124142-011	EPA 900.0/SW846-9310
	Uranium-233/234	0.788 ± 0.167	0.124	0.0542	NE	NE			124142-014	HASL-300
	Uranium-235/236	0.0257 ± 0.0389	0.106	0.0432	NE	NE	U	BD	124142-014	HASL-300
	Uranium-238	0.177 ± 0.0686	0.123	0.0537	NE	NE		J	124142-014	HASL-300
	Radium-226	1.27 ± 0.500	0.483	0.191	5 pCi/L	5 pCi/L		J	124142-012	EPA 903.1M
	Radium-228	1.00 ± 0.479	0.471	0.199	5 pCi/L	5 pCi/L		NJ+	124142-013	EPA 904.0/SW846-9320M
Greystone-MW2 29-Apr-25	Americium-241	7.21 ± 7.99	13.1	6.19	NE	NE	U	BD	124133-010	EPA 901.1
	Cesium-137	-0.00892 ± 2.70	5.03	2.26	NE	NE	U	BD	124133-010	EPA 901.1
	Cobalt-60	1.69 ± 2.93	5.48	2.34	NE	NE	U	BD	124133-010	EPA 901.1
	Potassium-40	3.51 ± 49.0	49.3	20.7	NE	NE	U	BD	124133-010	EPA 901.1
	Gross Alpha	-1.10	NA	NA	15 pCi/L	NE	NA	None	124133-011	EPA 900.0/SW846-9310
	Gross Beta	7.42 ± 1.75	2.56	1.24	4 mrem/yr	NE		J	124133-011	EPA 900.0/SW846-9310
	Uranium-233/234	8.41 ± 0.778	0.0598	0.0272	NE	NE			124133-014	HASL-300
	Uranium-235/236	0.273 ± 0.0586	0.0426	0.0180	NE	NE			124133-014	HASL-300
	Uranium-238	2.14 ± 0.228	0.0495	0.0220	NE	NE			124133-014	HASL-300
	Radium-226	1.50 ± 0.496	0.323	0.122	5 pCi/L	5 pCi/L			124133-012	EPA 903.1M
	Radium-228	0.681 ± 0.394	0.505	0.225	5 pCi/L	5 pCi/L		NJ+	124133-013	EPA 904.0/SW846-9320M

See notes at end of tables.

Table 2B-7 (continued)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, and Radium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	MCL/MAC[d]		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
Greystone-MW2 (Duplicate) 29-Apr-25	Americium-241	4.94 ± 4.81	8.00	3.78	NE	NE	U	BD	124134-010	EPA 901.1
	Cesium-137	2.79 ± 4.49	8.36	3.83	NE	NE	U	BD	124134-010	EPA 901.1
	Cobalt-60	1.39 ± 4.07	8.31	3.59	NE	NE	U	BD	124134-010	EPA 901.1
	Potassium-40	15.2 ± 53.0	73.8	31.2	NE	NE	U	BD	124134-010	EPA 901.1
	Gross Alpha	-6.09	NA	NA	15 pCi/L	NE	NA	None	124134-011	EPA 900.0/SW846-9310
	Gross Beta	6.23 ± 1.77	2.70	1.31	4 mrem/yr	NE		J	124134-011	EPA 900.0/SW846-9310
	Uranium-233/234	9.08 ± 0.855	0.0673	0.0306	NE	NE			124134-014	HASL-300
	Uranium-235/236	0.200 ± 0.0523	0.0480	0.0202	NE	NE			124134-014	HASL-300
	Uranium-238	2.15 ± 0.234	0.0557	0.0248	NE	NE			124134-014	HASL-300
	Radium-226	1.74 ± 0.579	0.314	0.108	5 pCi/L	5 pCi/L			124134-012	EPA 903.1M
	Radium-228	0.348 ± 0.326	0.504	0.223	5 pCi/L	5 pCi/L	U	BD	124134-013	EPA 904.0/SW846-9320M
MRN-2 15-Apr-25	Americium-241	-5.74 ± 8.74	12.9	6.23	NE	NE	U	BD	124102-010	EPA 901.1
	Cesium-137	2.74 ± 2.22	2.33	1.09	NE	NE	X	R	124102-010	EPA 901.1
	Cobalt-60	2.21 ± 1.88	3.28	1.52	NE	NE	U	BD	124102-010	EPA 901.1
	Potassium-40	-39.0 ± 36.2	41.4	19.5	NE	NE	U	BD	124102-010	EPA 901.1
	Gross Alpha	1.29	NA	NA	15 pCi/L	NE	NA	None	124102-011	EPA 900.0/SW846-9310
	Gross Beta	3.56 ± 0.720	1.04	0.503	4 mrem/yr	NE		NJ+	124102-011	EPA 900.0/SW846-9310
	Radium-226	1.91 ± 0.578	0.248	0.0753	5 pCi/L	5 pCi/L		NJ+	124102-012	EPA 903.1M
	Radium-228	0.434 ± 0.339	0.492	0.212	5 pCi/L	5 pCi/L	U	BD	124102-013	EPA 904.0/SW846-9320M
MRN-2 (Duplicate) 15-Apr-25	Americium-241	12.4 ± 19.0	28.6	13.9	NE	NE	U	BD	124103-010	EPA 901.1
	Cesium-137	-0.635 ± 1.82	3.17	1.51	NE	NE	U	BD	124103-010	EPA 901.1
	Cobalt-60	1.24 ± 2.00	3.63	1.69	NE	NE	U	BD	124103-010	EPA 901.1
	Potassium-40	12.0 ± 46.1	36.6	17.1	NE	NE	U	BD	124103-010	EPA 901.1
	Gross Alpha	1.21	NA	NA	15 pCi/L	NE	NA	None	124103-011	EPA 900.0/SW846-9310
	Gross Beta	3.69 ± 0.648	0.875	0.422	4 mrem/yr	NE		NJ+	124103-011	EPA 900.0/SW846-9310
	Radium-226	1.51 ± 0.525	0.314	0.108	5 pCi/L	5 pCi/L		NJ+	124103-012	EPA 903.1M
	Radium-228	0.569 ± 0.365	0.493	0.216	5 pCi/L	5 pCi/L		J	124103-013	EPA 904.0/SW846-9320M
MRN-3D 16-Apr-25	Americium-241	5.34 ± 17.3	28.5	13.8	NE	NE	U	BD	124105-010	EPA 901.1
	Cesium-137	-1.39 ± 2.13	3.42	1.61	NE	NE	U	BD	124105-010	EPA 901.1
	Cobalt-60	-7.12 ± 5.22	3.87	1.77	NE	NE	U	BD	124105-010	EPA 901.1
	Potassium-40	-72.9 ± 57.1	64.0	30.3	NE	NE	U	BD	124105-010	EPA 901.1
	Gross Alpha	1.72	NA	NA	15 pCi/L	NE	NA	None	124105-011	EPA 900.0/SW846-9310
	Gross Beta	4.91 ± 0.802	1.08	0.522	4 mrem/yr	NE			124105-011	EPA 900.0/SW846-9310
	Radium-226	1.27 ± 0.469	0.328	0.113	5 pCi/L	5 pCi/L			124105-012	EPA 903.1M
	Radium-228	0.682 ± 0.381	0.429	0.176	5 pCi/L	5 pCi/L		J	124105-013	EPA 904.0/SW846-9320M

See notes at end of tables.

Table 2B-7 (continued)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, and Radium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	MCL/MAC[d] (pCi/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
NWTA3-MW3D	Americium-241	-3.15 ± 5.72	8.61	4.16	NE	NE	U	BD	124097-010	EPA 901.1
14-Apr-25	Cesium-137	-0.909 ± 2.83	2.72	1.28	NE	NE	U	BD	124097-010	EPA 901.1
	Cobalt-60	-3.24 ± 3.22	3.13	1.44	NE	NE	U	BD	124097-010	EPA 901.1
	Potassium-40	16.7 ± 46.4	24.6	11.1	NE	NE	U	BD	124097-010	EPA 901.1
	Gross Alpha	0.66	NA	NA	15 pCi/L	NE	NA	None	124097-011	EPA 900.0/SW846-9310
	Gross Beta	4.42 ± 0.570	0.666	0.321	4 mrem/yr	NE			124097-011	EPA 900.0/SW846-9310
	Radium-226	0.555 ± 0.279	0.223	0.0679	5 pCi/L	5 pCi/L		J	124097-012	EPA 903.1M
	Radium-228	0.340 ± 0.317	0.493	0.217	5 pCi/L	5 pCi/L	U	BD	124097-013	EPA 904.0/SW846-9320M
OBS-MW1	Americium-241	3.81 ± 4.62	8.33	3.95	NE	NE	U	BD	124122-010	EPA 901.1
24-Apr-25	Cesium-137	3.65 ± 4.55	8.17	3.74	NE	NE	U	BD	124122-010	EPA 901.1
	Cobalt-60	0.611 ± 3.71	7.54	3.20	NE	NE	U	BD	124122-010	EPA 901.1
	Potassium-40	-43.6 ± 55.6	93.5	41.1	NE	NE	U	BD	124122-010	EPA 901.1
	Gross Alpha	-0.73	NA	NA	15 pCi/L	NE	NA	None	124122-011	EPA 900.0/SW846-9310
	Gross Beta	5.47 ± 0.971	1.32	0.637	4 mrem/yr	NE			124122-011	EPA 900.0/SW846-9310
	Uranium-233/234	17.3 ± 1.75	0.105	0.0477	NE	NE			124122-014	HASL-300
	Uranium-235/236	0.268 ± 0.0745	0.0748	0.0315	NE	NE			124122-014	HASL-300
	Uranium-238	3.26 ± 0.382	0.0868	0.0387	NE	NE			124122-014	HASL-300
	Radium-226	0.763 ± 0.321	0.234	0.0854	5 pCi/L	5 pCi/L		NJ+	124122-012	EPA 903.1M
	Radium-228	0.970 ± 0.474	0.478	0.202	5 pCi/L	5 pCi/L		J	124122-013	EPA 904.0/SW846-9320M
OBS-MW1 (Duplicate)	Americium-241	8.49 ± 8.53	14.6	6.92	NE	NE	U	BD	124123-010	EPA 901.1
24-Apr-25	Cesium-137	-1.20 ± 2.73	4.53	2.04	NE	NE	U	BD	124123-010	EPA 901.1
	Cobalt-60	1.16 ± 2.77	5.14	2.21	NE	NE	U	BD	124123-010	EPA 901.1
	Potassium-40	1.92 ± 77.8	51.8	22.3	NE	NE	U	BD	124123-010	EPA 901.1
	Gross Alpha	1.77	NA	NA	15 pCi/L	NE	NA	None	124123-011	EPA 900.0/SW846-9310
	Gross Beta	5.45 ± 1.09	1.60	0.783	4 mrem/yr	NE			124123-011	EPA 900.0/SW846-9310
	Uranium-233/234	16.9 ± 1.84	0.135	0.0613	NE	NE			124123-014	HASL-300
	Uranium-235/236	0.205 ± 0.0744	0.0960	0.0405	NE	NE		J	124123-014	HASL-300
	Uranium-238	3.13 ± 0.401	0.111	0.0496	NE	NE			124123-014	HASL-300
	Radium-226	0.916 ± 0.344	0.241	0.0879	5 pCi/L	5 pCi/L		NJ+	124123-012	EPA 903.1M
	Radium-228	0.535 ± 0.352	0.476	0.208	5 pCi/L	5 pCi/L		J	124123-013	EPA 904.0/SW846-9320M

See notes at end of tables.

Table 2B-7 (continued)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, and Radium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	MCL/MAC[d] (pCi/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
PL-2	Americium-241	-1.18 ± 2.37	4.11	1.98	NE	NE	U	BD	124109-010	EPA 901.1
17-Apr-25	Cesium-137	-1.42 ± 2.31	3.71	1.74	NE	NE	U	BD	124109-010	EPA 901.1
	Cobalt-60	1.40 ± 2.35	4.42	2.02	NE	NE	U	BD	124109-010	EPA 901.1
	Potassium-40	-19.2 ± 42.8	59.6	27.9	NE	NE	U	BD	124109-010	EPA 901.1
	Gross Alpha	-0.82	NA	NA	15 pCi/L	NE	NA	None	124109-011	EPA 900.0/SW846-9310
	Gross Beta	4.64 ± 0.924	1.33	0.643	4 mrem/yr	NE	*		124109-011	EPA 900.0/SW846-9310
	Radium-226	0.536 ± 0.406	0.577	0.235	5 pCi/L	5 pCi/L	U	BD	124109-012	EPA 903.1M
	Radium-228	0.516 ± 0.347	0.467	0.202	5 pCi/L	5 pCi/L		J	124109-013	EPA 904.0/SW846-9320M
PL-4	Americium-241	1.03 ± 3.98	6.53	3.14	NE	NE	U	BD	124111-010	EPA 901.1
17-Apr-25	Cesium-137	1.06 ± 1.63	2.90	1.36	NE	NE	U	BD	124111-010	EPA 901.1
	Cobalt-60	0.172 ± 1.54	2.93	1.33	NE	NE	U	BD	124111-010	EPA 901.1
	Potassium-40	10.7 ± 45.9	27.4	12.4	NE	NE	U	BD	124111-010	EPA 901.1
	Gross Alpha	1.43	NA	NA	15 pCi/L	NE	NA	None	124111-011	EPA 900.0/SW846-9310
	Gross Beta	5.47 ± 0.771	0.953	0.461	4 mrem/yr	NE	*		124111-011	EPA 900.0/SW846-9310
	Radium-226	0.939 ± 0.383	0.325	0.118	5 pCi/L	5 pCi/L		J	124111-012	EPA 903.1M
	Radium-228	0.446 ± 0.332	0.450	0.185	5 pCi/L	5 pCi/L	U	BD	124111-013	EPA 904.0/SW846-9320M
SFR-2S	Americium-241	-1.36 ± 7.06	11.6	5.41	NE	NE	U	BD	124117-011	EPA 901.1
23-Apr-25	Cesium-137	3.04 ± 2.94	5.51	2.49	NE	NE	U	BD	124117-011	EPA 901.1
	Cobalt-60	-0.294 ± 3.52	6.00	2.60	NE	NE	U	BD	124117-011	EPA 901.1
	Potassium-40	1.27 ± 47.5	91.1	41.6	NE	NE	U	BD	124117-011	EPA 901.1
	Gross Alpha	-9.09	NA	NA	15 pCi/L	NE	NA	None	124117-012	EPA 900.0/SW846-9310
	Gross Beta	9.05 ± 1.68	2.34	1.14	4 mrem/yr	NE	*		124117-012	EPA 900.0/SW846-9310
	Uranium-233/234	20.4 ± 2.04	0.101	0.0458	NE	NE			124117-015	HASL-300
	Uranium-235/236	0.365 ± 0.0870	0.0717	0.0302	NE	NE			124117-015	HASL-300
	Uranium-238	5.32 ± 0.578	0.0832	0.0371	NE	NE			124117-015	HASL-300
	Radium-226	0.674 ± 0.294	0.257	0.0937	5 pCi/L	5 pCi/L		J	124117-013	EPA 903.1M
	Radium-228	0.867 ± 0.440	0.498	0.219	5 pCi/L	5 pCi/L		J	124117-014	EPA 904.0/SW846-9320M

See notes at end of tables.

Table 2B-7 (continued)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, and Radium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	MCL/MAC[d] (pCi/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
SFR-4T	Americium-241	-4.81 ± 16.2	27.9	13.5	NE	NE	U	BD	124115-011	EPA 901.1
22-Apr-25	Cesium-137	1.37 ± 2.21	3.65	1.72	NE	NE	U	BD	124115-011	EPA 901.1
	Cobalt-60	-5.73 ± 4.95	4.56	2.11	NE	NE	U	BD	124115-011	EPA 901.1
	Potassium-40	-57.2 ± 52.5	64.1	30.4	NE	NE	U	BD	124115-011	EPA 901.1
	Gross Alpha	-3.12	NA	NA	15 pCi/L	NE	NA	None	124115-012	EPA 900.0/SW846-9310
	Gross Beta	-2.22 ± 6.48	11.3	5.48	4 mrem/yr	NE	U, *	BD	124115-012	EPA 900.0/SW846-9310
	Uranium-233/234	0.478 ± 0.0992	0.106	0.0480	NE	NE			124115-015	HASL-300
	Uranium-235/236	0.0130 ± 0.0256	0.0753	0.0317	NE	NE	U	BD	124115-015	HASL-300
	Uranium-238	0.0563 ± 0.0417	0.0874	0.0389	NE	NE	U	BD	124115-015	HASL-300
	Radium-226	0.828 ± 0.366	0.327	0.119	5 pCi/L	5 pCi/L		J	124115-013	EPA 903.1M
	Radium-228	0.554 ± 0.351	0.484	0.221	5 pCi/L	5 pCi/L		J	124115-014	EPA 904.0/SW846-9320M
SWTA3-MW2	Americium-241	0.0156 ± 14.9	27.1	13.0	NE	NE	U	BD	124090-011	EPA 901.1
08-Apr-25	Cesium-137	-0.977 ± 3.04	3.92	1.85	NE	NE	U	BD	124090-011	EPA 901.1
	Cobalt-60	-0.965 ± 2.06	3.58	1.61	NE	NE	U	BD	124090-011	EPA 901.1
	Potassium-40	-40.4 ± 56.4	68.8	32.6	NE	NE	U	BD	124090-011	EPA 901.1
	Gross Alpha	0.58	NA	NA	15 pCi/L	NE	NA	None	124090-012	EPA 900.0/SW846-9310
	Gross Beta	4.78 ± 0.724	0.966	0.468	4 mrem/yr	NE			124090-012	EPA 900.0/SW846-9310
	Radium-226	0.697 ± 0.358	0.334	0.115	5 pCi/L	5 pCi/L		J	124090-013	EPA 903.1M
	Radium-228	1.08 ± 0.579	0.735	0.332	5 pCi/L	5 pCi/L		J	124090-014	EPA 904.0/SW846-9320M
SWTA3-MW3	Americium-241	-2.76 ± 8.97	16.0	7.69	NE	NE	U	BD	124093-011	EPA 901.1
09-Apr-25	Cesium-137	0.297 ± 2.04	3.55	1.67	NE	NE	U	BD	124093-011	EPA 901.1
	Cobalt-60	0.485 ± 2.44	3.91	1.79	NE	NE	U	BD	124093-011	EPA 901.1
	Potassium-40	-9.54 ± 39.1	51.6	24.1	NE	NE	U	BD	124093-011	EPA 901.1
	Gross Alpha	0.89	NA	NA	15 pCi/L	NE	NA	None	124093-012	EPA 900.0/SW846-9310
	Gross Beta	3.34 ± 0.966	1.49	0.726	4 mrem/yr	NE		J	124093-012	EPA 900.0/SW846-9310
	Radium-226	0.927 ± 0.482	0.568	0.228	5 pCi/L	5 pCi/L		J	124093-013	EPA 903.1M
	Radium-228	0.613 ± 0.415	0.574	0.256	5 pCi/L	5 pCi/L		J	124093-014	EPA 904.0/SW846-9320M

See notes at end of tables.

Table 2B-7 (concluded)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, and Radium Results, Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	MCL/MAC[d] (pCi/L)		Laboratory Qualifier[e]	Validation Qualifier[f]	Sample No.	Analytical Method[g]
SWTA3-MW4	Americium-241	1.48 ± 8.73	14.4	6.96	NE	NE	U	BD	124095-011	EPA 901.1
10-Apr-25	Cesium-137	-1.12 ± 1.85	3.01	1.42	NE	NE	U	BD	124095-011	EPA 901.1
	Cobalt-60	-1.27 ± 1.77	2.88	1.30	NE	NE	U	BD	124095-011	EPA 901.1
	Potassium-40	-14.4 ± 39.7	44.3	20.8	NE	NE	U	BD	124095-011	EPA 901.1
	Gross Alpha	1.66	NA	NA	15 pCi/L	NE	NA	None	124095-012	EPA 900.0/SW846-9310
	Gross Beta	4.67 ± 0.879	1.25	0.605	4 mrem/yr	NE			124095-012	EPA 900.0/SW846-9310
	Radium-226	0.288 ± 0.373	0.631	0.254	5 pCi/L	5 pCi/L	U	BD	124095-013	EPA 903.1M
	Radium-228	0.669 ± 0.499	0.726	0.328	5 pCi/L	5 pCi/L	U	BD	124095-014	EPA 904.0/SW846-9320M
TRE-1	Americium-241	-0.444 ± 3.84	6.67	3.22	NE	NE	U	BD	124113-011	EPA 901.1
21-Apr-25	Cesium-137	0.364 ± 1.74	3.07	1.45	NE	NE	U	BD	124113-011	EPA 901.1
	Cobalt-60	1.40 ± 2.56	3.14	1.44	NE	NE	U	BD	124113-011	EPA 901.1
	Potassium-40	-8.64 ± 39.1	48.0	22.7	NE	NE	U	BD	124113-011	EPA 901.1
	Gross Alpha	-8.94	NA	NA	15 pCi/L	NE	NA	None	124113-012	EPA 900.0/SW846-9310
	Gross Beta	13.0 ± 2.38	3.27	1.58	4 mrem/yr	NE	*		124113-012	EPA 900.0/SW846-9310
	Uranium-233/234	24.3 ± 2.40	0.0998	0.0454	NE	NE			124113-015	HASL-300
	Uranium-235/236	0.551 ± 0.108	0.0711	0.0300	NE	NE			124113-015	HASL-300
	Uranium-238	6.39 ± 0.677	0.0826	0.0368	NE	NE			124113-015	HASL-300
	Radium-226	0.726 ± 0.304	0.259	0.0943	5 pCi/L	5 pCi/L		J	124113-013	EPA 903.1M
	Radium-228	0.766 ± 0.400	0.465	0.205	5 pCi/L	5 pCi/L		J	124113-014	EPA 904.0/SW846-9320M

See notes at end of tables.

Table 2B-8
Summary of Field Water Quality Parameter Measurements[h], Groundwater Monitoring Program, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Sample Date	Temperature (^{0}C)	Specific Conductivity (µmho/cm)	Oxidation Reduction Potential (mV)	pH	Turbidity (NTU)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)
Coyote Springs	24-Apr-25	14.47	3510.7	183.0	6.17	1.39	35.02	2.86
CCBA-MW2	30-Apr-25	14.91	693.43	74.9	7.52	0.21	76.42	6.20
CTF-MW1	28-Apr-25	17.60	735.60	99.9	7.21	0.65	90.43	6.99
CYN-MW5	01-May-25	15.39	408.84	123.4	6.06	0.21	52.63	4.29
Greystone-MW2	29-Apr-25	16.36	1256.1	180.8	7.07	0.18	87.46	7.10
MRN-2	15-Apr-25	17.29	441.35	213.7	7.91	0.18	82.98	6.62
MRN-3D	16-Apr-25	20.78	506.09	86.7	7.59	1.40	62.79	4.62
NWTA3-MW3D	14-Apr-25	19.32	410.06	137.4	7.79	0.55	53.95	4.11
OBS-MW1	24-Apr-25	17.33	631.22	85.0	7.48	0.13	48.88	3.77
PL-2	17-Apr-25	21.58	514.45	112.6	7.74	0.80	87.19	6.24
PL-4	17-Apr-25	19.31	552.93	94.9	7.50	1.81	84.51	6.31
SFR-2S	23-Apr-25	18.26	1252.8	117.8	6.92	0.75	93.14	7.16
SFR-4T	22-Apr-25	17.89	4836.5	119.3	7.91	0.58	13.08	1.00
SWTA3-MW2	08-Apr-25	18.00	479.20	204.6	7.70	0.21	53.38	4.18
SWTA3-MW3	09-Apr-25	20.57	490.74	186.6	7.73	0.67	55.95	4.15
SWTA3-MW4	10-Apr-25	19.74	495.71	194.4	7.77	0.24	56.57	4.28
TRE-1	21-Apr-25	17.22	1534.0	104.8	6.79	0.27	90.52	7.00

See notes at end of tables.

Notes for Groundwater Monitoring Program Analytical Results Tables

%	= percent
$CaCO_3$	= calcium carbonate
CFR	= Code of Federal Regulations
EPA	= U.S. Environmental Protection Agency
HMX	= octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
ID	= identifier
µg/L	= micrograms per liter
mg/L	= milligrams per liter
mrem/yr	= millirem per year
NMAC	= New Mexico Administrative Code
No.	= number
pCi/L	= picocuries per liter
RDX	= hexahydro-1,3,5-trinitro-1,3,5-triazine
Tetryl	= methyl-2,4,6-trinitrophenylnitramine

[a]Result or Activity

Result applies to Tables 2A-1 and 2A-3 through 2A-6. Activity applies to Table 2A-7.

Activity	= Gross alpha activity measurements were corrected by subtracting the total uranium activity (40 CFR Part 141). Activities of zero or less are considered not detected.
Bold	= Value exceeds the established MCL or MAC.
ND	= not detected (at MDL)

[b]MDL or MDA

The MDL applies to Tables 2A-1 through 2A-6. MDA applies to Table 2A-7.

MDA	= The minimal detectable activity or minimum measured activity in a sample required to ensure a 95% probability that the measured activity is accurately quantified above the critical level.
MDL	= Method detection limit. The minimum concentration or activity that can be measured and reported with 99% confidence that the analyte is greater than zero; analyte is matrix specific.
NA	= Not applicable for gross alpha activities. The MDA could not be calculated as the gross alpha activity was corrected by subtracting the total uranium activity.

[c]PQL or Critical Level

The PQL applies to Tables 2A-1 and 2A-3 through 2A-6. The critical Level applies to Table 2A-7.

Critical Level	= The minimum activity that can be measured and reported with 99% confidence that the analyte is greater than zero; analyte is matrix specific.
NA	= Not applicable for gross alpha activities. The critical level could not be calculated as the gross alpha activity was corrected by subtracting the total uranium activity.
PQL	= Practical quantitation limit. The lowest concentration of analytes in a sample that can be reliably determined within specified limits of precision and accuracy by the indicated method under routine laboratory operating conditions.

[d]MCL or MAC

Regulatory limits: The MCL is listed first, followed by the MAC. A single value is listed when the MCL and MAC are equal (for example, nitrate plus nitrite).

MAC = Maximum allowable concentration. MACs were established for groundwater for the contaminants specified in *Environmental Protection*, Human Health Standards, 20.6.2.3103 NMAC, (NMWQCC, December 2018).

- The MAC of 30 µg/L for total naphthalene plus monomethylnaphthalenes was used as the screening level for naphthalene.

MCL = Maximum contaminant level. Established by the EPA (EPA, March 2018).

- The total for trihalomethanes (including chloroform) is 80 mg/L.

The following are the MCLs for gross alpha particles, beta particles, and radium in community water systems:

- 15 pCi/L = gross alpha particle activity, excluding total uranium (40 CFR Part 141)
- 4 mrem/yr = any combination of beta and/or gamma emitting radionuclides (as dose rate)
- 5 pCi/L = combined radium-226 and radium-228

NE = not established

Notes for Groundwater Monitoring Program Analytical Results Tables (concluded)

[e]Laboratory Qualifier

If cell is blank, then all quality control samples met acceptance criteria with respect to submitted samples.

B	= The analyte was detected in the blank above the effective MDL.
H	= Analytical holding time was exceeded.
J	= Estimated value; the analyte concentration fell above the effective MDL and below the effective PQL.
N	= Results associated with a spike analysis that was outside control limits.
NA	= not applicable
U	= Analyte is absent or below the method detection limit.
X	= Data rejected due to peak not meeting identification criteria.
*	= Recovery or relative percent difference (RPD) not within acceptance limits and/or spike amount not compatible with the sample or the duplicate RPDs are not applicable where the concentration fails below the effective PQL.

[f]Validation Qualifier

If cell is blank, then all quality control samples met acceptance criteria with respect to submitted samples.

BD	= Below detection limit as used in radiochemistry to identify results that are not statistically different from zero.
J	= The associated value is an estimated quantity.
J+	= The associated numerical value is an estimated quantity with a suspected positive bias.
J-	= The associated numerical value is an estimated quantity with a suspected negative bias.
NJ+	= Presumptive evidence of the presence of the material at an estimated quantity with a suspected positive bias.
None	= No data validation for corrected gross alpha activity.
U	= The analyte was analyzed for but was not detected. The associated numerical value is the sample PQL.
UJ	= The analyte was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	= The data are unusable, and resampling or reanalysis are necessary for verification.

[g]Analytical Method References

Rice, E.W., Baird, R.B., Eaton, A.D., and Clesceri, L.S. (2012). *Standard Methods for the Examination of Water and Wastewater*, 23rd ed., American Public Health Association, American Water Works Association, and Water Environment Federation.

U.S. Department of Energy. (1997). *EML Procedures Manual,* 27th ed., Vol. 1, Rev. 1992, HASL-300.

U.S. Environmental Protection Agency. (1980). *Prescribed Procedures for Measurement of Radioactivity in Drinking Water,* EPA-600/4-80-032.

U.S. Environmental Protection Agency. (1984). *Methods for Chemical Analysis of Water and Wastes*, EPA 600-4-79-020.

U.S. Environmental Protection Agency. (1986, as updated). *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,* SW-846, 3rd ed., Rev.1.

DOE	= U.S. Department of Energy
HASL	= Health and Safety Laboratory
SM	= Standard Method
SW	= Solid Waste

[h]Field Water Quality Parameter Measurements

Field measurements were collected prior to sampling.

°C	= degrees Celsius
% Sat	= percent saturation
µmho/cm	= micromhos per centimeter
mg/L	= milligrams per liter
mV	= millivolts
NTU	= nephelometric turbidity units
pH	= potential of hydrogen (negative logarithm of the hydrogen ion concentration)

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Attachment 2C
Groundwater Monitoring Program
Concentration Trend Plots

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Attachment 2C Plots

Figure 2C-1 Chloride Concentrations, Coyote Springs 2C-5
Figure 2C-2 Fluoride Concentrations, Coyote Springs 2C-6
Figure 2C-3 Fluoride Concentrations, Monitoring Well OBS-MW1 ..... 2C-7
Figure 2C-4 Fluoride Concentrations, Monitoring Well SFR-2S 2C-8
Figure 2C-5 Fluoride Concentrations, Monitoring Well SFR-4T 2C-9
Figure 2C-6 Fluoride Concentrations, Monitoring Well SWTA3-MW4 ..... 2C-10
Figure 2C-7 Fluoride Concentrations, Monitoring Well TRE-1 ..... 2C-11
Figure 2C-8 Sulfate Concentrations, Monitoring Well SFR-4T 2C-12
Figure 2C-9 Beryllium Concentrations, Coyote Springs 2C-13
Figure 2C-10 Manganese Concentrations, Coyote Springs 2C-14

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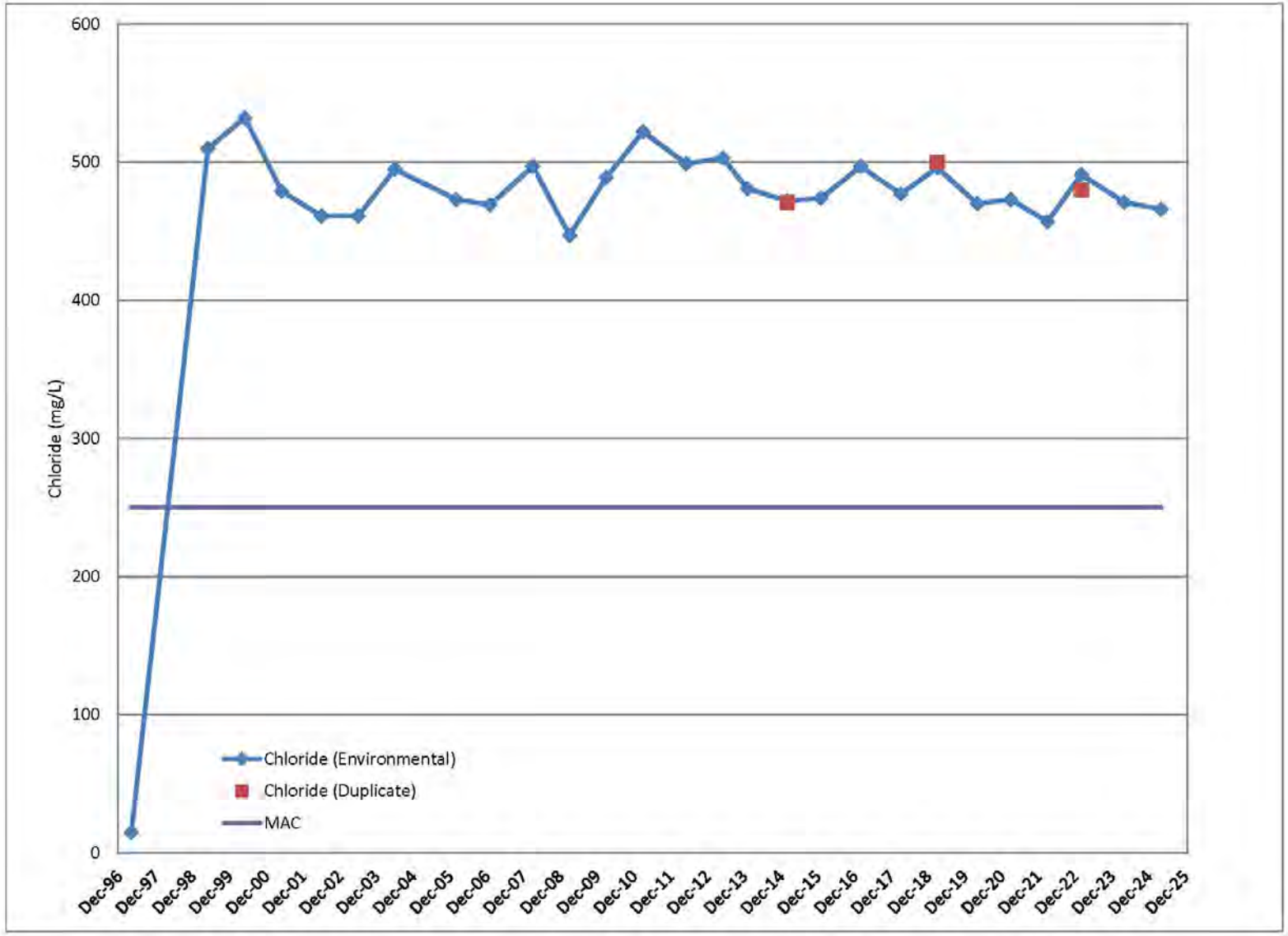


Figure 2C-1
Chloride Concentrations, Coyote Springs

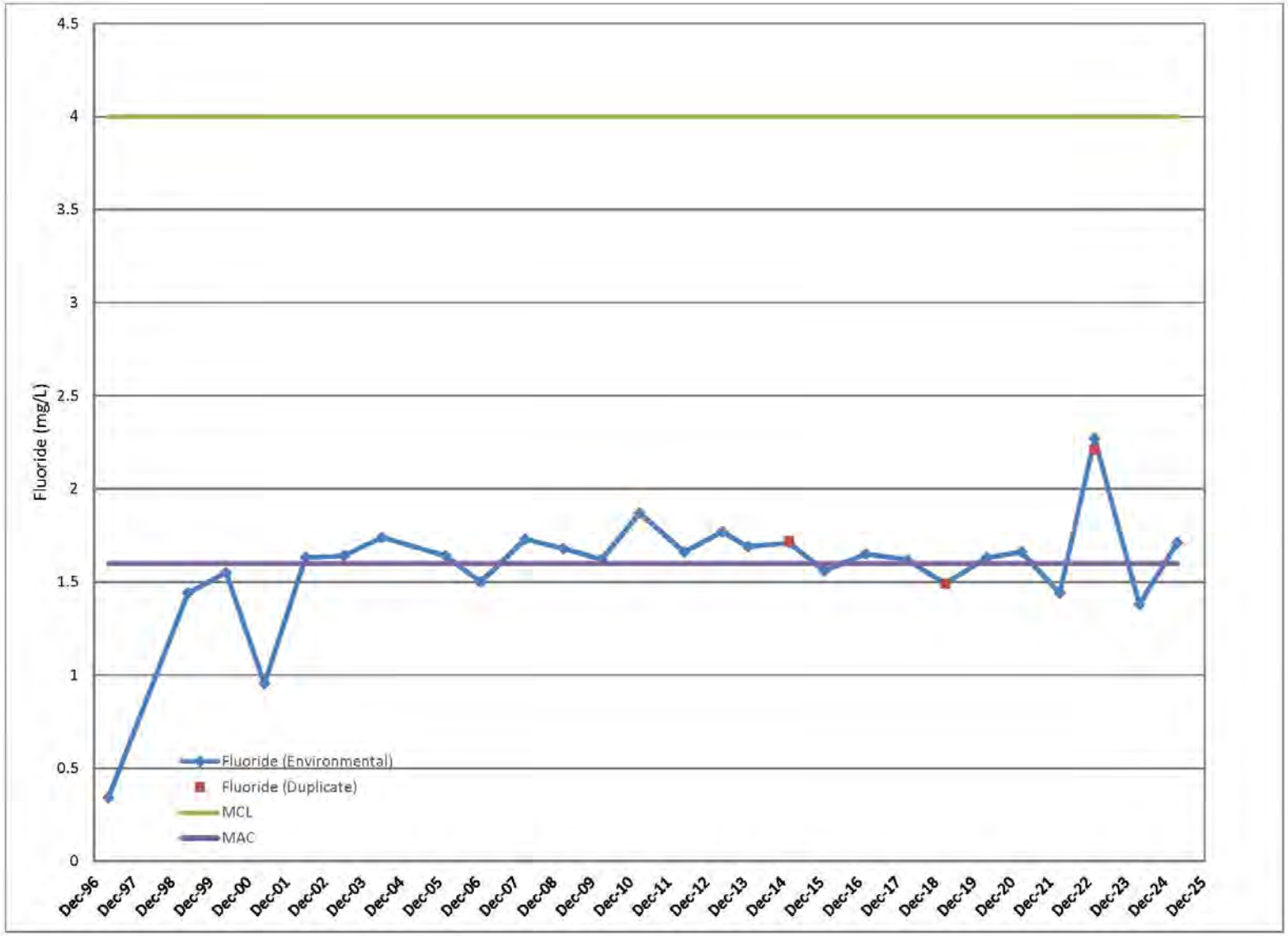


Figure 2C-2
Fluoride Concentrations, Coyote Springs

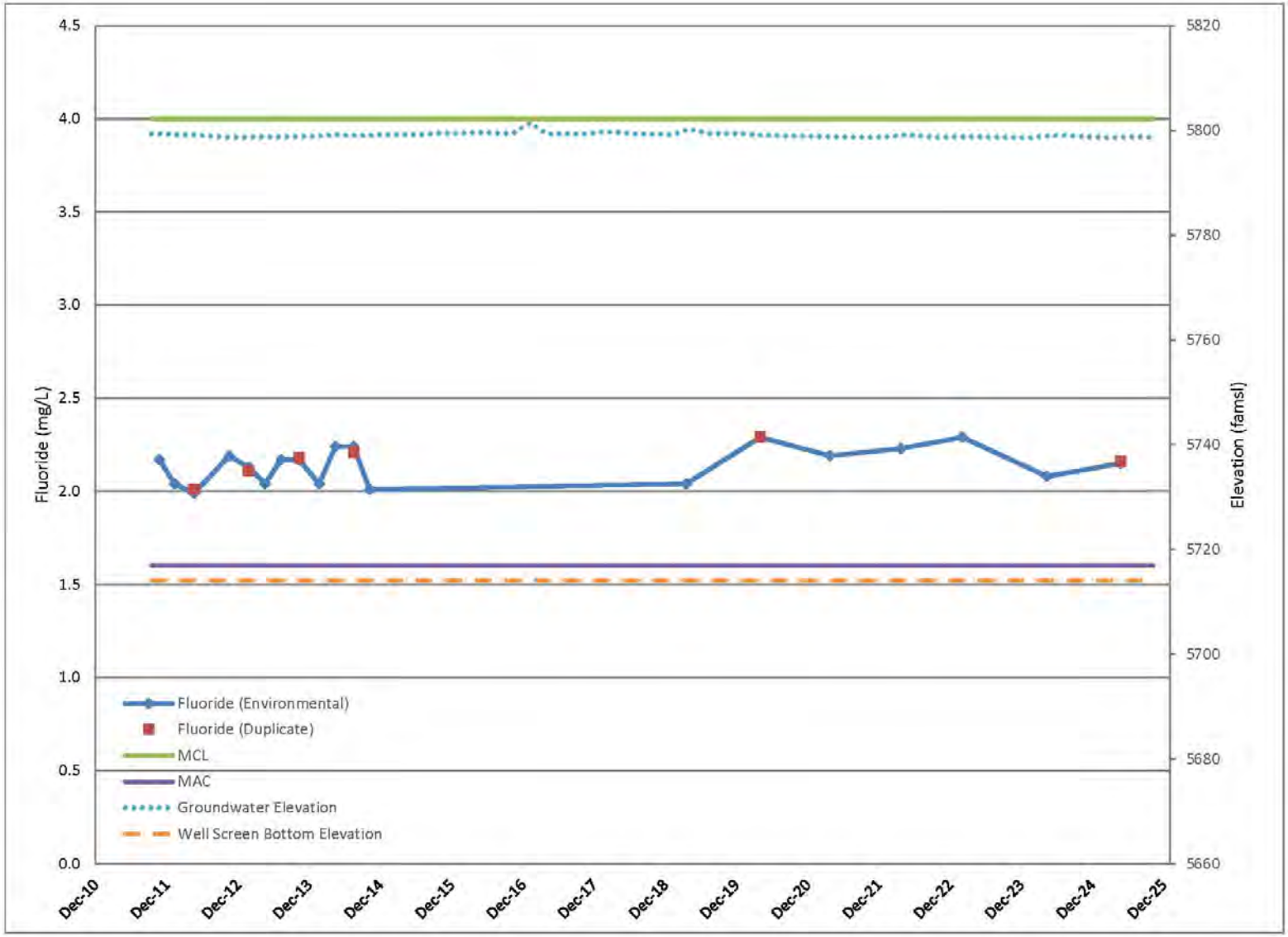


Figure 2C-3
Fluoride Concentrations, Monitoring Well OBS-MW1

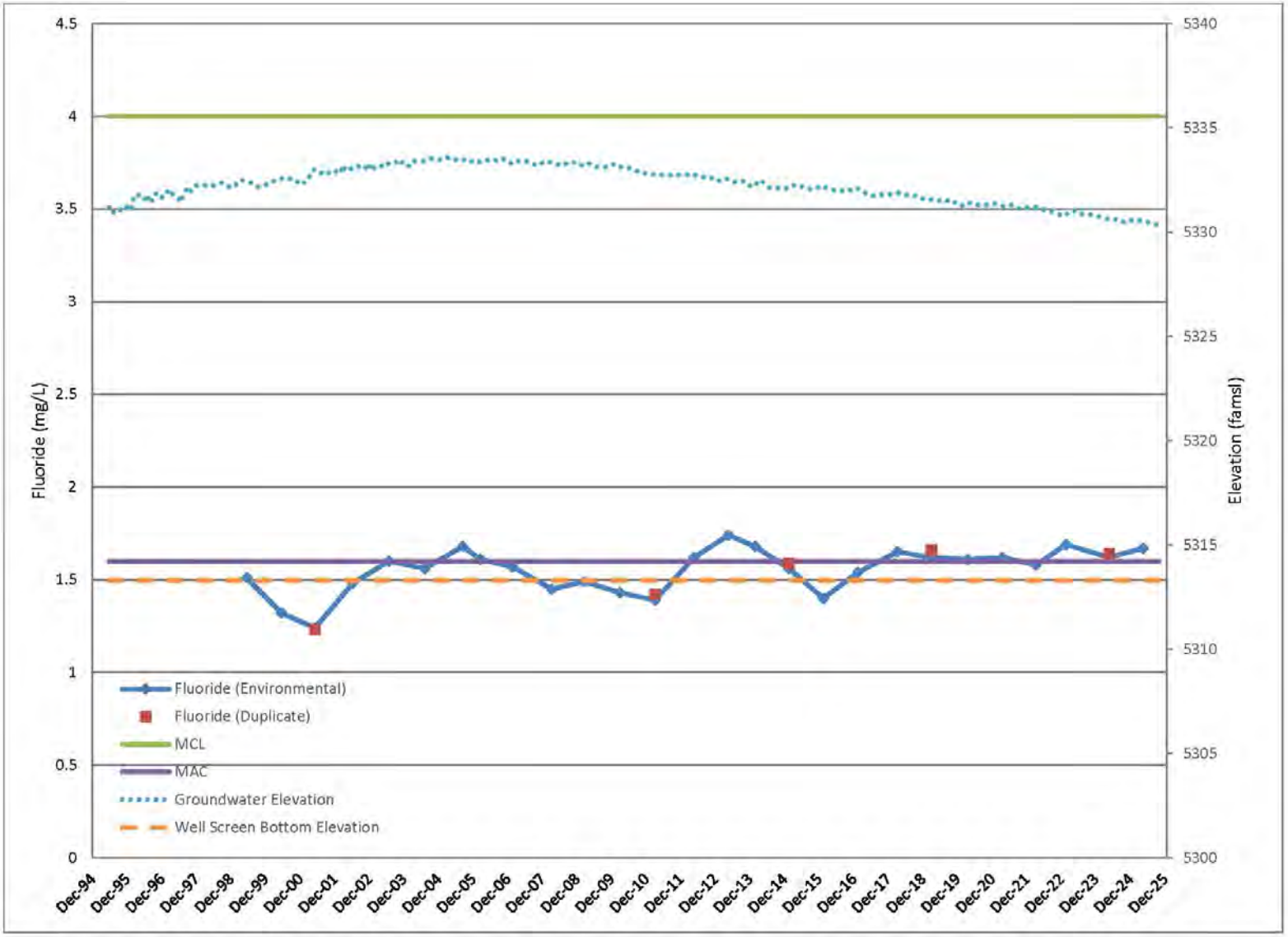


Figure 2C-4
Fluoride Concentrations, Monitoring Well SFR-2S

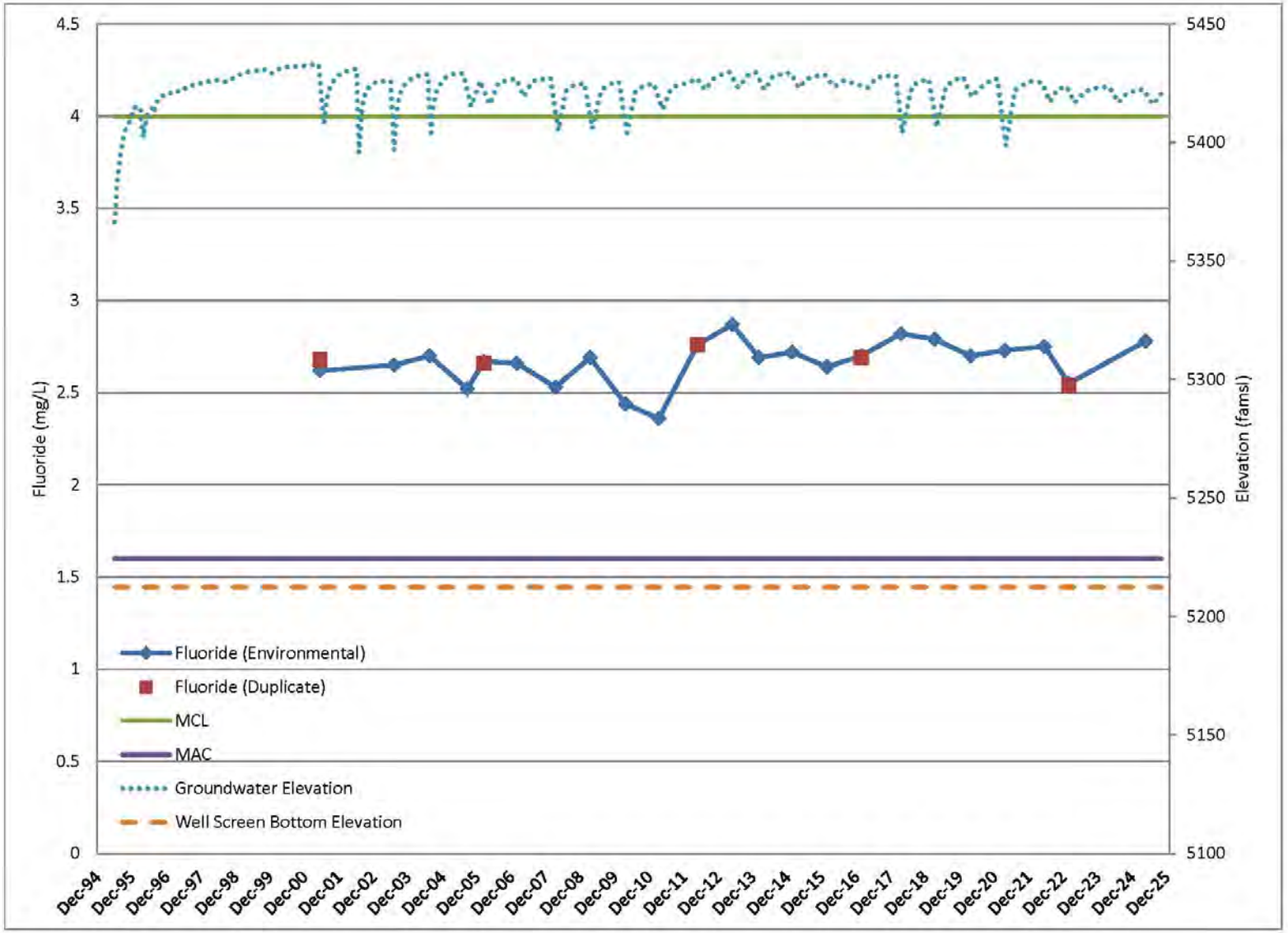


Figure 2C-5
Fluoride Concentrations, Monitoring Well SFR-4T

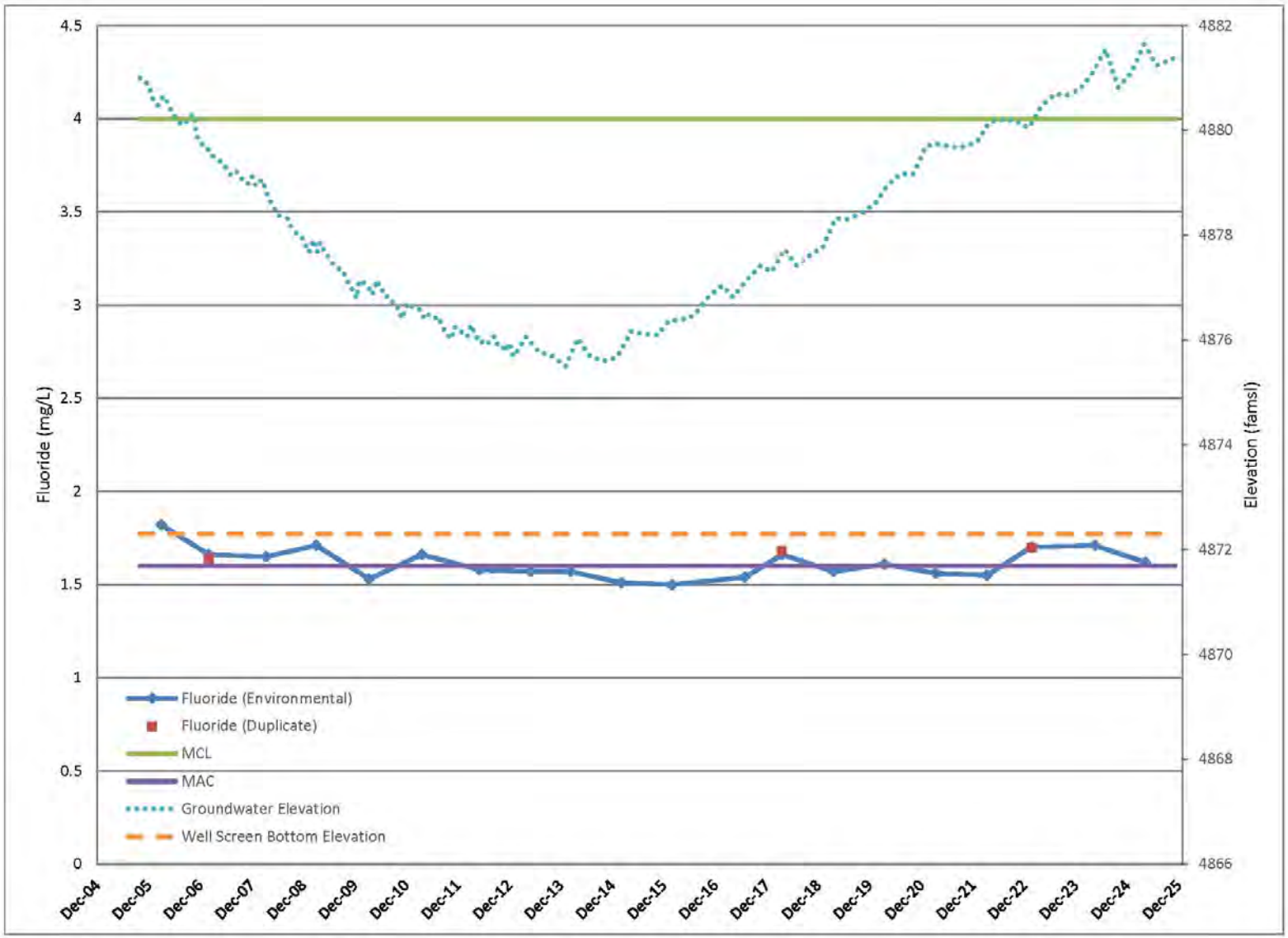


Figure 2C-6
Fluoride Concentrations, Monitoring Well SWTA3-MW4

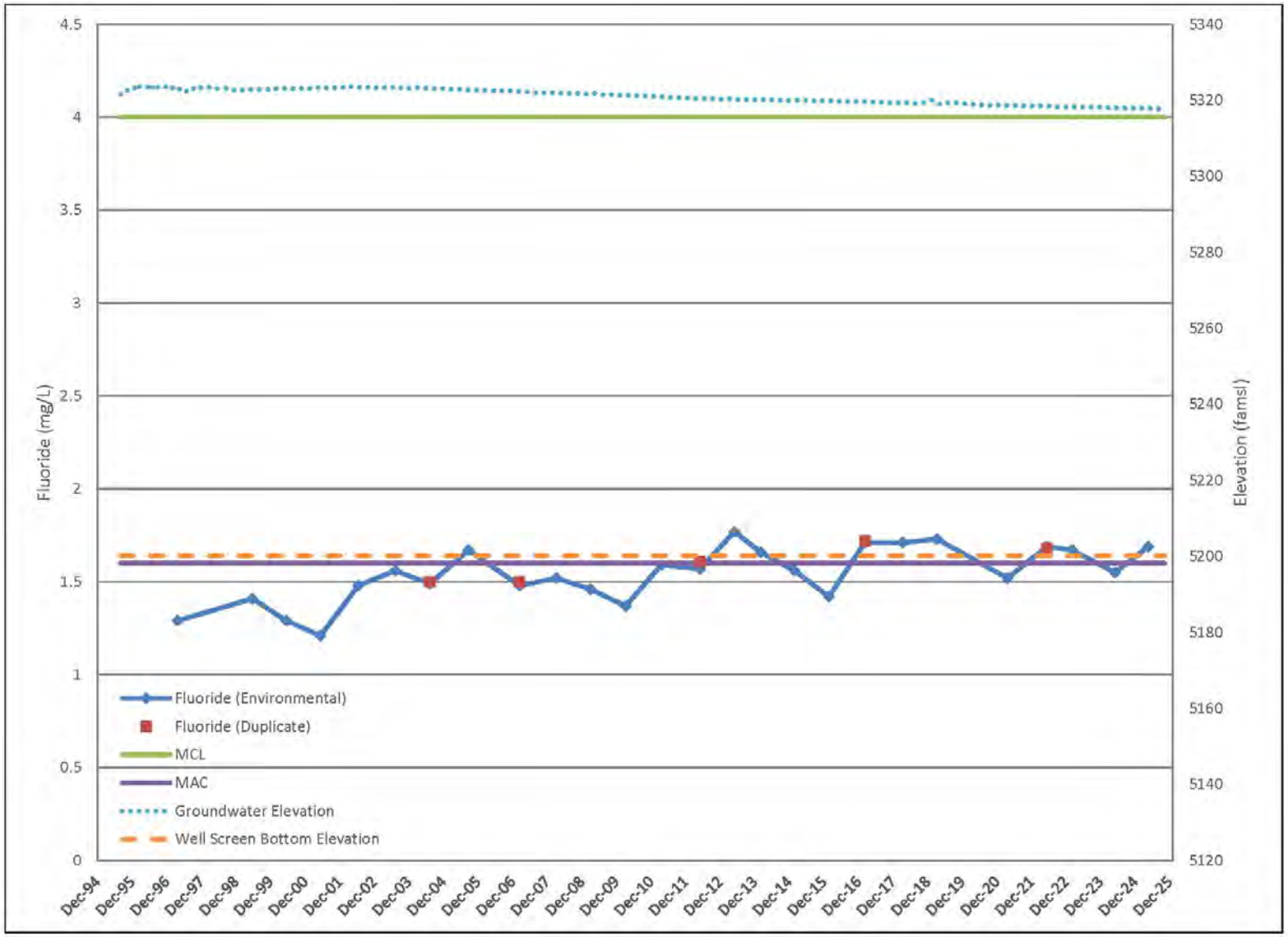


Figure 2C-7
Fluoride Concentrations, Monitoring Well TRE-1

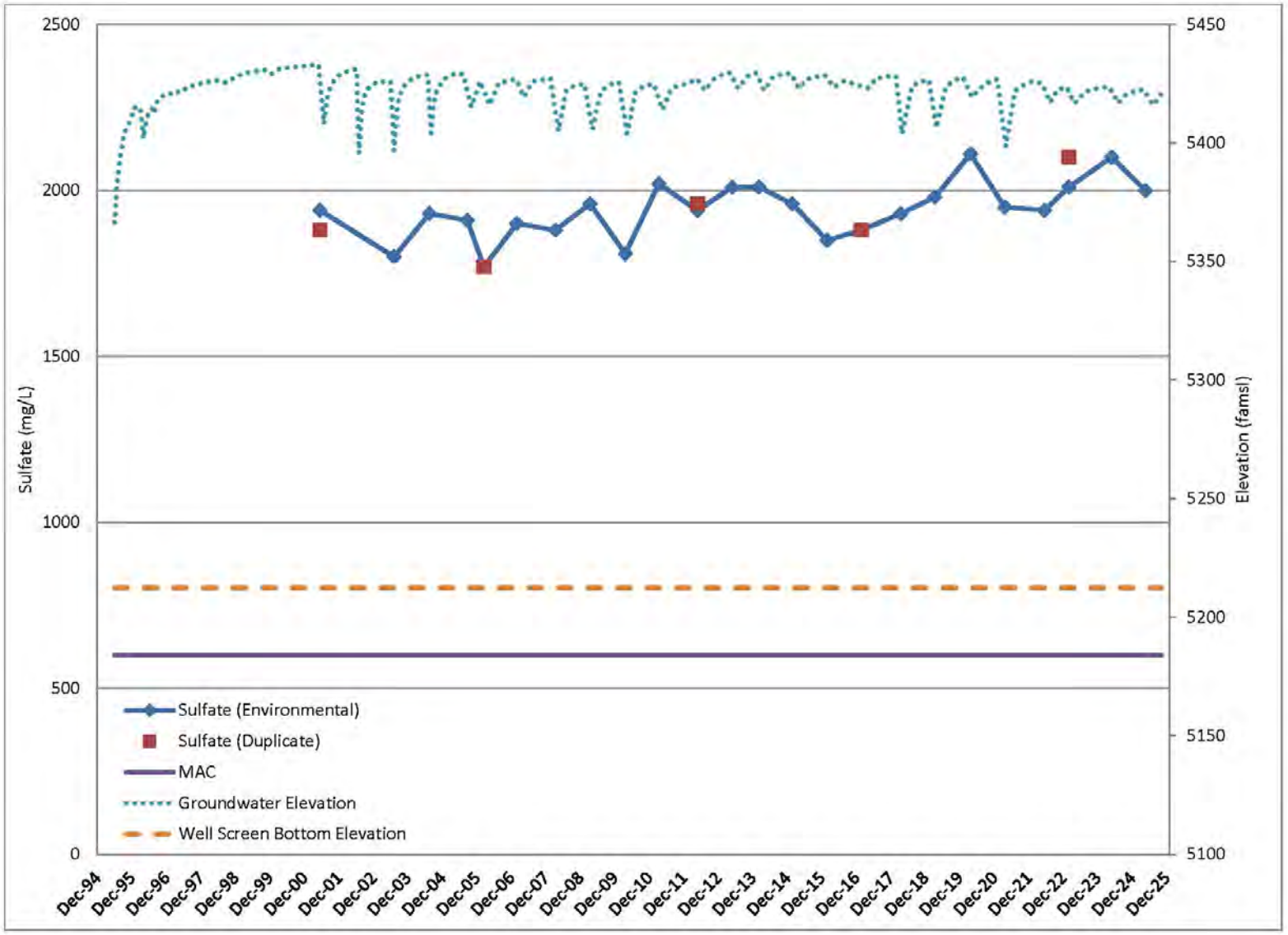


Figure 2C-8
Sulfate Concentrations, Monitoring Well SFR-4T

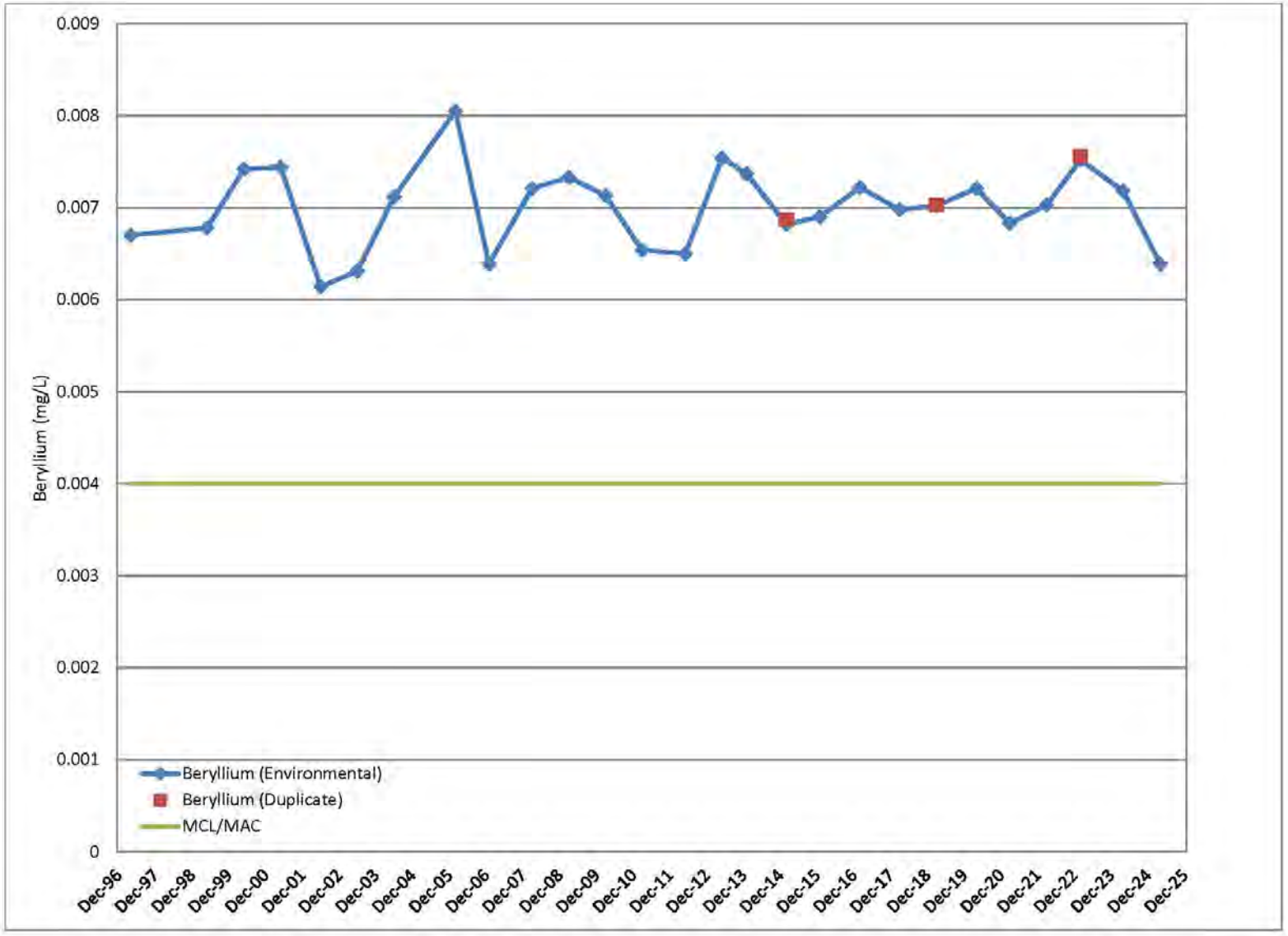


Figure 2C-9
Beryllium Concentrations, Coyote Springs

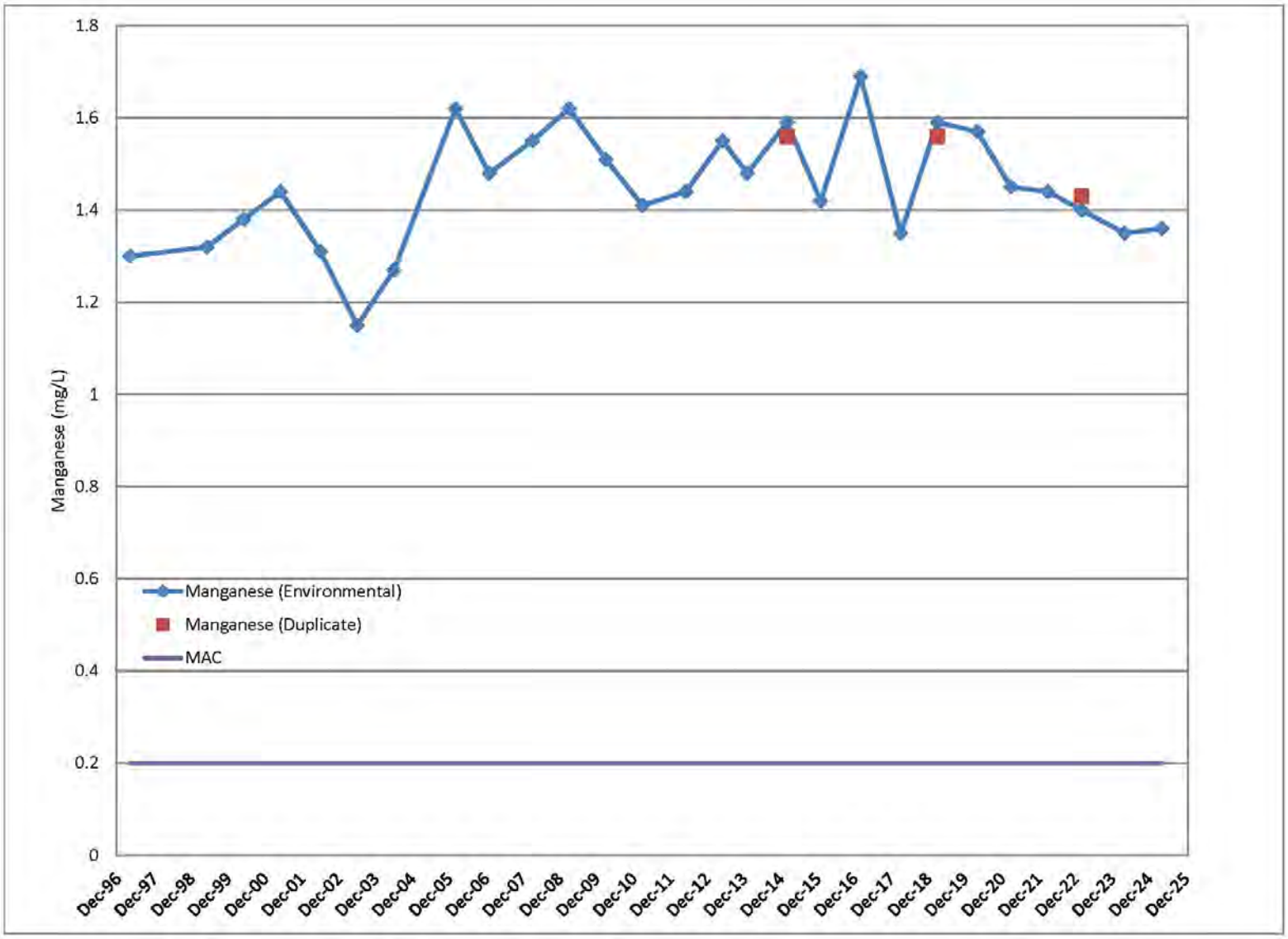


Figure 2C-10
Manganese Concentrations, Coyote Springs

Attachment 3A
Technical Area-V Groundwater Area of Concern
Monitoring Well Hydrographs

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Attachment 3A Monitoring Well Hydrographs

Figure 3A-1 Technical Area-V Groundwater Area of Concern Wells (1 of 4).....3A-5
Figure 3A-2 Technical Area-V Groundwater Area of Concern Wells (2 of 4).....3A-6
Figure 3A-3 Technical Area-V Groundwater Area of Concern Wells (3 of 4).....3A-7
Figure 3A-4 Technical Area-V Groundwater Area of Concern Wells (4 of 4).....3A-8

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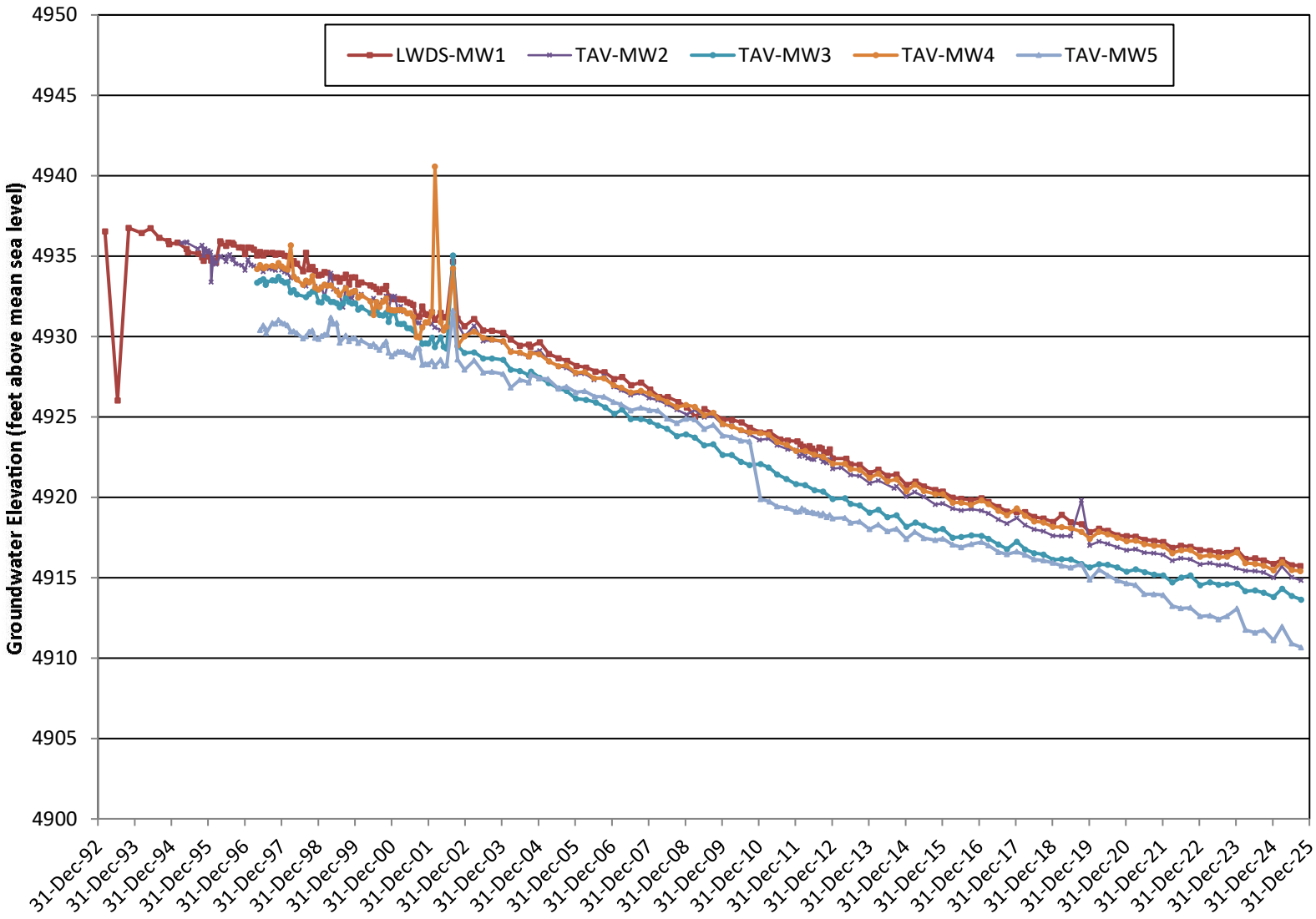


Figure 3A-1
Technical Area-V Groundwater Area of Concern Wells (1 of 4)

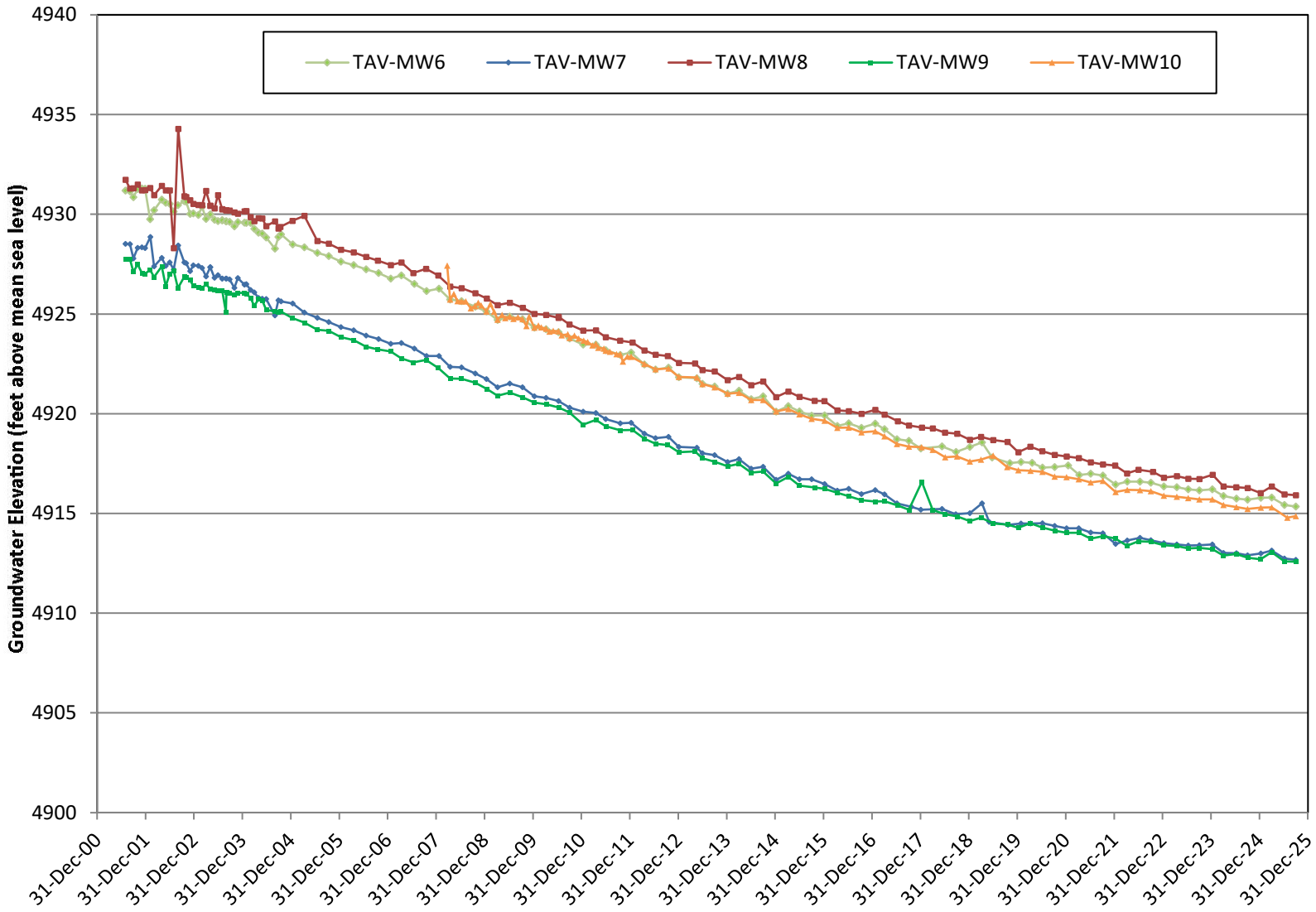


Figure 3A-2
Technical Area-V Groundwater Area of Concern Wells (2 of 4)

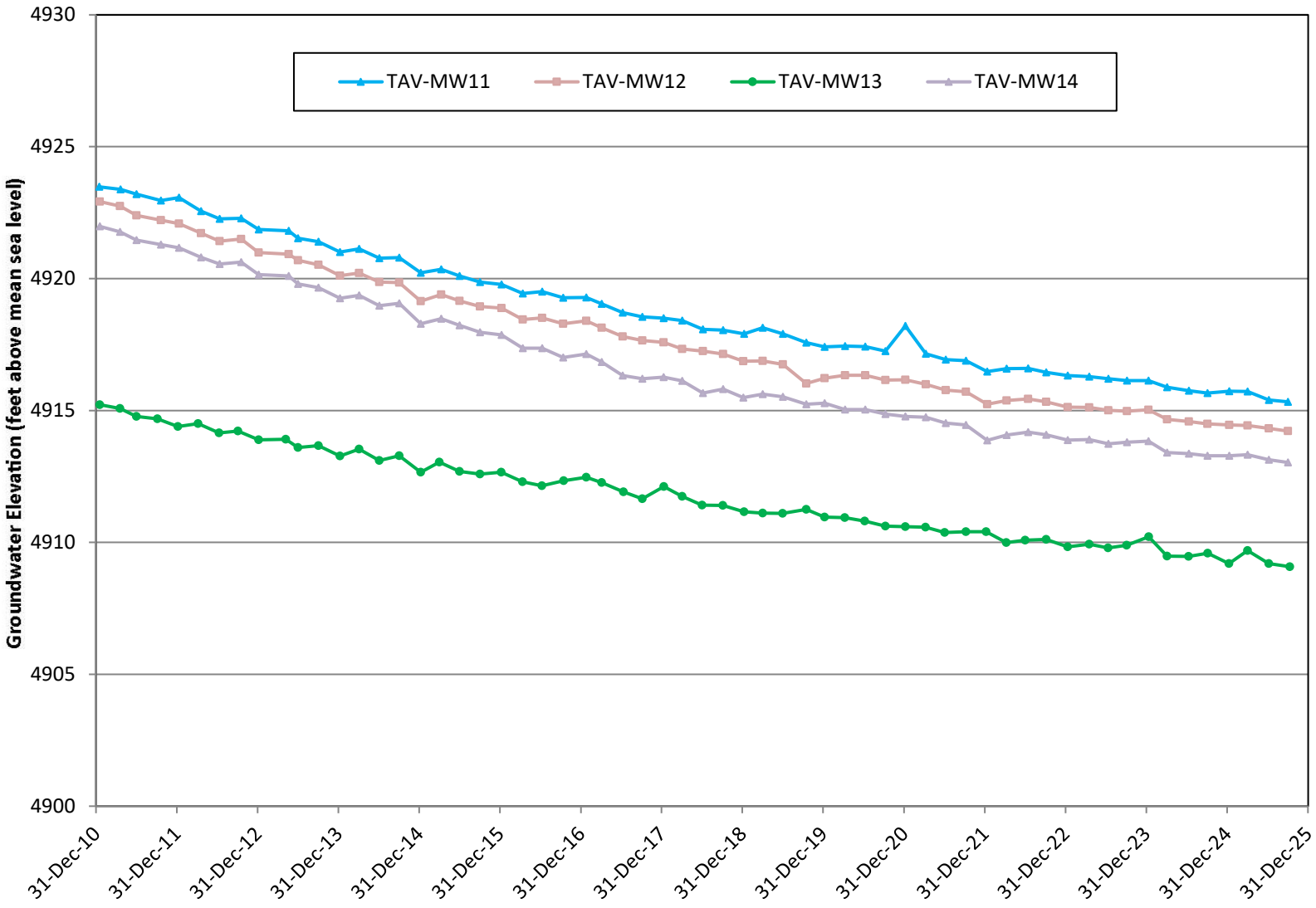


Figure 3A-3
Technical Area-V Groundwater Area of Concern Wells (3 of 4)

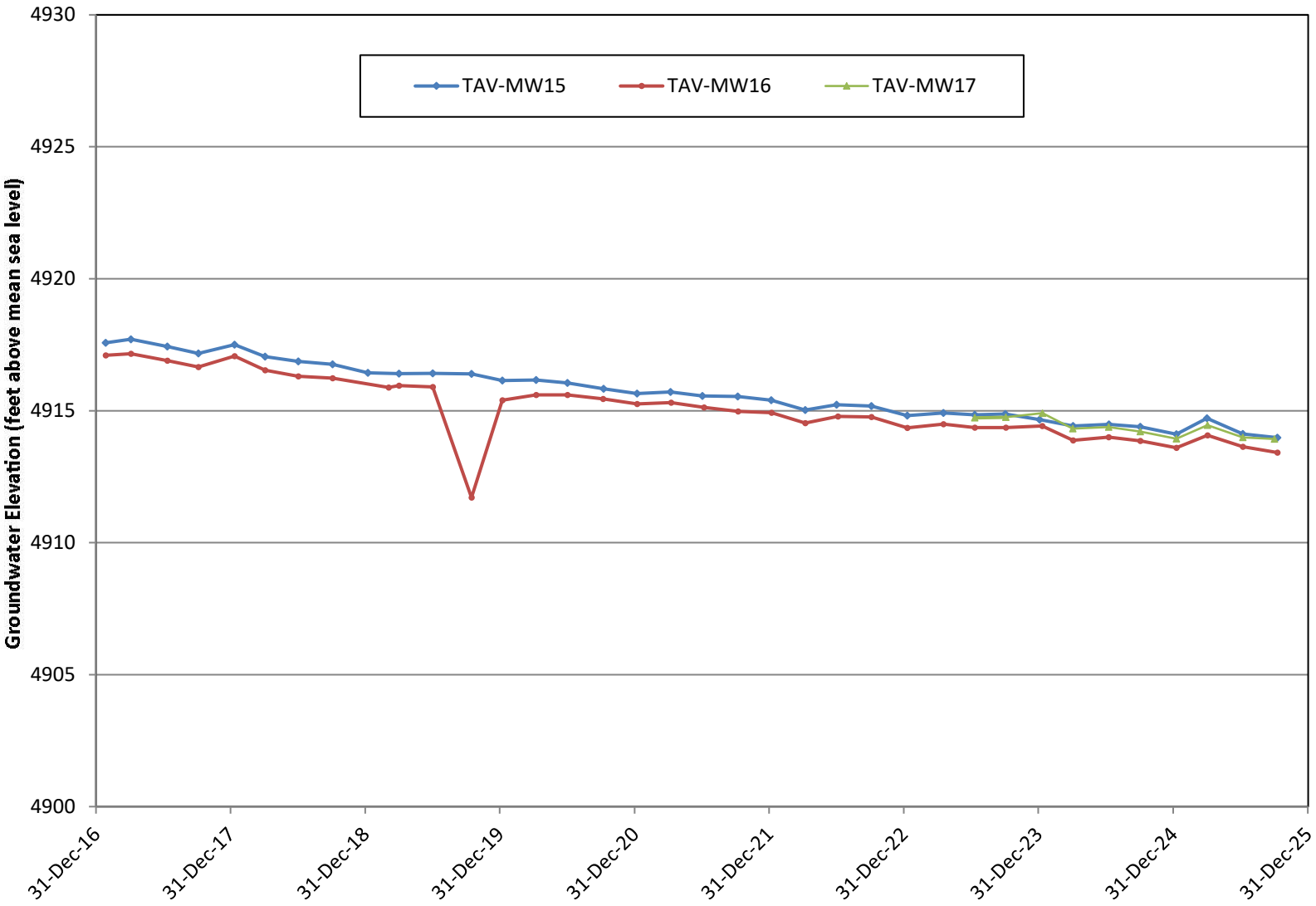


Figure 3A-4
Technical Area-V Groundwater Area of Concern Wells (4 of 4)

Attachment 3B
Technical Area-V Groundwater Area of Concern
Analytical Results Tables

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Attachment 3B Analytical Results Tables

Table 3B-1 Summary of Detected Volatile Organic Compounds, Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... *3B-5*

Table 3B-2 Method Detection Limits for Volatile Organic Compounds (EPA Method[g] SW846-8260B and SW846-8260D), Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 3B-8

Table 3B-3 Summary of Nitrate plus Nitrite Results, Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 3B-9

Table 3B-4 Summary of Anion and Alkalinity Results, Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 3B-11

Table 3B-5 Summary of Target Analyte List Metals plus Uranium Results, Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 3B-14

Table 3B-6 Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, and Tritium Results, Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 3B-31

Table 3B-7 Summary of Field Water Quality Parameter Measurements, Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 3B-35

Notes for Technical Area-V Groundwater Area of Concern Analytical Results Tables 3B-36

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Table 3B-1
Summary of Detected Volatile Organic Compounds,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (µg/L)	MDL[b] (µg/L)	PQL[c] (µg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
LWDS-MW1 17-Feb-25	Methylene chloride	1.39	0.500	5.00	B, J	R	123812-001	SW846-8260D
LWDS-MW1 28-Mar-25	Acetone	4.97	1.74	5.00	B, J	5.00U	124149-001	SW846-8260D
	Chloroform	1.39	0.330	1.00			124149-001	SW846-8260D
	Methylene chloride	2.46	0.500	5.00	B, J	5.00UJ	124149-001	SW846-8260D
	Trichloroethene	**9.24**	0.330	1.00			124149-001	SW846-8260D
	cis-1,2-Dichloroethene	2.77	0.330	1.00			124149-001	SW846-8260D
TAV-MW2 30-Jan-25	Methylene chloride	2.00	0.500	5.00	J	5.00UJ	123784-001	SW846-8260D
	Trichloroethene	2.82	0.333	1.00			123784-001	SW846-8260D
TAV-MW4 06-Feb-25	Chloroform	1.01	0.333	1.00		J	123805-001	SW846-8260D
	Methylene chloride	3.76	0.500	5.00	B, J	5.00U	123805-001	SW846-8260D
	Trichloroethene	**5.97**	0.333	1.00			123805-001	SW846-8260D
	cis-1,2-Dichloroethene	0.560	0.333	1.00	J		123805-001	SW846-8260D
TAV-MW4 (Duplicate) 06-Feb-25	Chloroform	1.02	0.333	1.00		J	123806-001	SW846-8260D
	Methylene chloride	3.75	0.500	5.00	B, J	5.00U	123806-001	SW846-8260D
	Trichloroethene	**5.92**	0.333	1.00			123806-001	SW846-8260D
	cis-1,2-Dichloroethene	0.500	0.333	1.00	J		123806-001	SW846-8260D
TAV-MW6 10-Feb-25	Methylene chloride	1.62	0.500	5.00	B, J	5.00UJ	123808-001	SW846-8260D
	Trichloroethene	**8.11**	0.333	1.00			123808-001	SW846-8260D
	cis-1,2-Dichloroethene	0.730	0.333	1.00	J		123808-001	SW846-8260D
TAV-MW6 (Duplicate) 10-Feb-25	Methylene chloride	1.69	0.500	5.00	B, J	5.00UJ	123809-001	SW846-8260D
	Trichloroethene	**7.73**	0.333	1.00			123809-001	SW846-8260D
	cis-1,2-Dichloroethene	0.770	0.333	1.00	J		123809-001	SW846-8260D
TAV-MW8 05-Feb-25	Methylene chloride	3.80	0.500	5.00	B, J	5.00U	123802-001	SW846-8260D
	Trichloroethene	**5.14**	0.333	1.00			123802-001	SW846-8260D
	cis-1,2-Dichloroethene	0.420	0.333	1.00	J		123802-001	SW846-8260D
TAV-MW10 11-Feb-25	Methylene chloride	1.65	0.500	5.00	B, J	5.00UJ	123814-001	SW846-8260D
	Trichloroethene	**8.00**	0.333	1.00			123814-001	SW846-8260D
	cis-1,2-Dichloroethene	1.38	0.333	1.00			123814-001	SW846-8260D
TAV-MW10 (Duplicate) 11-Feb-25	Methylene chloride	1.59	0.500	5.00	B, J	5.00UJ	123815-001	SW846-8260D
	Trichloroethene	**7.92**	0.333	1.00			123815-001	SW846-8260D
	cis-1,2-Dichloroethene	1.38	0.333	1.00			123815-001	SW846-8260D

Bold indicates that the trichloroethene concentration exceeds the EPA MCL of 5 µg/L.
See notes at end of tables.

Table 3B-1 (continued)
Summary of Detected Volatile Organic Compounds,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (µg/L)	MDL[b] (µg/L)	PQL[c] (µg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW11 03-Feb-25	Methylene chloride	2.35	0.500	5.00	B, J	5.00UJ	123798-001	SW846-8260D
	Trichloroethene	4.51	0.333	1.00			123798-001	SW846-8260D
	cis-1,2-Dichloroethene	0.450	0.333	1.00	J		123798-001	SW846-8260D
TAV-MW12 29-Jan-25	Methylene chloride	2.21	0.500	5.00	J	5.00UJ	123782-001	SW846-8260D
	Trichloroethene	2.07	0.333	1.00			123782-001	SW846-8260D
TAV-MW14 04-Feb-25	Methylene chloride	2.23	0.500	5.00	B, J	5.00UJ	123800-001	SW846-8260D
	Trichloroethene	3.83	0.333	1.00			123800-001	SW846-8260D
TAV-MW16 27-Jan-25	Methylene chloride	1.03	0.500	5.00	B, J	5.00UJ	123775-001	SW846-8260D
	Trichloroethene	0.540	0.333	1.00	J		123775-001	SW846-8260D
TAV-MW17 28-Jan-25	Methylene chloride	1.21	0.500	5.00	B, J	5.00UJ	123779-001	SW846-8260D
TAV-MW17 (Duplicate) 28-Jan-25	Methylene chloride	1.20	0.500	5.00	B, J	5.00UJ	123780-001	SW846-8260D
	Trichloroethene	0.340	0.333	1.00	J		123780-001	SW846-8260D
LWDS-MW1 18-Sep-25	Chloroform	0.700	0.333	1.00	J		126995-001	SW846-8260D
	Toluene	0.430	0.333	1.00	J		126995-001	SW846-8260D
	Trichloroethene	4.65	0.333	1.00			126995-001	SW846-8260D
	cis-1,2-Dichloroethene	1.16	0.333	1.00			126995-001	SW846-8260D
TAV-MW2 08-Sep-25	Methylene chloride	1.32	0.500	5.00	B, J	5.0UJ	126977-001	SW846-8260D
	Trichloroethene	2.99	0.333	1.00			126977-001	SW846-8260D
TAV-MW3 21-Aug-25	Methylene chloride	0.940	0.500	5.00	B, J	5.0UJ	126955-001	SW846-8260D
	Toluene	0.550	0.333	1.00	J		126955-001	SW846-8260D
TAV-MW3 (Duplicate) 21-Aug-25	Methylene chloride	0.960	0.500	5.00	B, J	5.0UJ	126956-001	SW846-8260D
	Toluene	0.560	0.333	1.00	J		126956-001	SW846-8260D
TAV-MW4 12-Sep-25	Chloroform	1.23	0.333	1.00			126988-001	SW846-8260D
	Trichloroethene	**6.83**	0.333	1.00			126988-001	SW846-8260D
	cis-1,2-Dichloroethene	0.690	0.333	1.00	J		126988-001	SW846-8260D
TAV-MW6 15-Sep-25	Chloroform	0.340	0.333	1.00	J		126990-001	SW846-8260D
	Trichloroethene	**8.43**	0.333	1.00			126990-001	SW846-8260D
	cis-1,2-Dichloroethene	0.900	0.333	1.00	J		126990-001	SW846-8260D
TAV-MW8 11-Sep-25	Trichloroethene	**5.16**	0.333	1.00			126986-001	SW846-8260D
	cis-1,2-Dichloroethene	0.540	0.333	1.00	J		126986-001	SW846-8260D
TAV-MW9 20-Aug-25	Methylene chloride	0.700	0.500	5.00	J	5.0UJ	126951-001	SW846-8260D
TAV-MW10 16-Sep-25	Trichloroethene	**8.90**	0.333	1.00			126993-001	SW846-8260D
	cis-1,2-Dichloroethene	1.74	0.333	1.00			126993-001	SW846-8260D
TAV-MW11 09-Sep-25	Methylene chloride	1.32	0.500	5.00	B, J	5.0UJ	126979-001	SW846-8260D
	Trichloroethene	**5.34**	0.333	1.00			126979-001	SW846-8260D
	cis-1,2-Dichloroethene	0.530	0.333	1.00	J		126979-001	SW846-8260D
TAV-MW12 04-Sep-25	Trichloroethene	2.50	0.333	1.00			126974-001	SW846-8260D

Bold indicates that the trichloroethene concentration exceeds the EPA MCL of 5 µg/L.
See notes at end of tables.

Table 3B-1 (concluded)
Summary of Detected Volatile Organic Compounds,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (µg/L)	MDL[b] (µg/L)	PQL[c] (µg/L)	Laboratory Qualifier[d]	ValidationQualifier[e]	Sample No.	Analytical Method[f]
TAV-MW13 25-Aug-25	Methylene chloride	0.900	0.500	5.00	B, J	5.0U	126958-001	SW846-8260D
TAV-MW14 10-Sep-25	Trichloroethene	4.65	0.333	1.00			126983-001	SW846-8260D
	cis-1,2-Dichloroethene	0.470	0.333	1.00	J		126983-001	SW846-8260D
TAV-MW14 (Duplicate) 10-Sep-25	Trichloroethene	4.66	0.333	1.00			126984-001	SW846-8260D
	cis-1,2-Dichloroethene	0.460	0.333	1.00	J		126984-001	SW846-8260D
TAV-MW15 19-Aug-25	Methylene chloride	0.750	0.500	5.00	J	5.0UJ	126948-001	SW846-8260D
TAV-MW15 (Duplicate) 19-Aug-25	Methylene chloride	0.760	0.500	5.00	J	5.0UJ	126949-001	SW846-8260D
TAV-MW16 27-Aug-25	Methylene chloride	1.87	0.500	5.00	B, J	5.0UJ	126965-001	SW846-8260D
	Trichloroethene	0.580	0.333	1.00	J		126965-001	SW846-8260D

See notes at end of tables.

Table 3B-2
Method Detection Limits for Volatile Organic Compounds (EPA Method[f] SW846-8260B and SW846-8260D), Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Analyte	MDL[b] (µg/L)	Analyte	MDL[b] (µg/L)
1,1,1-Trichloroethane	0.333	Chlorobenzene	0.333
1,1,2,2-Tetrachloroethane	0.333	Chloroethane	0.333
1,1,2-Trichloroethane	0.333	Chloroform	0.333
1,1-Dichloroethane	0.333	Chloromethane	0.333
1,1-Dichloroethene	0.333	Cyclohexane	0.333
1,2,3-Trichlorobenzene	0.333	Dibromochloromethane	0.333
1,2,4-Trichlorobenzene	0.333	Dichlorodifluoromethane	0.355
1,2-Dibromo-3-chloropropane	0.333	Ethylbenzene	0.333
1,2-Dibromoethane	0.333	Isopropylbenzene	0.333
1,2-Dichlorobenzene	0.333	Methyl acetate	1.67
1,2-Dichloroethane	0.333	Methylcyclohexane	0.333
1,2-Dichloropropane	0.333	Methylene chloride	0.500
1,3-Dichlorobenzene	0.333	Styrene	0.333
1,4-Dichlorobenzene	0.333	Tert-butyl methyl ether	0.333
2,2-trifluoroethane, 1,1,2-Trichloro-1	1.67	Tetrachloroethene	0.333
2-Butanone	1.67	Toluene	0.333
2-Hexanone	1.67	Trichloroethene	0.333
4-methyl-, 2-Pentanone	1.67	Trichlorofluoromethane	0.333
Acetone	1.74	Vinyl chloride	0.333
Benzene	0.333	Xylene	1.00
Bromochloromethane	0.333	cis-1,2-Dichloroethene	0.333
Bromodichloromethane	0.333	cis-1,3-Dichloropropene	0.333
Bromoform	0.333	m-, p-Xylene	0.500
Bromomethane	0.337	o-Xylene	0.333
Carbon disulfide	1.67	trans-1,2-Dichloroethene	0.333
Carbon tetrachloride	0.333	trans-1,3-Dichloropropene	0.333

See notes at end of tables.

Table 3B-3
Summary of Nitrate plus Nitrite Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
LWDS-MW1 17-Feb-25	Nitrate plus nitrite	**11.1**	0.850	2.50		R	123812-002	EPA 353.2
LWDS-MW1 28-Mar-25	Nitrate plus nitrite	**12.9**	0.170	0.500		J	124149-002	EPA 353.2
TAV-MW2 30-Jan-25	Nitrate plus nitrite	5.18	0.170	0.500			123784-002	EPA 353.2
TAV-MW4 06-Feb-25	Nitrate plus nitrite	4.12	0.170	0.500			123805-002	EPA 353.2
TAV-MW4(Duplicate) 06-Feb-25	Nitrate plus nitrite	4.11	0.170	0.500			123806-002	EPA 353.2
TAV-MW6 10-Feb-25	Nitrate plus nitrite	6.60	0.170	0.500			123808-002	EPA 353.2
TAV-MW6 (Duplicate) 10-Feb-25	Nitrate plus nitrite	7.27	0.170	0.500			123809-002	EPA 353.2
TAV-MW8 05-Feb-25	Nitrate plus nitrite	6.57	0.170	0.500			123802-002	EPA 353.2
TAV-MW10 11-Feb-25	Nitrate plus nitrite	**12.4**	0.170	0.500			123814-002	EPA 353.2
TAV-MW10 (Duplicate) 11-Feb-25	Nitrate plus nitrite	**12.4**	0.170	0.500			123815-002	EPA 353.2
TAV-MW11 03-Feb-25	Nitrate plus nitrite	6.89	0.170	0.500			123798-002	EPA 353.2
TAV-MW12 29-Jan-25	Nitrate plus nitrite	4.71	0.0850	0.250			123782-002	EPA 353.2
TAV-MW14 04-Feb-25	Nitrate plus nitrite	7.55	0.170	0.500			123800-002	EPA 353.2
TAV-MW16 27-Jan-25	Nitrate plus nitrite	2.48	0.170	0.500			123775-002	EPA 353.2
TAV-MW17 28-Jan-25	Nitrate plus nitrite	8.95	0.170	0.500			123779-002	EPA 353.2
TAV-MW17 (Duplicate) 28-Jan-25	Nitrate plus nitrite	8.71	0.170	0.500			123780-002	EPA 353.2
LWDS-MW1 18-Sep-25	Nitrate plus nitrite	7.52	0.170	0.500			126995-002	EPA 353.2
TAV-MW2 08-Sep-25	Nitrate plus nitrite	5.03	0.170	0.500			126977-002	EPA 353.2
TAV-MW3 21-Aug-25	Nitrate plus nitrite	5.10	0.0850	0.250			126955-002	EPA 353.2

Bold indicates that the nitrate plus nitrite concentration exceeds the EPA MCL of 10 mg/L.
See notes at end of tables.

Table 3B-3 (concluded)
Summary of Nitrate plus Nitrite Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW3 (Duplicate) 21-Aug-25	Nitrate plus nitrite	5.20	0.0850	0.250			126956-002	EPA 353.2
TAV-MW4 12-Sep-25	Nitrate plus nitrite	4.04	0.170	0.500			126988-002	EPA 353.2
TAV-MW5 22-Sep-25	Nitrate plus nitrite	7.18	0.170	0.500			126962-002	EPA 353.2
TAV-MW6 15-Sep-25	Nitrate plus nitrite	6.81	0.170	0.500			126990-002	EPA 353.2
TAV-MW7 02-Sep-25	Nitrate plus nitrite	5.25	0.170	0.500	N	J+	126969-002	EPA 353.2
TAV-MW7 (Duplicate) 02-Sep-25	Nitrate plus nitrite	6.77	0.170	0.500	N	J+	126970-002	EPA 353.2
TAV-MW8 11-Sep-25	Nitrate plus nitrite	6.57	0.170	0.500			126986-002	EPA 353.2
TAV-MW9 20-Aug-25	Nitrate plus nitrite	3.69	0.0850	0.250			126951-002	EPA 353.2
TAV-MW10 16-Sep-25	Nitrate plus nitrite	**12.6**	0.170	0.500			126993-002	EPA 353.2
TAV-MW11 09-Sep-25	Nitrate plus nitrite	9.51	0.170	0.500	N	J+	126979-002	EPA 353.2
TAV-MW12 04-Sep-25	Nitrate plus nitrite	8.06	0.170	0.500	N	J+	126974-002	EPA 353.2
TAV-MW13 25-Aug-25	Nitrate plus nitrite	6.10	0.0850	0.250			126958-002	EPA 353.2
TAV-MW14 10-Sep-25	Nitrate plus nitrite	8.54	0.170	0.500			126983-002	EPA 353.2
TAV-MW14 (Duplicate) 10-Sep-25	Nitrate plus nitrite	7.65	0.170	0.500			126984-002	EPA 353.2
TAV-MW15 19-Aug-25	Nitrate plus nitrite	1.99	0.0850	0.250			126948-002	EPA 353.2
TAV-MW15 (Duplicate) 19-Aug-25	Nitrate plus nitrite	1.99	0.0850	0.250			126949-002	EPA 353.2
TAV-MW16 27-Aug-25	Nitrate plus nitrite	2.53	0.0850	0.250			126965-002	EPA 353.2
TAV-MW17 03-Sep-25	Nitrate plus nitrite	**12.7**	0.170	0.500	N	J+	126972-002	EPA 353.2

Bold indicates that the nitrate plus nitrite concentration exceeds the EPA MCL of 10 mg/L.
See notes at end of tables

Table 3B-4
Summary of Anion and Alkalinity Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
LWDS-MW1	Bromide	0.595	0.0670	0.200			126995-003	SW846-9056A
18-Sep-25	Chloride	55.5	1.34	4.00			126995-003	SW846-9056A
	Fluoride	0.491	0.0330	0.100			126995-003	SW846-9056A
	Sulfate	26.9	2.66	8.00			126995-003	SW846-9056A
	Bicarbonate Alkalinity	190	0.725	2.00			126995-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126995-004	SM 2320B
TAV-MW2	Bromide	0.342	0.0670	0.200			126977-003	SW846-9056A
08-Sep-25	Chloride	48.0	0.670	2.00			126977-003	SW846-9056A
	Fluoride	0.984	0.0330	0.100			126977-003	SW846-9056A
	Sulfate	54.2	1.33	4.00			126977-003	SW846-9056A
	Bicarbonate Alkalinity	253	0.725	2.00			126977-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126977-004	SM 2320B
TAV-MW3	Bromide	0.263	0.0670	0.200			126955-003	SW846-9056A
21-Aug-25	Chloride	28.7	0.335	1.00			126955-003	SW846-9056A
	Fluoride	1.32	0.0330	0.100			126955-003	SW846-9056A
	Sulfate	64.8	0.665	2.00			126955-003	SW846-9056A
	Bicarbonate Alkalinity	195	0.725	2.00			126955-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126955-004	SM 2320B
TAV-MW4	Bromide	0.453	0.0670	0.200			126988-003	SW846-9056A
12-Sep-25	Chloride	38.9	0.670	2.00			126988-003	SW846-9056A
	Fluoride	1.17	0.0330	0.100			126988-003	SW846-9056A
	Sulfate	36.3	1.33	4.00			126988-003	SW846-9056A
	Bicarbonate Alkalinity	168	0.725	2.00			126988-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126988-004	SM 2320B
TAV-MW5	Bromide	0.189	0.0670	0.200	J		126962-003	SW846-9056A
22-Sep-25	Chloride	17.4	0.335	1.00			126962-003	SW846-9056A
	Fluoride	1.24	0.0330	0.100			126962-003	SW846-9056A
	Sulfate	39.7	0.665	2.00			126962-003	SW846-9056A
	Bicarbonate Alkalinity	189	0.725	2.00		J	126962-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U	UJ	126962-004	SM 2320B
TAV-MW6	Bromide	0.931	0.0670	0.200			126990-003	SW846-9056A
15-Sep-25	Chloride	91.3	1.34	4.00			126990-003	SW846-9056A
	Fluoride	1.12	0.0330	0.100			126990-003	SW846-9056A
	Sulfate	37.5	2.66	8.00			126990-003	SW846-9056A
	Bicarbonate Alkalinity	215	0.725	2.00			126990-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126990-004	SM 2320B

See notes at end of tables.

Table 3B-4 (continued)
Summary of Anion and Alkalinity Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW7	Bromide	0.343	0.0670	0.200			126969-003	SW846-9056A
02-Sep-25	Chloride	28.6	0.335	1.00			126969-003	SW846-9056A
	Fluoride	1.01	0.0330	0.100			126969-003	SW846-9056A
	Sulfate	61.3	0.665	2.00			126969-003	SW846-9056A
	Bicarbonate Alkalinity	228	0.725	2.00			126969-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126969-004	SM 2320B
TAV-MW8	Bromide	0.324	0.0670	0.200			126986-003	SW846-9056A
11-Sep-25	Chloride	40.7	0.670	2.00			126986-003	SW846-9056A
	Fluoride	1.36	0.0330	0.100			126986-003	SW846-9056A
	Sulfate	45.8	1.33	4.00			126986-003	SW846-9056A
	Bicarbonate Alkalinity	198	0.725	2.00			126986-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126986-004	SM 2320B
TAV-MW9	Bromide	0.249	0.0670	0.200			126951-003	SW846-9056A
20-Aug-25	Chloride	30.7	0.335	1.00			126951-003	SW846-9056A
	Fluoride	0.800	0.0330	0.100			126951-003	SW846-9056A
	Sulfate	54.7	0.665	2.00			126951-003	SW846-9056A
	Bicarbonate Alkalinity	228	0.725	2.00			126951-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126951-004	SM 2320B
TAV-MW10	Bromide	0.346	0.0670	0.200			126993-003	SW846-9056A
16-Sep-25	Chloride	46.8	0.670	2.00			126993-003	SW846-9056A
	Fluoride	1.44	0.0330	0.100			126993-003	SW846-9056A
	Sulfate	47.1	1.33	4.00			126993-003	SW846-9056A
	Bicarbonate Alkalinity	181	0.725	2.00			126993-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126993-004	SM 2320B
TAV-MW11	Bromide	0.513	0.0670	0.200			126979-003	SW846-9056A
09-Sep-25	Chloride	52.2	0.670	2.00			126979-003	SW846-9056A
	Fluoride	1.34	0.0330	0.100			126979-003	SW846-9056A
	Sulfate	41.9	1.33	4.00			126979-003	SW846-9056A
	Bicarbonate Alkalinity	191	0.725	2.00			126979-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126979-004	SM 2320B
TAV-MW12	Bromide	0.306	0.0670	0.200			126974-003	SW846-9056A
04-Sep-25	Chloride	48.0	0.670	2.00			126974-003	SW846-9056A
	Fluoride	1.05	0.0330	0.100			126974-003	SW846-9056A
	Sulfate	58.5	1.33	4.00			126974-003	SW846-9056A
	Bicarbonate Alkalinity	244	0.725	2.00			126974-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126974-004	SM 2320B

See notes at end of tables.

Table 3B-4 (concluded)
Summary of Anion and Alkalinity Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW13	Bromide	0.191	0.0670	0.200	J		126958-003	SW846-9056A
25-Aug-25	Chloride	16.2	0.335	1.00			126958-003	SW846-9056A
	Fluoride	1.19	0.0330	0.100			126958-003	SW846-9056A
	Sulfate	45.7	0.665	2.00			126958-003	SW846-9056A
	Bicarbonate Alkalinity	195	0.725	2.00			126958-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126958-004	SM 2320B
TAV-MW14	Bromide	0.339	0.0670	0.200			126983-003	SW846-9056A
10-Sep-25	Chloride	50.2	0.670	2.00			126983-003	SW846-9056A
	Fluoride	1.10	0.0330	0.100			126983-003	SW846-9056A
	Sulfate	50.6	1.33	4.00			126983-003	SW846-9056A
	Bicarbonate Alkalinity	218	0.725	2.00			126983-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126983-004	SM 2320B
TAV-MW15	Bromide	0.401	0.0670	0.200			126948-003	SW846-9056A
19-Aug-25	Chloride	71.0	1.34	4.00			126948-003	SW846-9056A
	Fluoride	0.832	0.0330	0.100			126948-003	SW846-9056A
	Sulfate	55.1	2.66	8.00			126948-003	SW846-9056A
	Bicarbonate Alkalinity	263	0.725	2.00			126948-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126948-004	SM 2320B
TAV-MW16	Bromide	0.670	0.0670	0.200			126965-003	SW846-9056A
27-Aug-25	Chloride	82.1	1.34	4.00			126965-003	SW846-9056A
	Fluoride	0.931	0.0330	0.100			126965-003	SW846-9056A
	Sulfate	54.3	2.66	8.00			126965-003	SW846-9056A
	Bicarbonate Alkalinity	278	0.725	2.00			126965-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126965-004	SM 2320B
TAV-MW17	Bromide	0.202	0.0670	0.200			126972-003	SW846-9056A
03-Sep-25	Chloride	13.6	0.335	1.00			126972-003	SW846-9056A
	Fluoride	1.26	0.0330	0.100			126972-003	SW846-9056A
	Sulfate	27.5	0.665	2.00			126972-003	SW846-9056A
	Bicarbonate Alkalinity	152	0.725	2.00			126972-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		126972-004	SM 2320B

See notes at end of tables.

Table 3B-5
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
LWDS-MW1	Aluminum	ND	0.0193	0.0500	U		126995-005	SW846-3005A/6020B
18-Sep-25	Antimony	ND	0.00100	0.00300	U		126995-005	SW846-3005A/6020B
	Arsenic	0.00242	0.00200	0.00500	J		126995-005	SW846-3005A/6020B
	Barium	0.0709	0.000670	0.00400			126995-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		126995-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126995-005	SW846-3005A/6020B
	Calcium	52.9	0.800	2.00			126995-005	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		126995-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126995-005	SW846-3005A/6020B
	Copper	0.000424	0.000300	0.00200	J		126995-005	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		126995-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126995-005	SW846-3005A/6020B
	Magnesium	17.4	0.0100	0.0300			126995-005	SW846-3005A/6020B
	Manganese	0.00255	0.00100	0.00500	J		126995-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126995-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		126995-005	SW846-3005A/6020B
	Potassium	2.70	0.0800	0.300			126995-005	SW846-3005A/6020B
	Selenium	0.00526	0.00150	0.00500			126995-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126995-005	SW846-3005A/6020B
	Sodium	51.8	0.800	2.50			126995-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126995-005	SW846-3005A/6020B
	Uranium	0.00252	0.0000670	0.000200			126995-005	SW846-3005A/6020B
	Vanadium	0.00637	0.00330	0.0200	J		126995-005	SW846-3005A/6020B
	Zinc	0.00408	0.00330	0.0200	J		126995-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW2	Aluminum	0.0303	0.0193	0.0500	J		126977-005	SW846-3005A/6020B
08-Sep-25	Antimony	ND	0.00100	0.00300	U		126977-005	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		126977-005	SW846-3005A/6020B
	Barium	0.0590	0.000670	0.00400			126977-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		126977-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126977-005	SW846-3005A/6020B
	Calcium	62.7	0.800	2.00			126977-005	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		126977-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126977-005	SW846-3005A/6020B
	Copper	ND	0.000300	0.00200	U		126977-005	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		126977-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126977-005	SW846-3005A/6020B
	Magnesium	22.1	0.0100	0.0300			126977-005	SW846-3005A/6020B
	Manganese	ND	0.00100	0.00500	U		126977-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126977-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		126977-005	SW846-3005A/6020B
	Potassium	3.61	0.0800	0.300			126977-005	SW846-3005A/6020B
	Selenium	0.00309	0.00150	0.00500	J		126977-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126977-005	SW846-3005A/6020B
	Sodium	56.2	0.800	2.50			126977-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126977-005	SW846-3005A/6020B
	Uranium	0.00559	0.0000670	0.000200			126977-005	SW846-3005A/6020B
	Vanadium	0.00691	0.00330	0.0200	J		126977-005	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		126977-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW3	Aluminum	0.0197	0.0193	0.0500	B, J	0.05U	126955-005	SW846-3005A/6020B
21-Aug-25	Antimony	ND	0.00100	0.00300	U		126955-005	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		126955-005	SW846-3005A/6020B
	Barium	0.0475	0.000670	0.00400			126955-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		126955-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126955-005	SW846-3005A/6020B
	Calcium	57.2	0.800	2.00			126955-005	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		126955-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126955-005	SW846-3005A/6020B
	Copper	ND	0.000300	0.00200	U		126955-005	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		126955-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126955-005	SW846-3005A/6020B
	Magnesium	15.5	0.0100	0.0300			126955-005	SW846-3005A/6020B
	Manganese	0.00119	0.00100	0.00500	J		126955-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126955-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		126955-005	SW846-3005A/6020B
	Potassium	4.60	0.0800	0.300			126955-005	SW846-3005A/6020B
	Selenium	0.00223	0.00150	0.00500	J		126955-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126955-005	SW846-3005A/6020B
	Sodium	53.9	0.800	2.50		J	126955-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126955-005	SW846-3005A/6020B
	Uranium	0.00361	0.0000670	0.000200			126955-005	SW846-3005A/6020B
	Vanadium	0.00631	0.00330	0.0200	J		126955-005	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		126955-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW4	Aluminum	ND	0.0193	0.0500	U		126988-005	SW846-3005A/6020B
12-Sep-25	Antimony	ND	0.00100	0.00300	U		126988-005	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		126988-005	SW846-3005A/6020B
	Barium	0.0888	0.000670	0.00400			126988-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U, N		126988-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126988-005	SW846-3005A/6020B
	Calcium	55.5	0.400	1.00			126988-005	SW846-3005A/6020B
	Chromium	0.0378	0.00300	0.0100			126988-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126988-005	SW846-3005A/6020B
	Copper	0.000323	0.000300	0.00200	J		126988-005	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		126988-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126988-005	SW846-3005A/6020B
	Magnesium	15.0	0.0100	0.0300			126988-005	SW846-3005A/6020B
	Manganese	ND	0.00100	0.00500	U		126988-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126988-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		126988-005	SW846-3005A/6020B
	Potassium	3.31	0.0800	0.300			126988-005	SW846-3005A/6020B
	Selenium	0.00329	0.00150	0.00500	J		126988-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126988-005	SW846-3005A/6020B
	Sodium	49.0	0.0800	0.250			126988-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126988-005	SW846-3005A/6020B
	Uranium	0.00365	0.0000670	0.000200	B		126988-005	SW846-3005A/6020B
	Vanadium	0.00685	0.00330	0.0200	J		126988-005	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		126988-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW5	Aluminum	2.17	0.0193	0.0500			126962-005	SW846-3005A/6020B
22-Sep-25	Antimony	ND	0.00100	0.00300	U		126962-005	SW846-3005A/6020B
	Arsenic	0.00252	0.00200	0.00500	J		126962-005	SW846-3005A/6020B
	Barium	0.0791	0.000670	0.00400			126962-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		126962-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126962-005	SW846-3005A/6020B
	Calcium	48.3	0.800	2.00			126962-005	SW846-3005A/6020B
	Chromium	0.00588	0.00300	0.0100	J		126962-005	SW846-3005A/6020B
	Cobalt	0.000486	0.000300	0.00100	J		126962-005	SW846-3005A/6020B
	Copper	0.00191	0.000300	0.00200	J		126962-005	SW846-3005A/6020B
	Iron	1.87	0.0330	0.100			126962-005	SW846-3005A/6020B
	Lead	0.00114	0.000500	0.00200	J		126962-005	SW846-3005A/6020B
	Magnesium	14.6	0.0100	0.0300			126962-005	SW846-3005A/6020B
	Manganese	0.0282	0.00100	0.00500			126962-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126962-005	SW846-7470A
	Nickel	0.00136	0.000600	0.00200	J		126962-005	SW846-3005A/6020B
	Potassium	3.32	0.0800	0.300			126962-005	SW846-3005A/6020B
	Selenium	0.00269	0.00150	0.00500	J		126962-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126962-005	SW846-3005A/6020B
	Sodium	44.3	0.800	2.50			126962-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126962-005	SW846-3005A/6020B
	Uranium	0.00342	0.0000670	0.000200			126962-005	SW846-3005A/6020B
	Vanadium	0.0126	0.00330	0.0200	J		126962-005	SW846-3005A/6020B
	Zinc	0.00872	0.00330	0.0200	J		126962-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW6	Aluminum	0.0752	0.0193	0.0500			126990-005	SW846-3005A/6020B
15-Sep-25	Antimony	ND	0.00100	0.00300	U		126990-005	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		126990-005	SW846-3005A/6020B
	Barium	0.0784	0.000670	0.00400			126990-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U, N		126990-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126990-005	SW846-3005A/6020B
	Calcium	73.4	0.400	1.00			126990-005	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		126990-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126990-005	SW846-3005A/6020B
	Copper	0.000372	0.000300	0.00200	J		126990-005	SW846-3005A/6020B
	Iron	0.0698	0.0330	0.100	J		126990-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126990-005	SW846-3005A/6020B
	Magnesium	22.0	0.0100	0.0300			126990-005	SW846-3005A/6020B
	Manganese	0.0182	0.00100	0.00500			126990-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126990-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		126990-005	SW846-3005A/6020B
	Potassium	4.21	0.0800	0.300			126990-005	SW846-3005A/6020B
	Selenium	0.00373	0.00150	0.00500	J		126990-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126990-005	SW846-3005A/6020B
	Sodium	67.9	0.400	1.25			126990-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126990-005	SW846-3005A/6020B
	Uranium	0.00456	0.0000670	0.000200	B		126990-005	SW846-3005A/6020B
	Vanadium	0.00504	0.00330	0.0200	J		126990-005	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		126990-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW7	Aluminum	ND	0.0193	0.0500	U		126969-005	SW846-3005A/6020B
02-Sep-25	Antimony	ND	0.00100	0.00300	U		126969-005	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		126969-005	SW846-3005A/6020B
	Barium	0.0569	0.000670	0.00400			126969-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U, N		126969-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126969-005	SW846-3005A/6020B
	Calcium	60.2	0.400	1.00			126969-005	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		126969-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126969-005	SW846-3005A/6020B
	Copper	ND	0.000300	0.00200	U		126969-005	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		126969-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126969-005	SW846-3005A/6020B
	Magnesium	19.0	0.0100	0.0300			126969-005	SW846-3005A/6020B
	Manganese	ND	0.00100	0.00500	U		126969-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126969-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		126969-005	SW846-3005A/6020B
	Potassium	4.28	0.0800	0.300			126969-005	SW846-3005A/6020B
	Selenium	0.00224	0.00150	0.00500	J		126969-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126969-005	SW846-3005A/6020B
	Sodium	55.7	0.400	1.25			126969-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126969-005	SW846-3005A/6020B
	Uranium	0.00464	0.0000670	0.000200			126969-005	SW846-3005A/6020B
	Vanadium	0.00819	0.00330	0.0200	B, J	0.02U	126969-005	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		126969-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW8	Aluminum	0.0421	0.0193	0.0500	J		126986-005	SW846-3005A/6020B
11-Sep-25	Antimony	ND	0.00100	0.00300	U		126986-005	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		126986-005	SW846-3005A/6020B
	Barium	0.0568	0.000670	0.00400			126986-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		126986-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126986-005	SW846-3005A/6020B
	Calcium	54.9	0.800	2.00			126986-005	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		126986-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126986-005	SW846-3005A/6020B
	Copper	0.000351	0.000300	0.00200	J		126986-005	SW846-3005A/6020B
	Iron	0.0648	0.0330	0.100	J		126986-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126986-005	SW846-3005A/6020B
	Magnesium	17.0	0.0100	0.0300			126986-005	SW846-3005A/6020B
	Manganese	ND	0.00100	0.00500	U		126986-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126986-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		126986-005	SW846-3005A/6020B
	Potassium	3.72	0.0800	0.300			126986-005	SW846-3005A/6020B
	Selenium	0.00388	0.00150	0.00500	J		126986-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126986-005	SW846-3005A/6020B
	Sodium	54.2	0.800	2.50			126986-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126986-005	SW846-3005A/6020B
	Uranium	0.00337	0.0000670	0.000200			126986-005	SW846-3005A/6020B
	Vanadium	0.00737	0.00330	0.0200	J		126986-005	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		126986-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW9	Aluminum	0.0628	0.0193	0.0500			126951-005	SW846-3005A/6020B
20-Aug-25	Antimony	ND	0.00100	0.00300	U		126951-005	SW846-3005A/6020B
	Arsenic	0.00204	0.00200	0.00500	J		126951-005	SW846-3005A/6020B
	Barium	0.0656	0.000670	0.00400			126951-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		126951-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126951-005	SW846-3005A/6020B
	Calcium	65.8	0.800	2.00			126951-005	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		126951-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126951-005	SW846-3005A/6020B
	Copper	0.000525	0.000300	0.00200	J		126951-005	SW846-3005A/6020B
	Iron	0.0594	0.0330	0.100	J		126951-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126951-005	SW846-3005A/6020B
	Magnesium	20.4	0.0100	0.0300			126951-005	SW846-3005A/6020B
	Manganese	0.00308	0.00100	0.00500	J		126951-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126951-005	SW846-7470A
	Nickel	0.000790	0.000600	0.00200	J		126951-005	SW846-3005A/6020B
	Potassium	4.57	0.0800	0.300			126951-005	SW846-3005A/6020B
	Selenium	0.00191	0.00150	0.00500	J		126951-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126951-005	SW846-3005A/6020B
	Sodium	59.7	0.800	2.50			126951-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126951-005	SW846-3005A/6020B
	Uranium	0.00528	0.0000670	0.000200			126951-005	SW846-3005A/6020B
	Vanadium	0.00821	0.00330	0.0200	J		126951-005	SW846-3005A/6020B
	Zinc	0.00573	0.00330	0.0200	J		126951-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW10	Aluminum	ND	0.0193	0.0500	U		126993-005	SW846-3005A/6020B
16-Sep-25	Antimony	ND	0.00100	0.00300	U		126993-005	SW846-3005A/6020B
	Arsenic	0.00232	0.00200	0.00500	J		126993-005	SW846-3005A/6020B
	Barium	0.0641	0.000670	0.00400			126993-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		126993-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126993-005	SW846-3005A/6020B
	Calcium	63.3	0.800	2.00			126993-005	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		126993-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126993-005	SW846-3005A/6020B
	Copper	0.000503	0.000300	0.00200	B, J	0.002U	126993-005	SW846-3005A/6020B
	Iron	0.0341	0.0330	0.100	J		126993-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126993-005	SW846-3005A/6020B
	Magnesium	18.2	0.0100	0.0300			126993-005	SW846-3005A/6020B
	Manganese	ND	0.00100	0.00500	U		126993-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126993-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		126993-005	SW846-3005A/6020B
	Potassium	4.39	0.0800	0.300			126993-005	SW846-3005A/6020B
	Selenium	0.00228	0.00150	0.00500	J		126993-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126993-005	SW846-3005A/6020B
	Sodium	59.4	0.800	2.50			126993-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126993-005	SW846-3005A/6020B
	Uranium	0.00324	0.0000670	0.000200			126993-005	SW846-3005A/6020B
	Vanadium	0.00688	0.00330	0.0200	J		126993-005	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		126993-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW11	Aluminum	ND	0.0193	0.0500	U		126979-005	SW846-3005A/6020B
09-Sep-25	Antimony	ND	0.00100	0.00300	U		126979-005	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		126979-005	SW846-3005A/6020B
	Barium	0.0708	0.000670	0.00400			126979-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		126979-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126979-005	SW846-3005A/6020B
	Calcium	53.4	0.160	0.400			126979-005	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		126979-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126979-005	SW846-3005A/6020B
	Copper	ND	0.000300	0.00200	U		126979-005	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		126979-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126979-005	SW846-3005A/6020B
	Magnesium	15.9	0.0100	0.0300			126979-005	SW846-3005A/6020B
	Manganese	ND	0.00100	0.00500	U		126979-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126979-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		126979-005	SW846-3005A/6020B
	Potassium	3.73	0.0800	0.300			126979-005	SW846-3005A/6020B
	Selenium	0.00382	0.00150	0.00500	J		126979-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126979-005	SW846-3005A/6020B
	Sodium	51.6	0.160	0.500			126979-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126979-005	SW846-3005A/6020B
	Uranium	0.00294	0.0000670	0.000200			126979-005	SW846-3005A/6020B
	Vanadium	0.00691	0.00330	0.0200	J		126979-005	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		126979-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW12	Aluminum	0.0249	0.0193	0.0500	J, N	J	126974-005	SW846-3005A/6020B
04-Sep-25	Antimony	ND	0.00100	0.00300	U		126974-005	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		126974-005	SW846-3005A/6020B
	Barium	0.0760	0.000670	0.00400			126974-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U, N		126974-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126974-005	SW846-3005A/6020B
	Calcium	72.8	0.400	1.00			126974-005	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		126974-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126974-005	SW846-3005A/6020B
	Copper	ND	0.000300	0.00200	U		126974-005	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		126974-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126974-005	SW846-3005A/6020B
	Magnesium	23.3	0.0100	0.0300			126974-005	SW846-3005A/6020B
	Manganese	ND	0.00100	0.00500	U		126974-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126974-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		126974-005	SW846-3005A/6020B
	Potassium	4.26	0.0800	0.300			126974-005	SW846-3005A/6020B
	Selenium	0.00252	0.00150	0.00500	J		126974-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126974-005	SW846-3005A/6020B
	Sodium	70.5	0.400	1.25			126974-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126974-005	SW846-3005A/6020B
	Uranium	0.00619	0.0000670	0.000200			126974-005	SW846-3005A/6020B
	Vanadium	0.00450	0.00330	0.0200	J		126974-005	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		126974-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW13	Aluminum	ND	0.0193	0.0500	U		126958-005	SW846-3005A/6020B
25-Aug-25	Antimony	ND	0.00100	0.00300	U		126958-005	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		126958-005	SW846-3005A/6020B
	Barium	0.0579	0.000670	0.00400			126958-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		126958-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126958-005	SW846-3005A/6020B
	Calcium	52.5	0.400	1.00			126958-005	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		126958-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126958-005	SW846-3005A/6020B
	Copper	ND	0.000300	0.00200	U		126958-005	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		126958-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126958-005	SW846-3005A/6020B
	Magnesium	15.4	0.0100	0.0300			126958-005	SW846-3005A/6020B
	Manganese	ND	0.00100	0.00500	U		126958-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126958-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		126958-005	SW846-3005A/6020B
	Potassium	3.53	0.0800	0.300			126958-005	SW846-3005A/6020B
	Selenium	0.00227	0.00150	0.00500	J		126958-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126958-005	SW846-3005A/6020B
	Sodium	49.1	0.0800	0.250			126958-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126958-005	SW846-3005A/6020B
	Uranium	0.00349	0.0000670	0.000200			126958-005	SW846-3005A/6020B
	Vanadium	0.00628	0.00330	0.0200	J		126958-005	SW846-3005A/6020B
	Zinc	0.00378	0.00330	0.0200	J		126958-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW14	Aluminum	ND	0.0193	0.0500	U		126983-005	SW846-3005A/6020B
10-Sep-25	Antimony	ND	0.00100	0.00300	U		126983-005	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		126983-005	SW846-3005A/6020B
	Barium	0.0607	0.000670	0.00400			126983-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		126983-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126983-005	SW846-3005A/6020B
	Calcium	60.3	0.800	2.00			126983-005	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		126983-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126983-005	SW846-3005A/6020B
	Copper	ND	0.000300	0.00200	U		126983-005	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		126983-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126983-005	SW846-3005A/6020B
	Magnesium	19.9	0.0100	0.0300			126983-005	SW846-3005A/6020B
	Manganese	ND	0.00100	0.00500	U		126983-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126983-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		126983-005	SW846-3005A/6020B
	Potassium	4.05	0.0800	0.300			126983-005	SW846-3005A/6020B
	Selenium	0.00303	0.00150	0.00500	J		126983-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126983-005	SW846-3005A/6020B
	Sodium	57.9	0.800	2.50			126983-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126983-005	SW846-3005A/6020B
	Uranium	0.00471	0.0000670	0.000200		J	126983-005	SW846-3005A/6020B
	Vanadium	0.00738	0.00330	0.0200	J		126983-005	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		126983-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW15	Aluminum	0.0964	0.0193	0.0500		J+	126948-005	SW846-3005A/6020B
19-Aug-25	Antimony	ND	0.00100	0.00300	U		126948-005	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		126948-005	SW846-3005A/6020B
	Barium	0.0670	0.000670	0.00400			126948-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		126948-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126948-005	SW846-3005A/6020B
	Calcium	80.7	0.800	2.00			126948-005	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		126948-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126948-005	SW846-3005A/6020B
	Copper	0.000406	0.000300	0.00200	J	0.002U	126948-005	SW846-3005A/6020B
	Iron	0.172	0.0330	0.100			126948-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126948-005	SW846-3005A/6020B
	Magnesium	27.1	0.0100	0.0300			126948-005	SW846-3005A/6020B
	Manganese	0.00472	0.00100	0.00500	J	0.005U	126948-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126948-005	SW846-7470A
	Nickel	0.00115	0.000600	0.00200	J		126948-005	SW846-3005A/6020B
	Potassium	4.40	0.0800	0.300			126948-005	SW846-3005A/6020B
	Selenium	0.00248	0.00150	0.00500	J		126948-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126948-005	SW846-3005A/6020B
	Sodium	72.0	0.800	2.50			126948-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126948-005	SW846-3005A/6020B
	Uranium	0.00732	0.0000670	0.000200			126948-005	SW846-3005A/6020B
	Vanadium	0.00541	0.00330	0.0200	J		126948-005	SW846-3005A/6020B
	Zinc	0.00631	0.00330	0.0200	J	0.02U	126948-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW16	Aluminum	ND	0.0193	0.0500	U		126965-005	SW846-3005A/6020B
27-Aug-25	Antimony	ND	0.00100	0.00300	U		126965-005	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		126965-005	SW846-3005A/6020B
	Barium	0.0678	0.000670	0.00400			126965-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		126965-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126965-005	SW846-3005A/6020B
	Calcium	83.6	0.800	2.00			126965-005	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		126965-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126965-005	SW846-3005A/6020B
	Copper	ND	0.000300	0.00200	U		126965-005	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		126965-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126965-005	SW846-3005A/6020B
	Magnesium	29.9	0.0100	0.0300			126965-005	SW846-3005A/6020B
	Manganese	ND	0.00100	0.00500	U		126965-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126965-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		126965-005	SW846-3005A/6020B
	Potassium	5.02	0.0800	0.300			126965-005	SW846-3005A/6020B
	Selenium	0.00205	0.00150	0.00500	J		126965-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126965-005	SW846-3005A/6020B
	Sodium	76.8	0.800	2.50			126965-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126965-005	SW846-3005A/6020B
	Uranium	0.00671	0.0000670	0.000200			126965-005	SW846-3005A/6020B
	Vanadium	0.00592	0.00330	0.0200	J		126965-005	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		126965-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-5 (concluded)
Summary of Target Analyte List Metals plus Uranium Results,
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW17	Aluminum	ND	0.0193	0.0500	U, N		126972-005	SW846-3005A/6020B
03-Sep-25	Antimony	ND	0.00100	0.00300	U		126972-005	SW846-3005A/6020B
	Arsenic	0.00224	0.00200	0.00500	J		126972-005	SW846-3005A/6020B
	Barium	0.0991	0.000670	0.00400			126972-005	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U, N		126972-005	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		126972-005	SW846-3005A/6020B
	Calcium	40.6	0.0800	0.200			126972-005	SW846-3005A/6020B
	Chromium	0.00577	0.00300	0.0100	J		126972-005	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		126972-005	SW846-3005A/6020B
	Copper	ND	0.000300	0.00200	U		126972-005	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		126972-005	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		126972-005	SW846-3005A/6020B
	Magnesium	12.9	0.0100	0.0300			126972-005	SW846-3005A/6020B
	Manganese	ND	0.00100	0.00500	U		126972-005	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		126972-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		126972-005	SW846-3005A/6020B
	Potassium	2.93	0.0800	0.300			126972-005	SW846-3005A/6020B
	Selenium	0.00247	0.00150	0.00500	J		126972-005	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		126972-005	SW846-3005A/6020B
	Sodium	44.0	0.0800	0.250			126972-005	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		126972-005	SW846-3005A/6020B
	Uranium	0.00269	0.0000670	0.000200			126972-005	SW846-3005A/6020B
	Vanadium	0.00896	0.00330	0.0200	J		126972-005	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		126972-005	SW846-3005A/6020B

See notes at end of tables.

Table 3B-6
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, and Tritium Results, Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
LWDS-MW1	Americium-241	0.742 ± 8.95	14.9	7.11	U	BD	126995-006	EPA 901.1
18-Sep-25	Cesium-137	0.234 ± 1.90	3.44	1.59	U	BD	126995-006	EPA 901.1
	Cobalt-60	-0.488 ± 1.95	3.55	1.56	U	BD	126995-006	EPA 901.1
	Potassium-40	-2.56 ± 36.1	58.1	27.0	U	BD	126995-006	EPA 901.1
	Gross Alpha	3.06	NA	NA	NA	None	126995-007	EPA 900.0/SW846-9310
	Gross Beta	5.42 ± 1.07	1.51	0.727			126995-007	EPA 900.0/SW846-9310
	Tritium	8.50 ± 86.1	159	71.3	U	BD	126995-008	EPA 906.0M
TAV-MW2	Americium-241	3.10 ± 5.64	9.70	4.67	U	BD	126977-006	EPA 901.1
08-Sep-25	Cesium-137	1.75 ± 1.96	3.53	1.66	U	BD	126977-006	EPA 901.1
	Cobalt-60	-0.481 ± 1.93	3.25	1.46	U	BD	126977-006	EPA 901.1
	Potassium-40	43.4 ± 45.8	36.2	16.5		BD	126977-006	EPA 901.1
	Gross Alpha	2.34	NA	NA	NA	None	126977-007	EPA 900.0/SW846-9310
	Gross Beta	6.49 ± 1.27	1.80	0.867	*		126977-007	EPA 900.0/SW846-9310
	Tritium	-14.6 ± 64.0	125	55.4	U	BD	126977-008	EPA 906.0M
TAV-MW3	Americium-241	10.3 ± 13.7	15.8	7.56	U	BD	126955-006	EPA 901.1
21-Aug-25	Cesium-137	0.931 ± 2.10	3.68	1.73	U	BD	126955-006	EPA 901.1
	Cobalt-60	1.61 ± 4.51	4.39	2.02	U	BD	126955-006	EPA 901.1
	Potassium-40	-22.1 ± 44.8	56.4	26.5	U	BD	126955-006	EPA 901.1
	Gross Alpha	1.04	NA	NA	NA	None	126955-007	EPA 900.0/SW846-9310
	Gross Beta	3.78 ± 0.987	1.51	0.736		J	126955-007	EPA 900.0/SW846-9310
	Tritium	29.6 ± 83.7	149	67.3	U	BD	126955-008	EPA 906.0M
TAV-MW4	Americium-241	2.66 ± 8.28	13.7	6.49	U	BD	126988-006	EPA 901.1
12-Sep-25	Cesium-137	1.67 ± 2.95	5.66	2.61	U	BD	126988-006	EPA 901.1
	Cobalt-60	2.46 ± 3.17	6.00	2.65	U	BD	126988-006	EPA 901.1
	Potassium-40	18.1 ± 58.0	53.6	23.3	U	BD	126988-006	EPA 901.1
	Gross Alpha	1.99	NA	NA	NA	None	126988-007	EPA 900.0/SW846-9310
	Gross Beta	4.22 ± 0.865	1.25	0.604	*		126988-007	EPA 900.0/SW846-9310
	Tritium	22.4 ± 70.8	128	56.8	U	BD	126988-008	EPA 906.0M
TAV-MW5	Americium-241	0.579 ± 3.89	6.51	3.11	U	BD	126962-006	EPA 901.1
22-Sep-25	Cesium-137	8.96 ± 5.35	4.02	1.80	X	R	126962-006	EPA 901.1
	Cobalt-60	-1.50 ± 3.19	5.47	2.40	U	BD	126962-006	EPA 901.1
	Potassium-40	12.1 ± 61.1	44.4	18.8	U	BD	126962-006	EPA 901.1
	Gross Alpha	2.74	NA	NA	NA	None	126962-007	EPA 900.0/SW846-9310
	Gross Beta	8.57 ± 0.999	1.20	0.580			126962-007	EPA 900.0/SW846-9310
	Tritium	59.1 ± 102	174	82.8	U	BD	126962-008	EPA 906.0M

See notes at end of tables.

Table 3B-6 (continued)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, and Tritium Results, Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW6	Americium-241	-1.56 ± 12.0	19.9	9.41	U	BD	126990-006	EPA 901.1
15-Sep-25	Cesium-137	2.21 ± 2.62	4.91	2.23	U	BD	126990-006	EPA 901.1
	Cobalt-60	1.81 ± 3.06	6.11	2.71	U	BD	126990-006	EPA 901.1
	Potassium-40	0.428 ± 54.8	44.7	18.9	U	BD	126990-006	EPA 901.1
	Gross Alpha	1.00	NA	NA	NA	None	126990-007	EPA 900.0/SW846-9310
	Gross Beta	6.58 ± 0.994	1.33	0.642	*		126990-007	EPA 900.0/SW846-9310
	Tritium	19.1 ± 70.4	128	56.8	U	BD	126990-008	EPA 906.0M
TAV-MW7	Americium-241	-1.07 ± 7.56	12.2	5.93	U	BD	126969-006	EPA 901.1
02-Sep-25	Cesium-137	-1.19 ± 1.99	2.82	1.33	U	BD	126969-006	EPA 901.1
	Cobalt-60	0.0916 ± 1.39	2.59	1.18	U	BD	126969-006	EPA 901.1
	Potassium-40	66.8 ± 72.3	25.0	11.3	X	R	126969-006	EPA 901.1
	Gross Alpha	3.37	NA	NA	NA	None	126969-007	EPA 900.0/SW846-9310
	Gross Beta	6.20 ± 0.913	1.19	0.575			126969-007	EPA 900.0/SW846-9310
	Tritium	48.0 ± 93.0	159	75.4	U	BD	126969-008	EPA 906.0M
TAV-MW8	Americium-241	-0.389 ± 8.66	11.8	5.57	U	BD	126986-006	EPA 901.1
11-Sep-25	Cesium-137	2.26 ± 3.10	5.74	2.62	U	BD	126986-006	EPA 901.1
	Cobalt-60	0.0475 ± 3.04	5.75	2.50	U	BD	126986-006	EPA 901.1
	Potassium-40	19.4 ± 73.7	61.7	27.2	U	BD	126986-006	EPA 901.1
	Gross Alpha	2.73	NA	NA	NA	None	126986-007	EPA 900.0/SW846-9310
	Gross Beta	5.46 ± 1.33	1.99	0.965		J	126986-007	EPA 900.0/SW846-9310
	Tritium	21.0 ± 76.0	137	61.6	U	BD	126986-008	EPA 906.0M
TAV-MW9	Americium-241	1.60 ± 5.39	9.46	4.60	U	BD	126951-006	EPA 901.1
20-Aug-25	Cesium-137	-0.340 ± 1.23	2.08	0.987	U	BD	126951-006	EPA 901.1
	Cobalt-60	-1.69 ± 1.78	2.20	1.02	U	BD	126951-006	EPA 901.1
	Potassium-40	-7.62 ± 27.6	36.5	17.4	U	BD	126951-006	EPA 901.1
	Gross Alpha	2.05	NA	NA	NA	None	126951-007	EPA 900.0/SW846-9310
	Gross Beta	5.03 ± 0.883	1.20	0.580			126951-007	EPA 900.0/SW846-9310
	Tritium	57.5 ± 96.6	164	77.9	U	BD	126951-008	EPA 906.0M
TAV-MW10	Americium-241	0.811 ± 6.85	11.1	5.32	U	BD	126993-006	EPA 901.1
16-Sep-25	Cesium-137	-2.38 ± 2.36	3.55	1.64	U	BD	126993-006	EPA 901.1
	Cobalt-60	2.58 ± 2.62	4.81	2.20	U	BD	126993-006	EPA 901.1
	Potassium-40	43.2 ± 38.1	36.0	15.9		J	126993-006	EPA 901.1
	Gross Alpha	2.57	NA	NA	NA	None	126993-007	EPA 900.0/SW846-9310
	Gross Beta	7.75 ± 1.14	1.57	0.761	*		126993-007	EPA 900.0/SW846-9310
	Tritium	-39.6 ± 97.1	174	83.2	U	BD	126993-008	EPA 906.0M

See notes at end of tables.

Table 3B-6 (continued)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, and Tritium Results, Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW11	Americium-241	1.57 ± 4.17	7.08	3.36	U	BD	126979-006	EPA 901.1
09-Sep-25	Cesium-137	-0.137 ± 3.06	5.54	2.50	U	BD	126979-006	EPA 901.1
	Cobalt-60	1.57 ± 3.80	6.93	3.03	U	BD	126979-006	EPA 901.1
	Potassium-40	-28.3 ± 58.8	89.8	40.6	U	BD	126979-006	EPA 901.1
	Gross Alpha	2.62	NA	NA	NA	None	126979-007	EPA 900.0/SW846-9310
	Gross Beta	14.9 ± 1.11	1.13	0.546	*		126979-007	EPA 900.0/SW846-9310
	Tritium	-30.0 ± 61.7	125	55.3	U	BD	126979-008	EPA 906.0M
TAV-MW12	Americium-241	1.73 ± 5.64	8.98	4.37	U	BD	126974-006	EPA 901.1
04-Sep-25	Cesium-137	0.429 ± 1.70	3.13	1.49	U	BD	126974-006	EPA 901.1
	Cobalt-60	0.498 ± 1.88	3.38	1.57	U	BD	126974-006	EPA 901.1
	Potassium-40	-8.86 ± 34.5	48.9	23.3	U	BD	126974-006	EPA 901.1
	Gross Alpha	2.24	NA	NA	NA	None	126974-007	EPA 900.0/SW846-9310
	Gross Beta	5.42 ± 0.944	1.32	0.640			126974-007	EPA 900.0/SW846-9310
	Tritium	38.7 ± 72.4	128	55.2	U	BD	126974-008	EPA 906.0M
TAV-MW13	Americium-241	-7.99 ± 8.10	12.1	5.81	U	BD	126958-006	EPA 901.1
25-Aug-25	Cesium-137	0.187 ± 1.63	2.87	1.34	U	BD	126958-006	EPA 901.1
	Cobalt-60	-0.371 ± 1.88	3.32	1.51	U	BD	126958-006	EPA 901.1
	Potassium-40	29.2 ± 44.3	33.0	15.0	U	BD	126958-006	EPA 901.1
	Gross Alpha	2.90	NA	NA	NA	None	126958-007	EPA 900.0/SW846-9310
	Gross Beta	4.50 ± 0.775	1.03	0.493			126958-007	EPA 900.0/SW846-9310
	Tritium	40.7 ± 100	172	81.9	U	BD	126958-008	EPA 906.0M
TAV-MW14	Americium-241	0.843 ± 4.97	9.42	4.42	U	BD	126983-006	EPA 901.1
10-Sep-25	Cesium-137	0.471 ± 2. 37	4.59	2.06	U	BD	126983-006	EPA 901.1
	Cobalt-60	0.567 ± 2.22	4.75	2.01	U	BD	126983-006	EPA 901.1
	Potassium-40	6.20 ± 44.4	47.5	20.1	U	BD	126983-006	EPA 901.1
	Gross Alpha	3.26	NA	NA	NA	None	126983-007	EPA 900.0/SW846-9310
	Gross Beta	6.23 ± 0.972	1.34	0.648			126983-007	EPA 900.0/SW846-9310
	Tritium	45.6 ± 78.9	137	61.4	U	BD	126983-008	EPA 906.0M
TAV-MW15	Americium-241	2.94 ± 11.9	20.2	9.54	U	BD	126948-006	EPA 901.1
19-Aug-25	Cesium-137	-1.38 ± 2.39	3.91	1.73	U	BD	126948-006	EPA 901.1
	Cobalt-60	0.244 ± 2.55	5.05	2.19	U	BD	126948-006	EPA 901.1
	Potassium-40	-20.5 ± 44.0	78.6	35.9	U	BD	126948-006	EPA 901.1
	Gross Alpha	4.70	NA	NA	NA	None	126948-007	EPA 900.0/SW846-9310
	Gross Beta	6.67 ± 1.60	2.44	1.19		J	126948-007	EPA 900.0/SW846-9310
	Tritium	33.3 ± 83.5	149	66.2	U	BD	126948-008	EPA 906.0M

See notes at end of tables.

Table 3B-6 (concluded)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, and Tritium Results, Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
TAV-MW16	Americium-241	5.15 ± 9.28	15.2	7.32	U	BD	126965-006	EPA 901.1
27-Aug-25	Cesium-137	0.671 ± 2.12	3.40	1.61	U	BD	126965-006	EPA 901.1
	Cobalt-60	0.284 ± 1.89	3.55	1.63	U	BD	126965-006	EPA 901.1
	Potassium-40	24.6 ± 57.6	29.6	13.4	U	BD	126965-006	EPA 901.1
	Gross Alpha	5.34	NA	NA	NA	None	126965-007	EPA 900.0/SW846-9310
	Gross Beta	6.51 ± 1.27	1.80	0.867			126965-007	EPA 900.0/SW846-9310
	Tritium	-17.3 ± 99.3	176	84.1	U	BD	126965-008	EPA 906.0M
TAV-MW17	Americium-241	1.98 ± 15.2	27.1	13.2	U	BD	126972-006	EPA 901.1
03-Sep-25	Cesium-137	1.63 ± 4.15	3.71	1.75	U	BD	126972-006	EPA 901.1
	Cobalt-60	3.15 ± 2.85	4.99	2.32	U	BD	126972-006	EPA 901.1
	Potassium-40	5.59 ± 48.9	57.3	26.9	U	BD	126972-006	EPA 901.1
	Gross Alpha	2.84	NA	NA	NA	None	126972-007	EPA 900.0/SW846-9310
	Gross Beta	3.34 ± 1.33	2.12	1.03		J	126972-007	EPA 900.0/SW846-9310
	Tritium	38.6 ± 71.9	127	54.9	U	BD	126972-008	EPA 906.0M

See notes at end of tables.

Table 3B-7
Summary of Field Water Quality Parameter Measurements[g],
Technical Area-V Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Sample Date	Temperature (^{0}C)	Specific Conductivity (µmho/cm)	Oxidation Reduction Potential (mV)	pH	Turbidity (NTU)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)
LWDS-MW1	17-Feb-25	13.02	466.81	161.4	6.06	0.27	92.71	8.00
	28-Mar-25	18.88	824.58	225.6	7.51	0.50	88.87	6.62
TAV-MW2	30-Jan-25	16.15	757.70	101.9	7.32	2.25	80.22	6.45
TAV-MW4	06-Feb-25	20.11	663.25	78.2	7.54	0.40	78.15	5.88
TAV-MW6	10-Feb-25	17.3	788	36.6	7.31	0.75	32.6	3.12
TAV-MW8	05-Feb-25	21.03	659.00	93.5	7.52	0.53	79.95	5.94
TAV-MW10	11-Feb-25	17.0	688	97.7	7.36	0.23	73.9	7.12
TAV-MW11	03-Feb-25	20.4	645	112.1	7.35	0.17	70.1	6.31
TAV-MW12	29-Jan-25	14.8	755	86.7	7.20	0.53	58.2	5.89
TAV-MW14	04-Feb-25	19.0	722	92.8	7.32	0.15	69.5	6.42
TAV-MW16	27-Jan-25	21.12	914.94	94.9	7.26	0.23	57.83	4.20
TAV-MW17	28-Jan-25	20.82	461.15	88.3	7.82	0.26	86.00	6.27
LWDS-MW1	18-Sep-25	21.73	65.95	188.3	6.63	0.20	137.1	9.81
TAV-MW2	08-Sep-25	22.50	777.4	180.8	7.39	1.03	91.06	6.50
TAV-MW3	21-Aug-25	22.1	659	81.7	7.33	0.69	68.0	5.92
TAV-MW4	12-Sep-25	20.58	578.6	160.9	7.60	0.38	93.76	6.93
TAV-MW5	22-Sep-25	23.55	537.4	115.2	7.62	50.1	81.83	5.66
TAV-MW6	15-Sep-25	19.9	768	199.7	7.29	2.36	34.7	3.16
TAV-MW7	02-Sep-25	21.5	639	115.1	7.06	0.27	11.2	0.99
TAV-MW8	11-Sep-25	21.18	671.1	168.6	7.51	0.86	94.11	6.89
TAV-MW9	20-Aug-25	22.6	688	59.1	7.06	1.40	14.9	1.28
TAV-MW10	16-Sep-25	20.6	666	163.7	7.37	0.61	81.9	7.35
TAV-MW11	09-Sep-25	22.1	620	147.1	7.35	0.14	77.6	6.76
TAV-MW12	04-Sep-25	21.2	729	133.5	7.25	0.43	67.8	6.01
TAV-MW13	25-Aug-25	21.43	540.6	186.8	7.55	0.44	27.00	1.96
TAV-MW14	10-Sep-25	20.9	702	152.8	7.34	0.33	75.0	6.69
TAV-MW15	19-Aug-25	21.76	817.8	77.6	7.28	3.36	73.02	5.30
TAV-MW16	27-Aug-25	20.78	920.0	157.3	7.25	0.21	58.97	4.35
TAV-MW17	03-Sep-25	20.8	455.8	175.1	7.85	0.16	78.34	5.79

See notes at end of tables.

Notes for Technical Area-V Groundwater Area of Concern Analytical Results Tables

%	= percent
CFR	= Code of Federal Regulations
EPA	= U.S. Environmental Protection Agency
ID	= identifier
µg/L	= micrograms per liter
MCL	= maximum contaminant level
mg/L	= milligrams per liter
mrem/yr	= millirem per year
No.	= number
pCi/L	= picocuries per liter
TAL	= Target Analyte List

[a]Result or Activity

Result applies to Tables 3B-1 and 3B-3 through 3B-5. Activity applies to Table 3B-6.

Activity	= Gross alpha activity measurements were corrected by subtracting the total uranium activity (40 CFR Part 141). Activities of zero or less are considered not detected.
ND	= not detected (at MDL)

[b]MDL or MDA

The MDL applies to Tables 3B-1 through 3B-5. MDA applies to Table 3B-6.

MDA	= The minimal detectable activity or minimum measured activity in a sample required to ensure a 95% probability that the measured activity is accurately quantified above the critical level.
MDL	= Method detection limit. The minimum concentration or activity that can be measured and reported with 99% confidence that the analyte is greater than zero; analyte is matrix specific.
NA	= Not applicable for gross alpha activities. The MDA could not be calculated as the gross alpha activity was corrected by subtracting the total uranium activity.

[c]PQL or Critical Level

The PQL applies to Tables 3B-1 and 3B-3 through 3B-5. The critical level applies to Table 3B-6.

Critical Level	= The minimum activity that can be measured and reported with 99% confidence that the analyte is greater than zero; analyte is matrix specific.
NA	= Not applicable for gross alpha activities. The critical level could not be calculated as the gross alpha activity was corrected by subtracting the total uranium activity.
PQL	= Practical quantitation limit. The lowest concentration of analytes in a sample that can be reliably determined within specified limits of precision and accuracy by the indicated method under routine laboratory operating conditions.

[d]Laboratory Qualifier

If cell is blank, then all quality control samples met acceptance criteria with respect to submitted samples.

B	= The analyte was found in the blank above the effective MDL.
J	= Estimated value; the analyte concentration fell above the effective MDL and below the effective PQL.
N	= Results associated with a spike analysis that was outside control limits.
NA	= not applicable
U	= Analyte is absent or below the MDL.
X	= Uncertain identification for gamma spectroscopy.
*	= Recovery or relative percent difference (RPD) not within acceptance limits and/or spike amount not compatible with the sample or the duplicate RPDs are not applicable where the concentration falls below the effective PQL.

Notes for Technical Area-V Groundwater Area of Concern Analytical Results Tables (concluded)

[e]Validation Qualifier

If cell is blank, then all quality control samples met acceptance criteria with respect to submitted samples.

BD = Below detection limit as used in radiochemistry to identify results that are not statistically different from zero.
J = The associated value is an estimated quantity.
J+ = The associated numerical value is an estimated quantity with a suspected positive bias.
None = No data validation for corrected gross alpha activity.
U = The analyte was analyzed for but was not detected.
UJ = The analyte was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R = The data are unusable (compound may or may not be present). Resampling and reanalysis may be required for verification.

[f]Analytical Method

Rice, E.W., Baird, R.B., Eaton, A.D., and Clesceri, L.S. (2012). *Standard Methods for the Examination of Water and Wastewater*, 23rd ed., American Public Health Association, American Water Works Association, and Water Environment Federation.

U.S. Department of Energy (1997). *EML Procedures Manual*, 27th ed., Vol. 1, Rev. 1992, HASL-300.

U.S. Environmental Protection Agency. (1980). *Prescribed Procedures for Measurement of Radioactivity in Drinking Water*, EPA-600/4-80-032

U.S. Environmental Protection Agency. (1984). *Methods for Chemical Analysis of Water and Wastes*, EPA 600-4-79-020.

U.S. Environmental Protection Agency. (1986, as updated). *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, 3rd ed., Rev. 1.

EML = Environmental Measurements Laboratory
HASL = Health and Safety Laboratory
SM = Standard Method
SW = Solid Waste

[g]Field Water Quality Measurements

Measurements were taken before sample collection.

°C = degrees Celsius
% Sat = percent saturation
µmho/cm = micromhos per centimeter
mg/L = milligrams per liter
mV = millivolts
NTU = nephelometric turbidity units
pH = potential of hydrogen (negative logarithm of the hydrogen ion concentration)

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Attachment 3C
Technical Area-V Groundwater Area of Concern
Concentration Trend Plots

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Attachment 3C Concentration Trend Plots

Figure 3C-1 Trichloroethene Concentrations, LWDS-MW1 ..... 3C-5
Figure 3C-2 Trichloroethene Concentrations, TAV-MW4 ..... 3C-6
Figure 3C-3 Trichloroethene Concentrations, TAV-MW6 ..... 3C-7
Figure 3C-4 Trichloroethene Concentrations, TAV-MW8 ..... 3C-8
Figure 3C-5 Trichloroethene Concentrations, TAV-MW10 ..... 3C-9
Figure 3C-6 Trichloroethene Concentrations, TAV-MW11 ..... 3C-10
Figure 3C-7 Nitrate Plus Nitrite Concentrations, LWDS-MW1 ..... 3C-11
Figure 3C-8 Nitrate Plus Nitrite Concentrations, TAV-MW10 ..... 3C-12
Figure 3C-9 Nitrate Plus Nitrite Concentrations, TAV-MW17 ..... 3C-13

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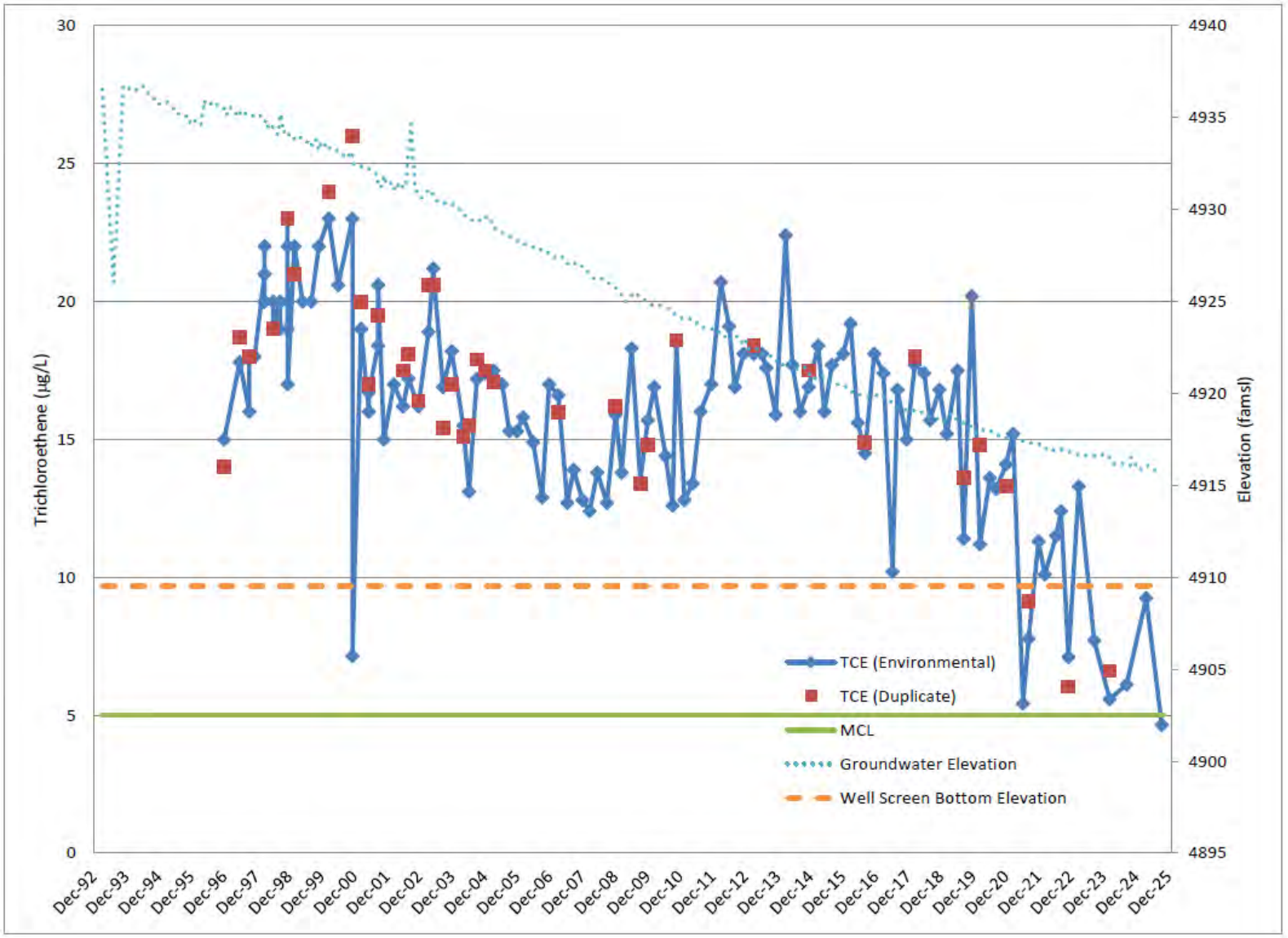


Figure 3C-1
Trichloroethene Concentrations, LWDS-MW1

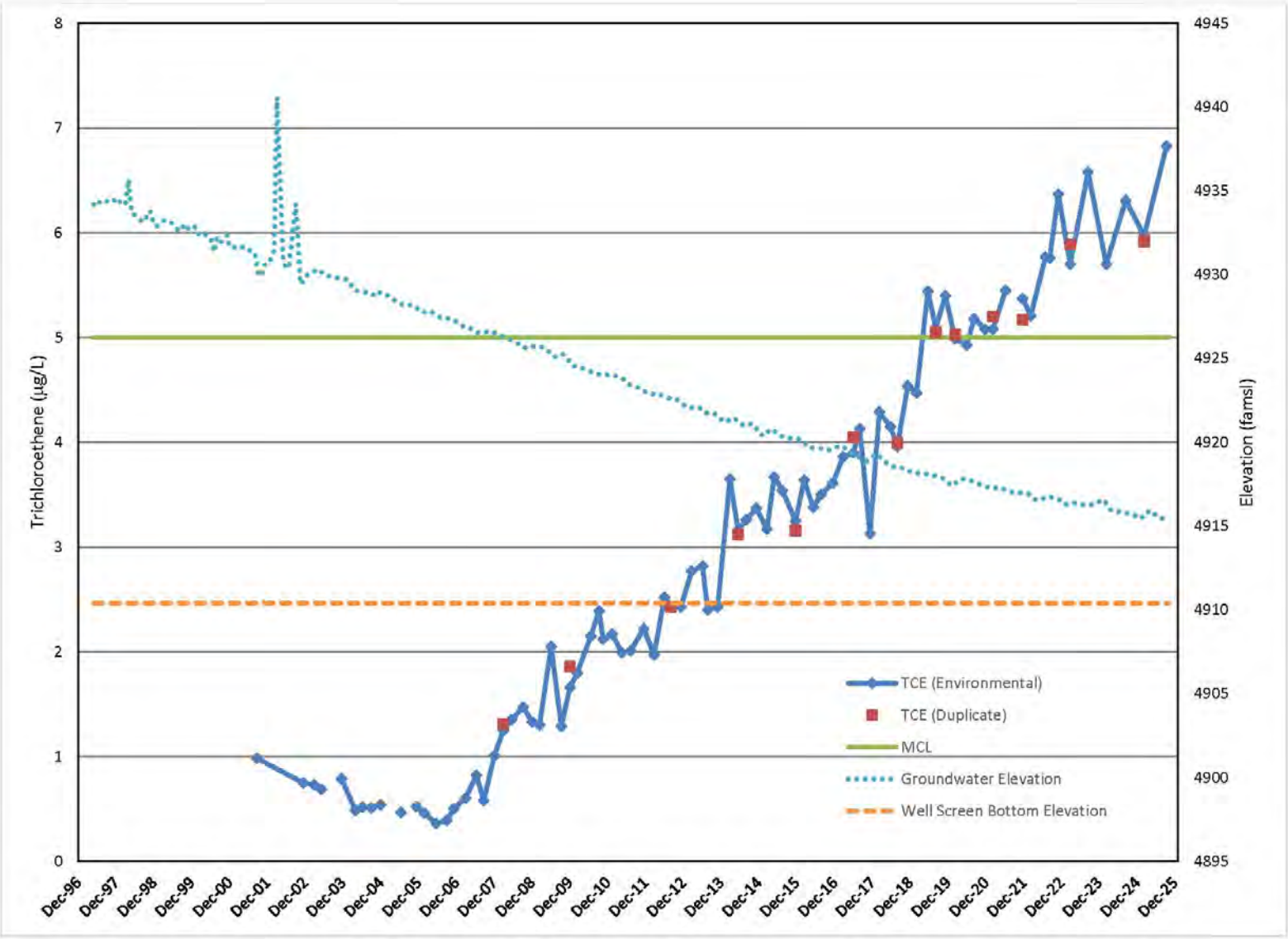


Figure 3C-2
Trichloroethene Concentrations, TAV-MW4

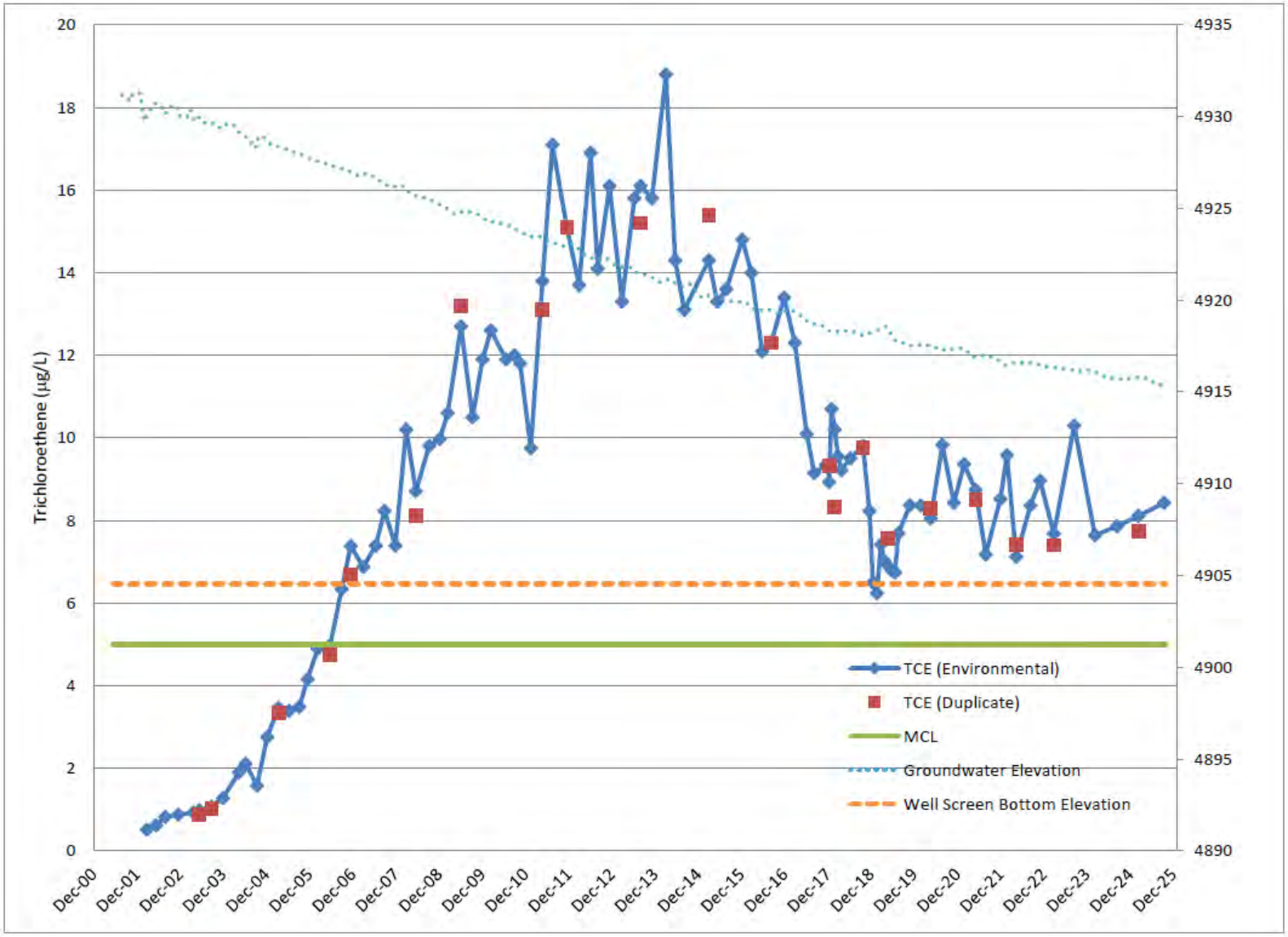


Figure 3C-3
Trichloroethene Concentrations, TAV-MW6

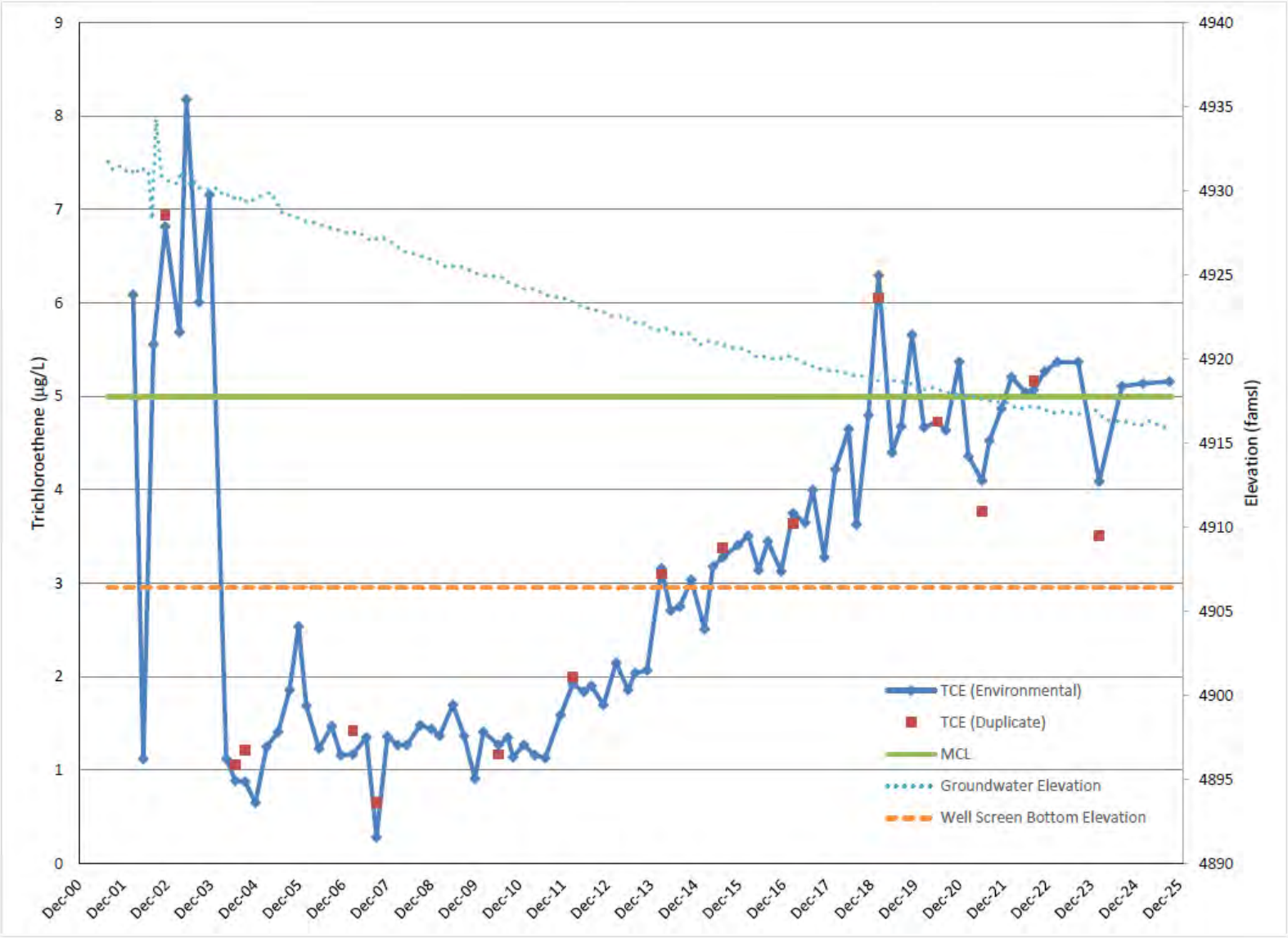


Figure 3C-4
Trichloroethene Concentrations, TAV-MW8

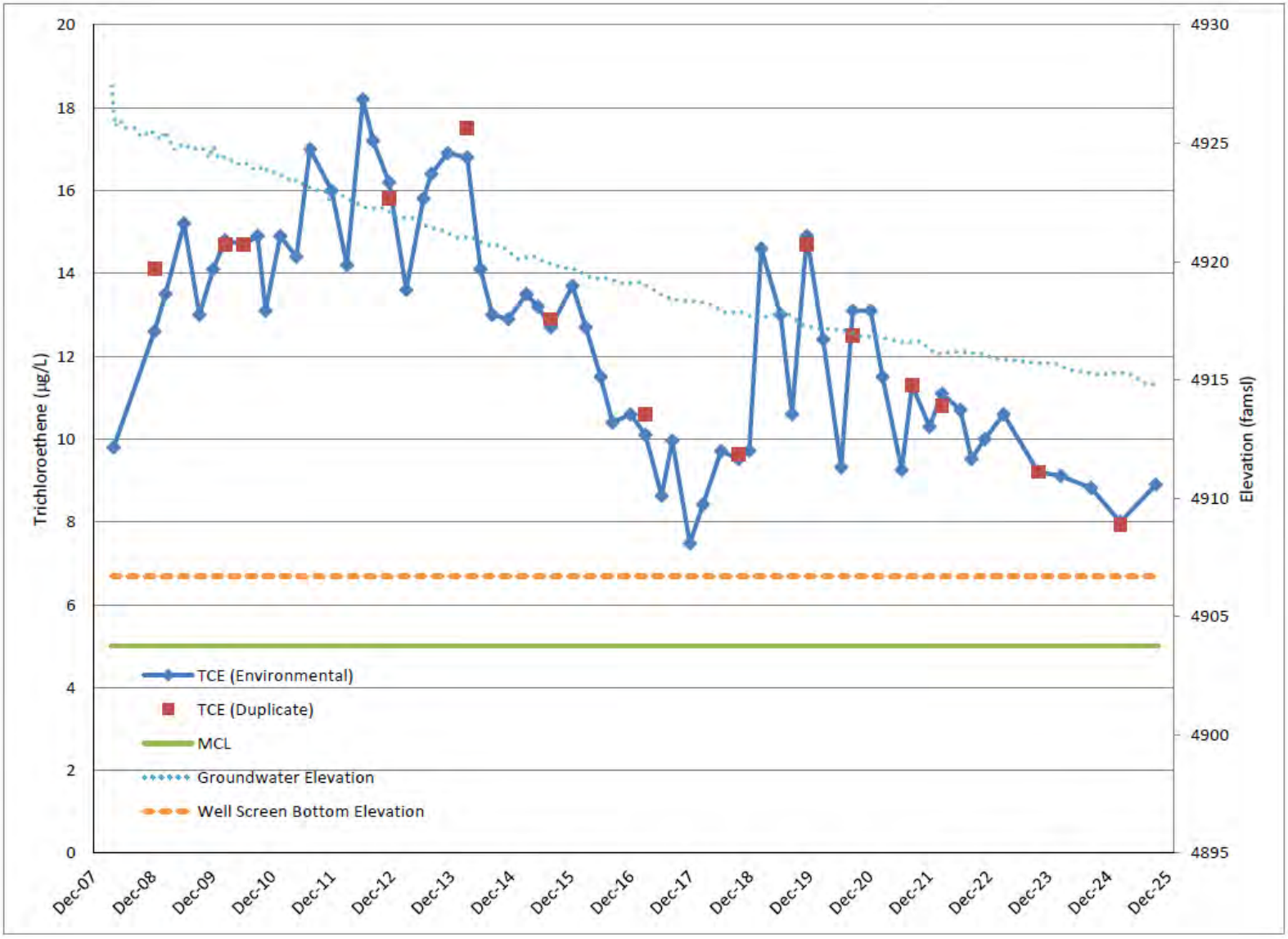


Figure 3C-5
Trichloroethene Concentrations, TAV-MW10

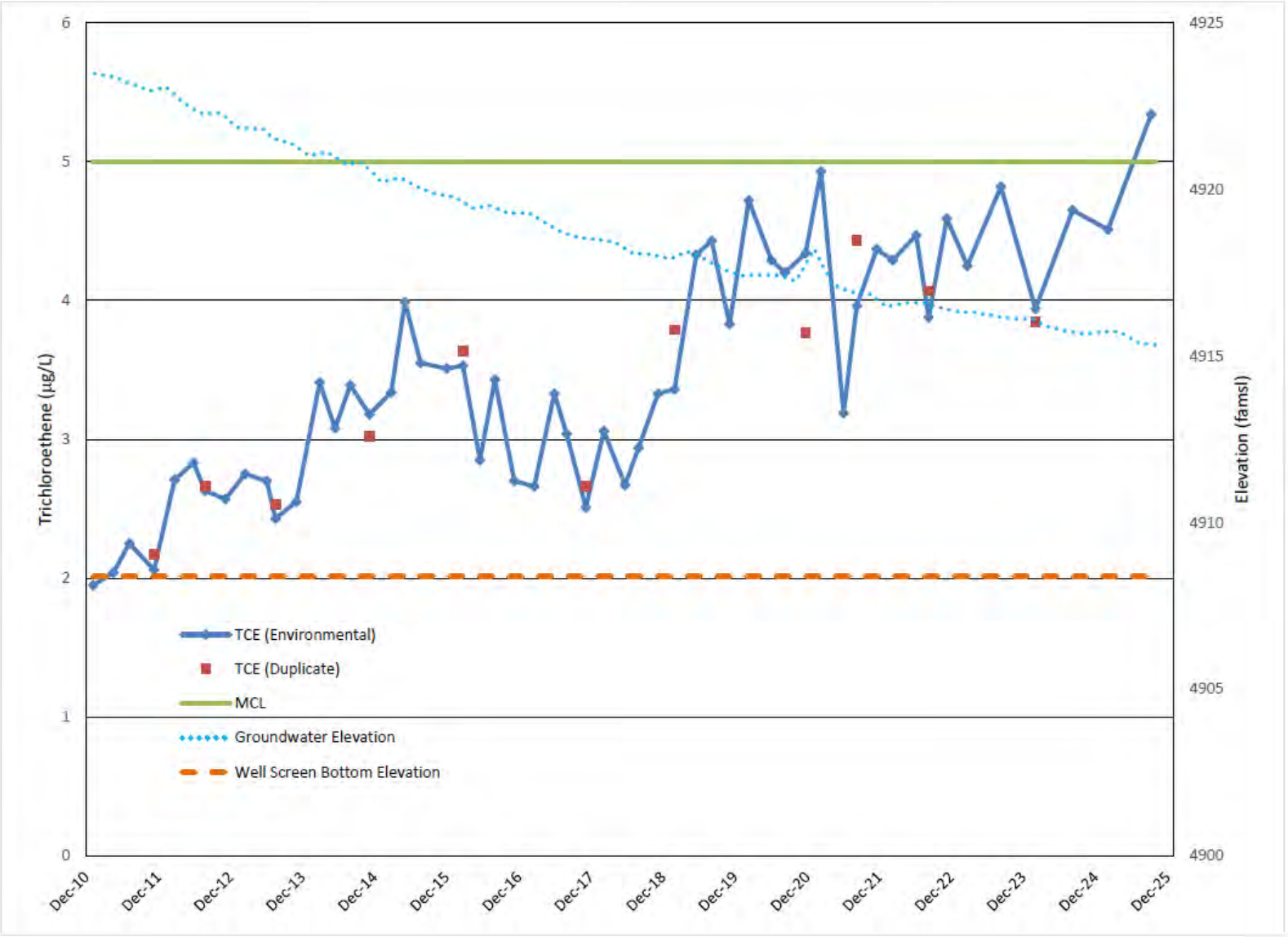


Figure 3C-6
Trichloroethene Concentrations, TAV-MW11

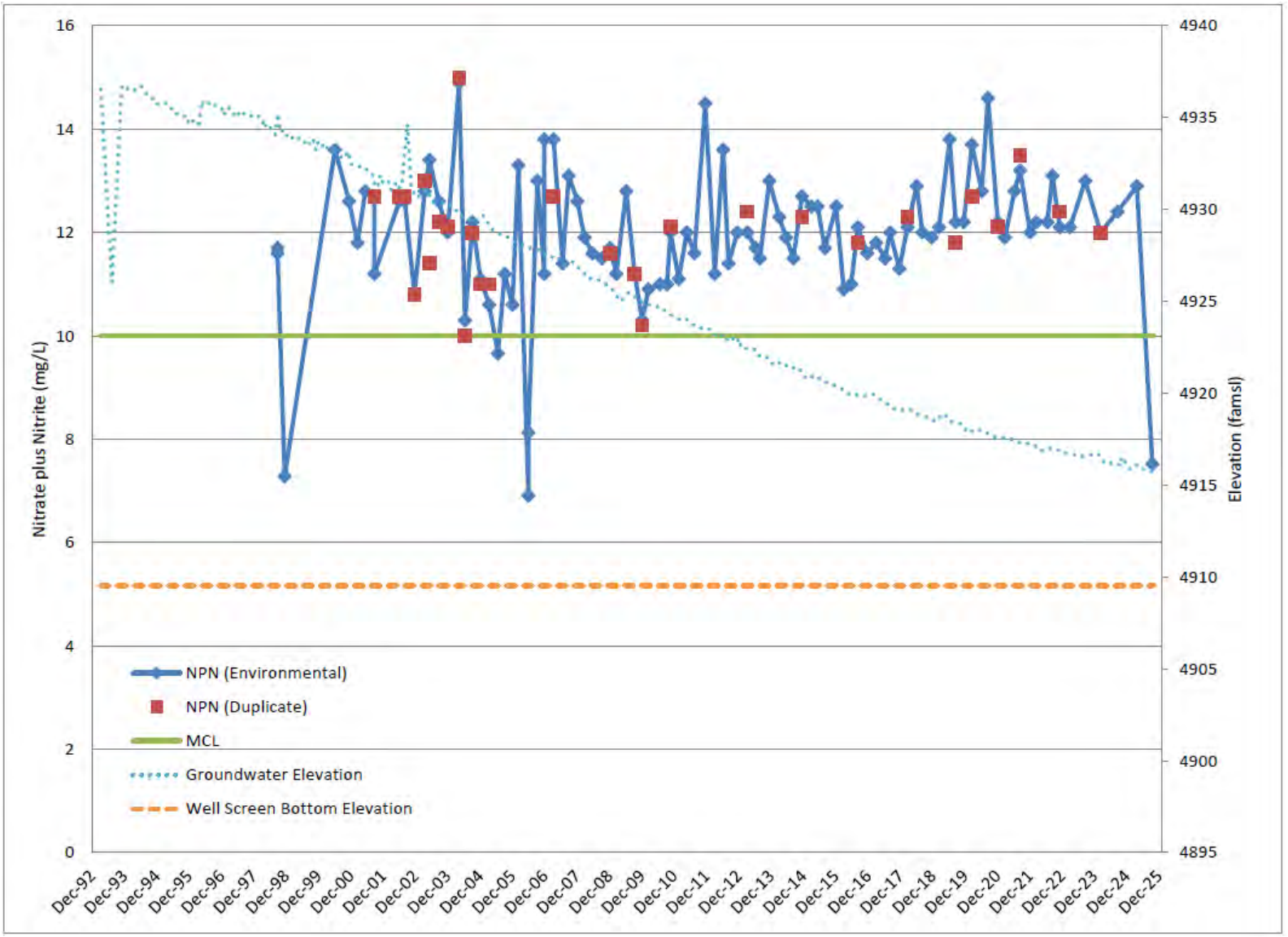


Figure 3C-7
Nitrate Plus Nitrite Concentrations, LWDS-MW1

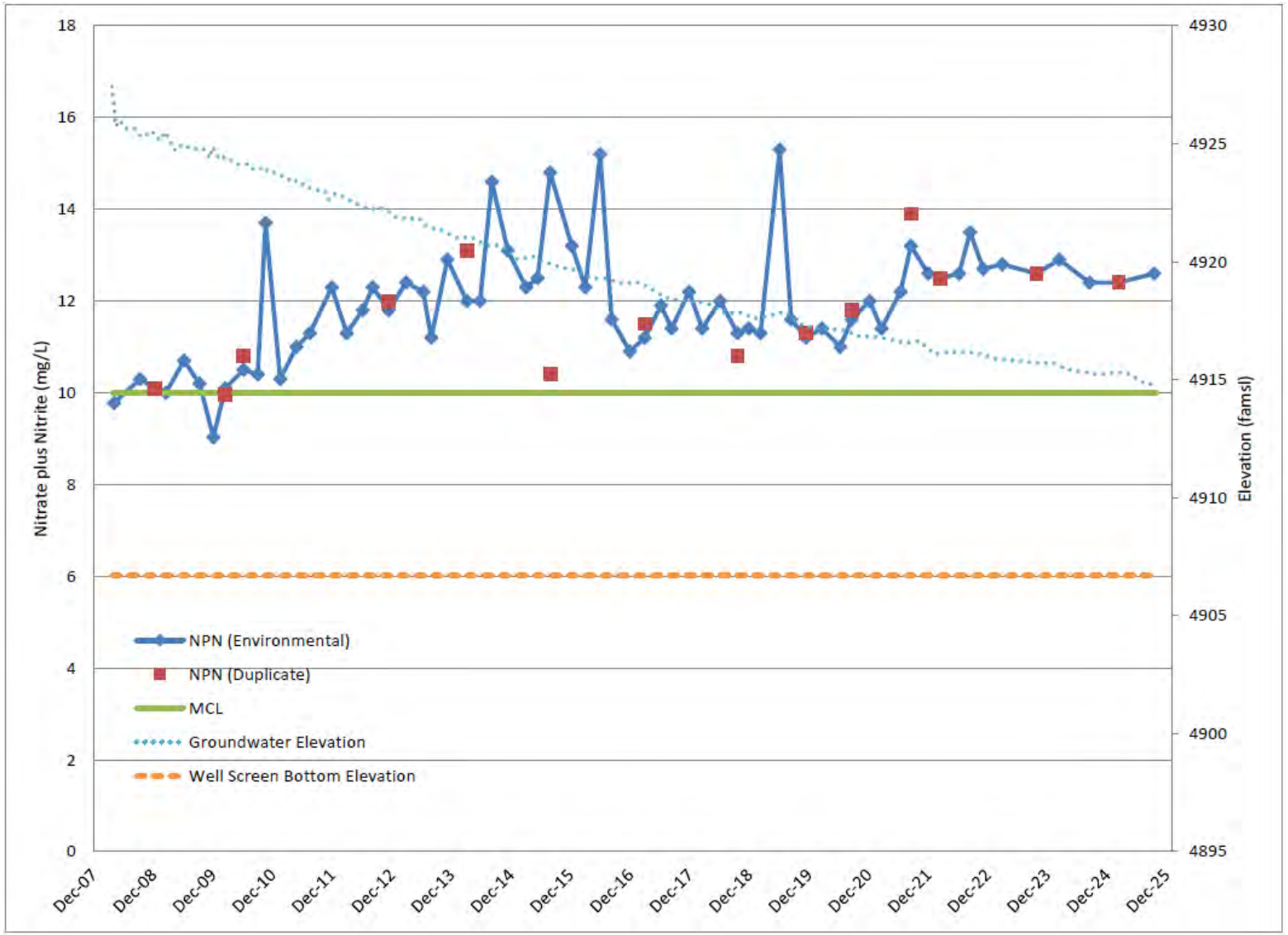


Figure 3C-8
Nitrate Plus Nitrite Concentrations, TAV-MW10

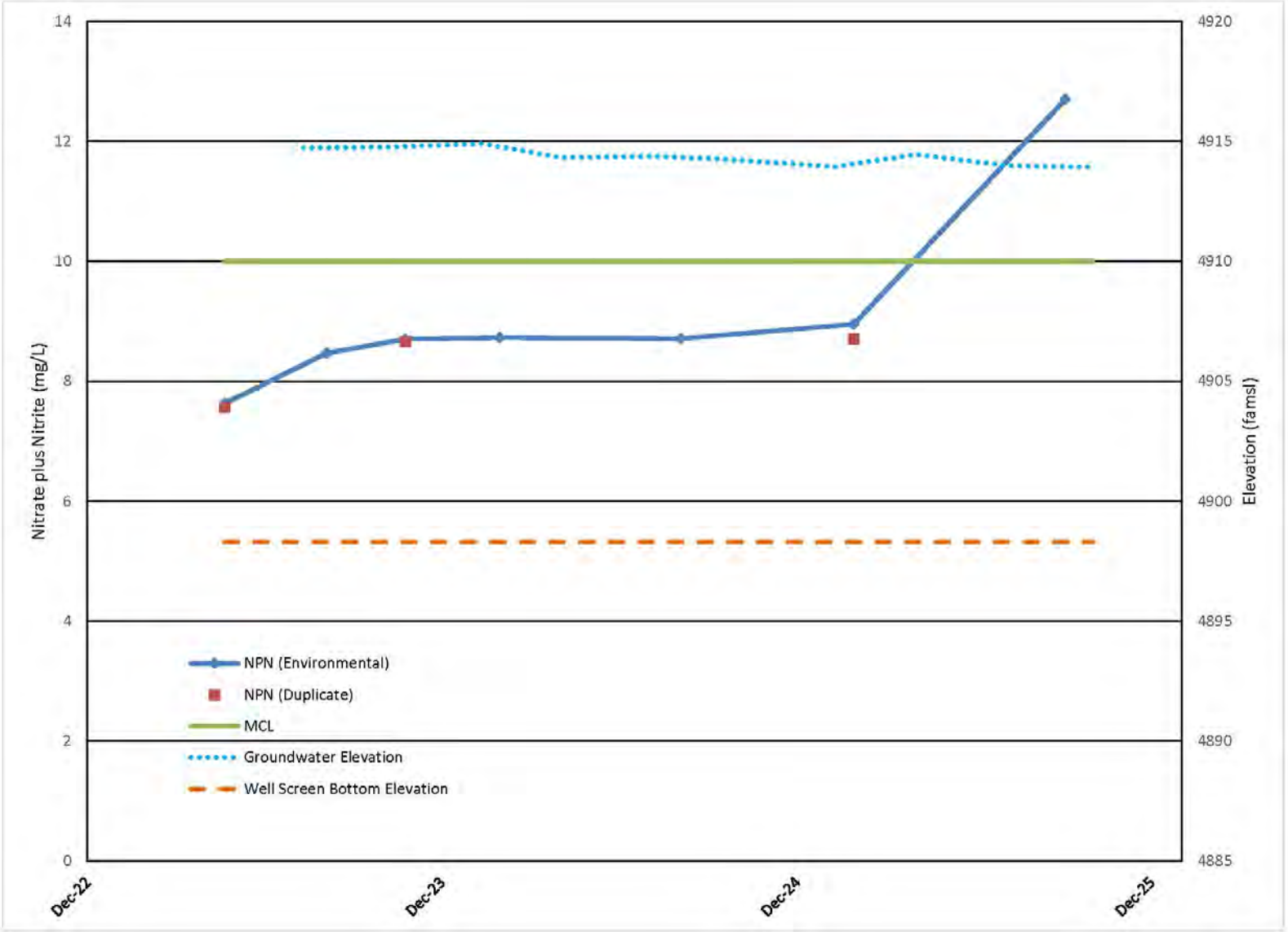


Figure 3C-9
Nitrate Plus Nitrite Concentrations, TAV-MW17

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Attachment 4A
Burn Site Groundwater Area of Concern
Monitoring Well Hydrographs

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Attachment 4A Monitoring Well Hydrographs

Figure 4A-1 Burn Site Groundwater Area of Concern Wells (1 of 4).....4A-5
Figure 4A-2 Burn Site Groundwater Area of Concern Wells (2 of 4).....4A-6
Figure 4A-3 Burn Site Groundwater Area of Concern Wells (3 of 4).....4A-7
Figure 4A-4 Burn Site Groundwater Area of Concern Wells (4 of 4).....4A-8

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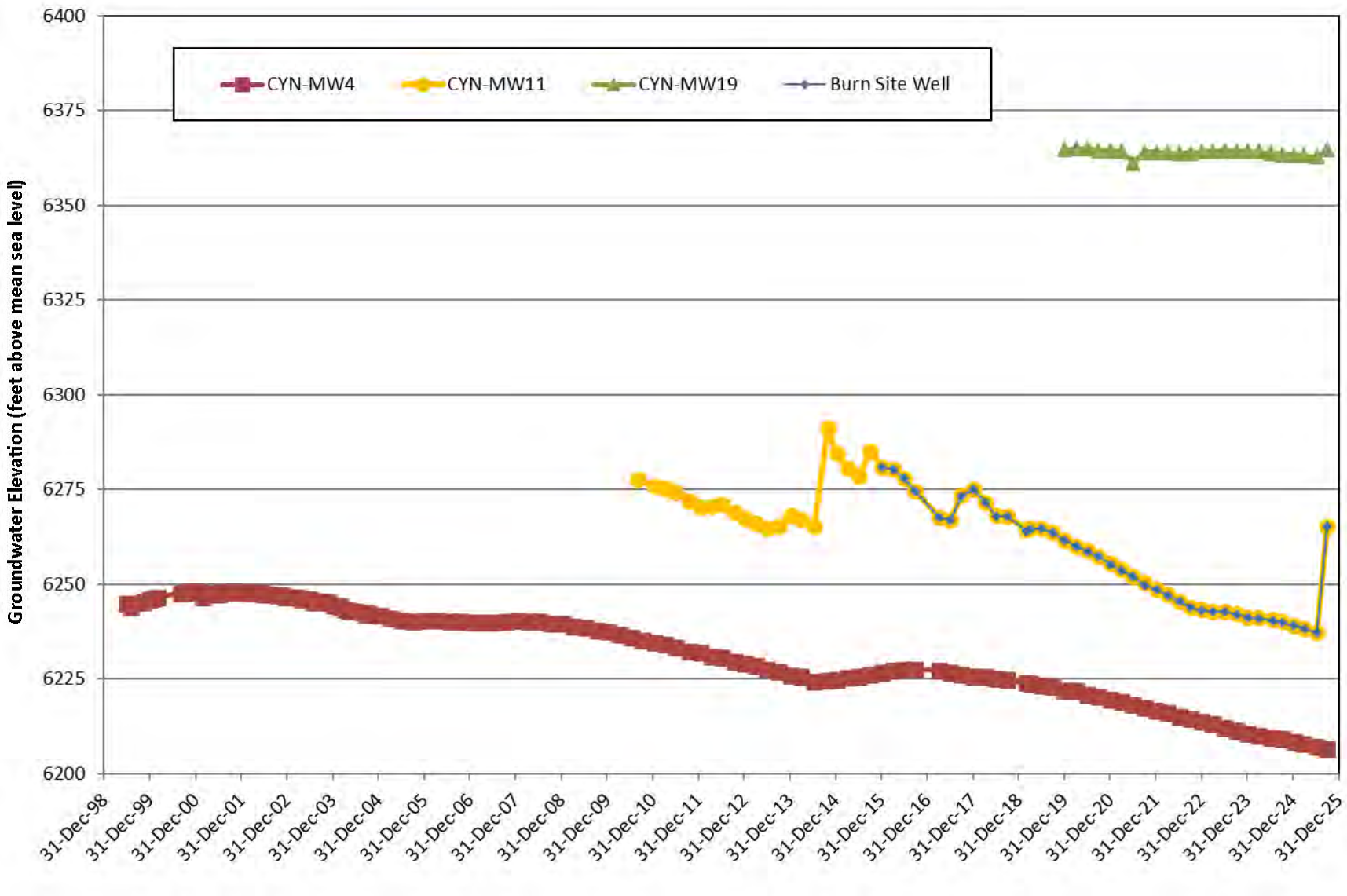


Figure 4A-1
Burn Site Groundwater Area of Concern Wells (1 of 4)

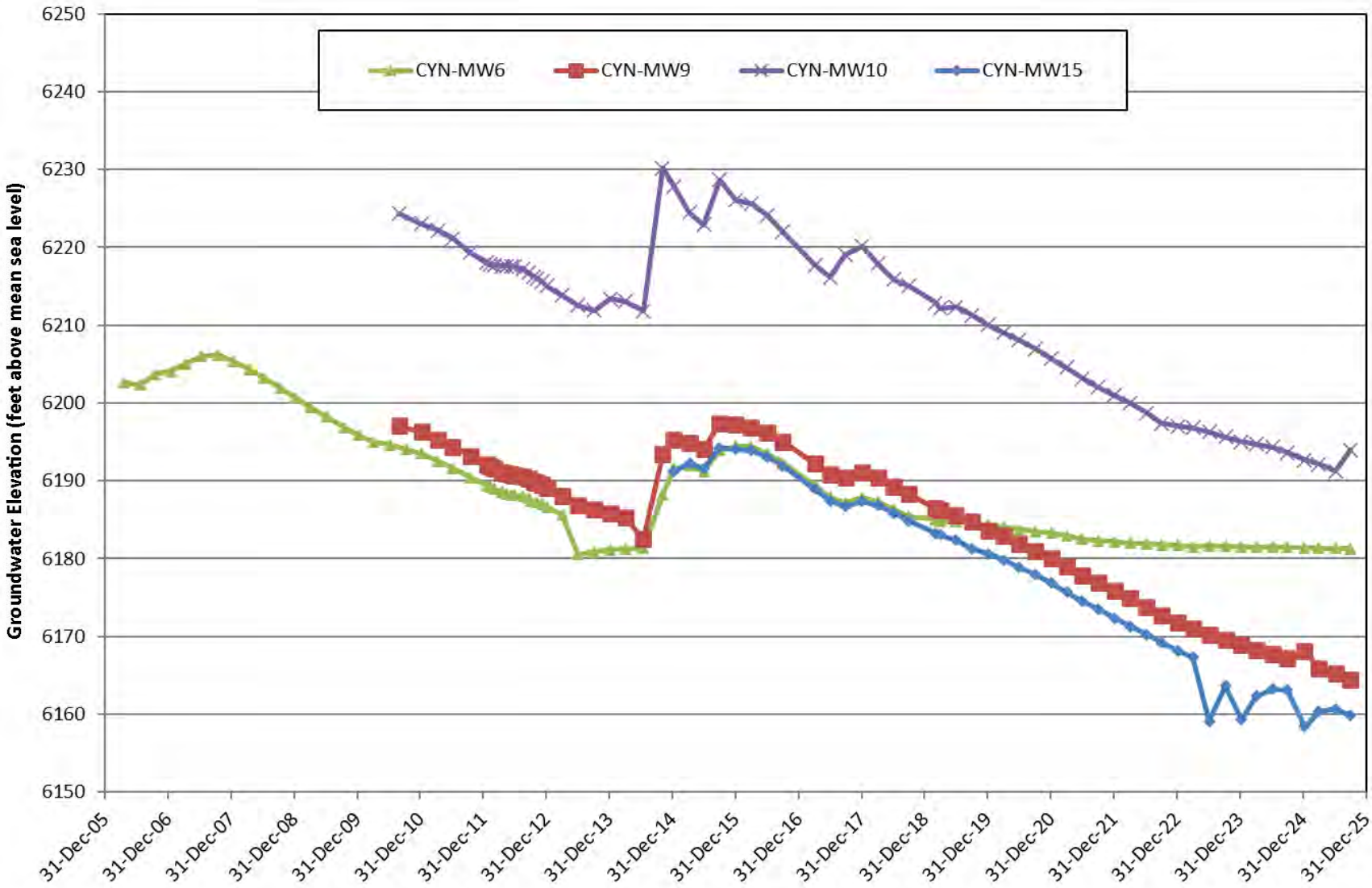


Figure 4A-2
Burn Site Groundwater Area of Concern Wells (2 of 4)

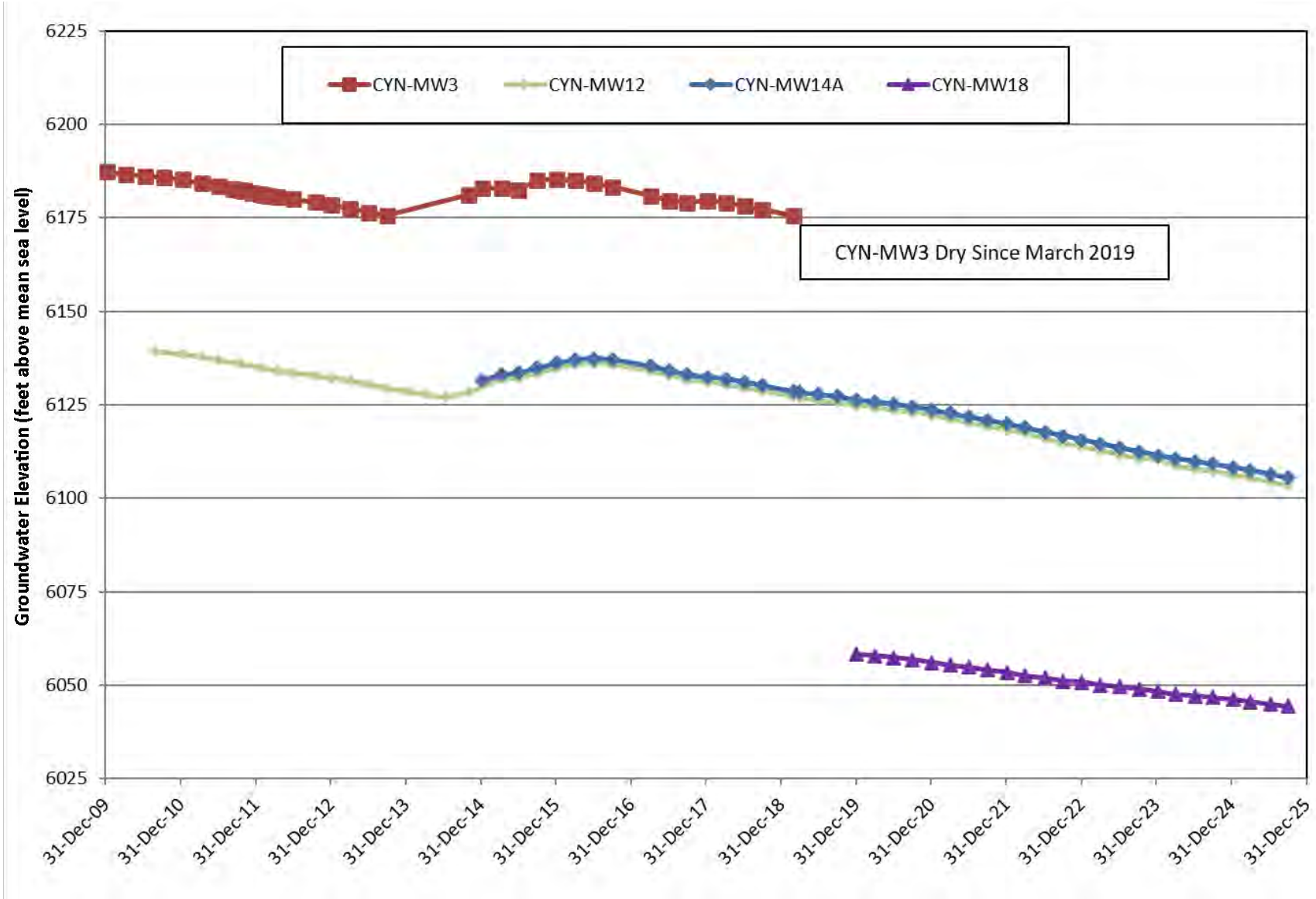


Figure 4A-3
Burn Site Groundwater Area of Concern Wells (3 of 4)

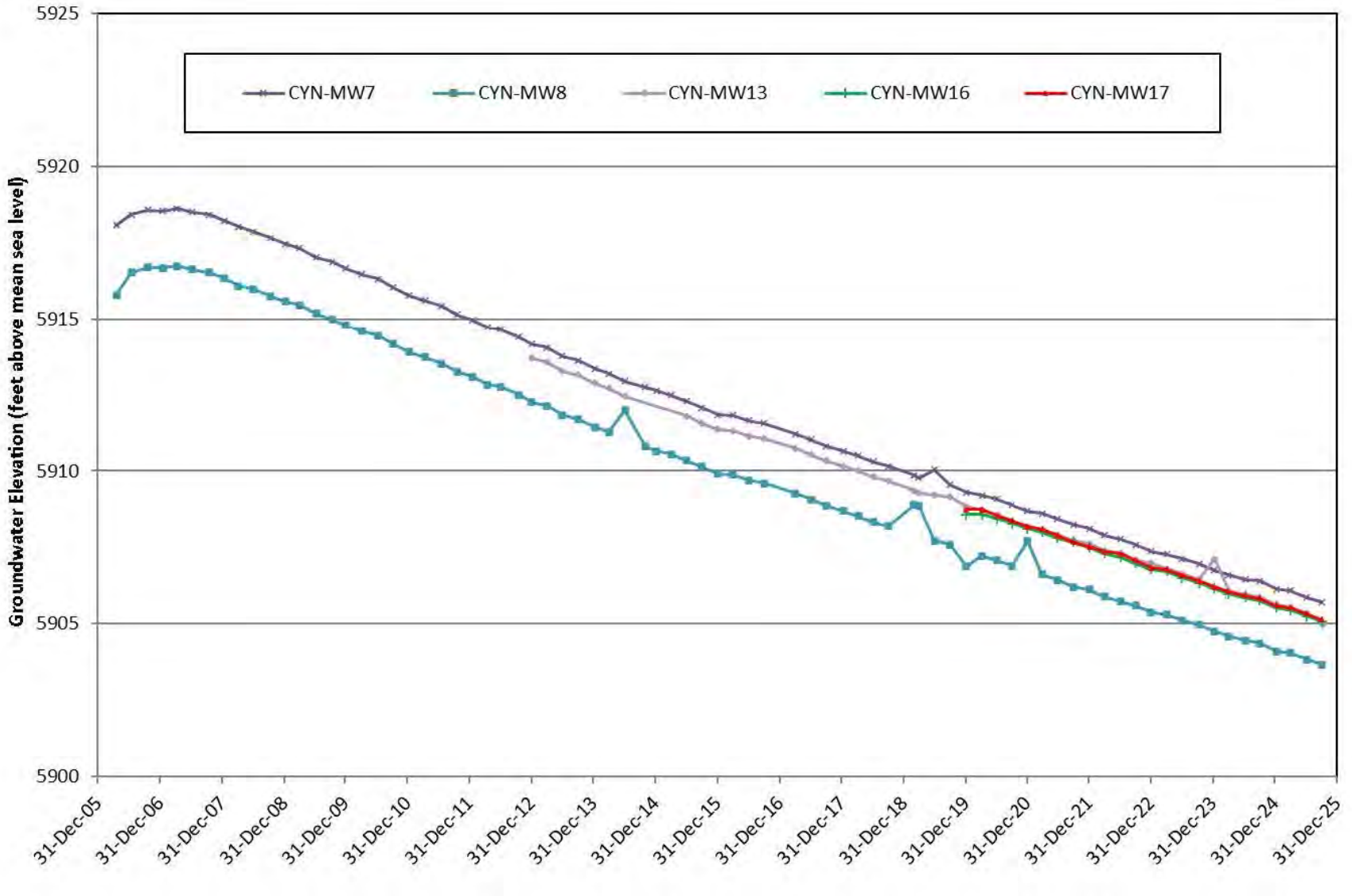


Figure 4A-4
Burn Site Groundwater Area of Concern Wells (4 of 4)

Attachment 4B
Burn Site Groundwater Area of Concern
Analytical Results Tables

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Attachment 4B Analytical Results Tables

Table 4B-1 Summary of Nitrate plus Nitrite Results, Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 4B-5

Table 4B-2 Summary of Diesel Range Organics and Gasoline Range Organics Results, Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 4B-7

Table 4B-3 Summary of Detected Volatile Organic Compounds and High Explosive Compounds, Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 4B-9

Table 4B-4 Method Detection Limits for Volatile Organic Compounds (EPA Method SW846-8260D), Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 4B-10

Table 4B-5 Method Detection Limits for High Explosive Compounds (EPA Method SW846-8330B), Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 4B-11

Table 4B-6 Summary of Anion and Alkalinity Results, Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 4B-12

Table 4B-7 Summary of Target Analyte List Metals Results, Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 4B-14

Table 4B-8 Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, and Tritium Results, Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 4B-27

Table 4B-9 Summary of Field Water Quality Parameter Measurements, Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 4B-32

Notes for Burn Site Groundwater Area of Concern Analytical Results Tables 4B-33

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Table 4B-1
Summary of Nitrate plus Nitrite Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW4 13-May-25	Nitrate plus nitrite	0.117	0.0170	0.0500			124372-005	EPA 353.2
CYN-MW7 15-May-25	Nitrate plus nitrite	2.42	0.170	0.500		J	124375-005	EPA 353.2
CYN-MW8 20-May-25	Nitrate plus nitrite	5.95	0.170	0.500	N	J+	124382-005	EPA 353.2
CYN-MW9 05-Jun-25	Nitrate plus nitrite	**34.3**	0.850	2.50	N	J+	124413-005	EPA 353.2
CYN-MW9 (Duplicate) 05-Jun-25	Nitrate plus nitrite	**34.6**	0.850	2.50	N	J+	124414-003	EPA 353.2
CYN-MW10 03-Jun-25	Nitrate plus nitrite	**39.5**	1.70	5.00	N	J+	124405-005	EPA 353.2
CYN-MW11 28-May-25	Nitrate plus nitrite	8.70	0.425	1.25	N	J+	124395-005	EPA 353.2
CYN-MW11 (Duplicate) 28-May-25	Nitrate plus nitrite	9.20	0.425	1.25	N	J+	124449-003	EPA 353.2
CYN-MW12 02-Jun-25	Nitrate plus nitrite	**21.8**	0.850	2.50	N	J+	124400-005	EPA 353.2
CYN-MW13 04-Jun-25	Nitrate plus nitrite	**25.1**	1.70	5.00	N	J+	124409-005	EPA 353.2
CYN-MW13 (Duplicate) 04-Jun-25	Nitrate plus nitrite	**25.9**	1.70	5.00	N	J+	124410-003	EPA 353.2
CYN-MW14A 29-May-25	Nitrate plus nitrite	**16.3**	0.850	2.50			124396-005	EPA 353.2
CYN-MW16 27-May-25	Nitrate plus nitrite	6.35	0.850	2.50			124391-005	EPA 353.2
CYN-MW17 14-May-25	Nitrate plus nitrite	2.32	0.170	0.500		J	124373-005	EPA 353.2
CYN-MW18 21-May-25	Nitrate plus nitrite	6.45	0.850	2.50			124387-005	EPA 353.2
CYN-MW18 (Duplicate) 21-May-25	Nitrate plus nitrite	6.45	0.850	2.50			124388-003	EPA 353.2
CYN-MW19 19-May-25	Nitrate plus nitrite	3.15	0.170	0.500			124380-005	EPA 353.2

Bold indicates that the nitrate plus nitrite concentration exceeds the EPA MCL of 10 mg/L.
See notes at end of tables.

Table 4B-1 (concluded)
Summary of Nitrate plus Nitrite Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW4 06-Nov-25	Nitrate plus nitrite	0.116	0.0170	0.0500		J	130780-003	EPA 353.2
CYN-MW7 21-Oct-25	Nitrate plus nitrite	2.34	0.170	0.500			130787-003	EPA 353.2
CYN-MW7 (Duplicate) 21-Oct-25	Nitrate plus nitrite	2.35	0.170	0.500			130788-003	EPA 353.2
CYN-MW8 22-Oct-25	Nitrate plus nitrite	4.69	0.170	0.500			130792-003	EPA 353.2
CYN-MW9 13-Nov-25	Nitrate plus nitrite	**30.3**	1.70	5.00			130821-003	EPA 353.2
CYN-MW10 11-Nov-25	Nitrate plus nitrite	**15.2**	0.425	1.25			130814-003	EPA 353.2
CYN-MW10 (Duplicate) 11-Nov-25	Nitrate plus nitrite	**16.6**	0.425	1.25			130815-003	EPA 353.2
CYN-MW11 04-Nov-25	Nitrate plus nitrite	**12.8**	0.170	0.500			130802-003	EPA 353.2
CYN-MW12 10-Nov-25	Nitrate plus nitrite	**17.5**	0.850	2.50			130810-003	EPA 353.2
CYN-MW13 12-Nov-25	Nitrate plus nitrite	**25.0**	0.850	2.50			130819-003	EPA 353.2
CYN-MW14A 05-Nov-25	Nitrate plus nitrite	**13.7**	0.170	0.500			130806-003	EPA 353.2
CYN-MW14A (Duplicate) 05-Nov-25	Nitrate plus nitrite	**14.2**	0.170	0.500			130807-003	EPA 353.2
CYN-MW16 30-Oct-25	Nitrate plus nitrite	7.09	0.170	0.500			130798-003	EPA 353.2
CYN-MW16(Duplicate) 30-Oct-25	Nitrate plus nitrite	8.33	0.170	0.500			130799-003	EPA 353.2
CYN-MW17 21-Oct-25	Nitrate plus nitrite	2.27	0.170	0.500			130783-003	EPA 353.2
CYN-MW18 03-Nov-25	Nitrate plus nitrite	6.75	0.0850	0.250			130794-003	EPA 353.2
CYN-MW19 20-Oct-25	Nitrate plus nitrite	3.55	0.170	0.500			130790-003	EPA 353.2

Bold indicates that the nitrate plus nitrite concentration exceeds the EPA MCL of 10 mg/L.
See notes at end of tables.

Table 4B-2
Summary of Diesel Range Organics and Gasoline Range Organics Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (µg/L)	MDL[b] (µg/L)	PQL[c] (µg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW4	Diesel Range Organics	ND	81.6	218	U, h	UJ	124372-003	SW846-3535A/8015D
13-May-25	Gasoline Range Organics	ND	16.7	100	U		124372-004	SW846-8015D GRO
CYN-MW7	Diesel Range Organics	ND	75.0	200	U		124375-003	SW846-3535A/8015D
15-May-25	Gasoline Range Organics	ND	16.7	100	U		124375-004	SW846-8015D GRO
CYN-MW8	Diesel Range Organics	89.7	77.8	207	J, *	J	124382-003	SW846-3535A/8015D
20-May-25	Gasoline Range Organics	ND	16.7	100	U		124382-004	SW846-8015D GRO
CYN-MW9	Diesel Range Organics	93.6	79.3	211	J, *	J	124413-003	SW846-3535A/8015D
05-Jun-25	Gasoline Range Organics	ND	16.7	100	U		124413-004	SW846-8015D GRO
CYN-MW9 (Duplicate)	Diesel Range Organics	83.8	80.7	215	J, *	J	124414-001	SW846-3535A/8015D
05-Jun-25	Gasoline Range Organics	ND	16.7	100	U		124414-002	SW846-8015D GRO
CYN-MW10	Diesel Range Organics	ND	79.7	213	U, *, h	UJ	124405-003	SW846-3535A/8015D
03-Jun-25	Gasoline Range Organics	ND	16.7	100	U		124405-004	SW846-8015D GRO
CYN-MW11	Diesel Range Organics	ND	79.9	213	U		124395-003	SW846-3535A/8015D
28-May-25	Gasoline Range Organics	ND	16.7	100	U		124395-004	SW846-8015D GRO
CYN-MW11 (Duplicate)	Diesel Range Organics	ND	79.1	211	U		124449-001	SW846-3535A/8015D
28-May-25	Gasoline Range Organics	ND	16.7	100	U		124449-002	SW846-8015D GRO
CYN-MW12	Diesel Range Organics	87.1	80.9	216	J, *, h	J-	124400-003	SW846-3535A/8015D
02-Jun-25	Gasoline Range Organics	ND	16.7	100	U		124400-004	SW846-8015D GRO
CYN-MW13	Diesel Range Organics	ND	75.0	200	U, *	UJ	124409-003	SW846-3535A/8015D
04-Jun-25	Gasoline Range Organics	ND	16.7	100	U		124409-004	SW846-8015D GRO
CYN-MW13 (Duplicate)	Diesel Range Organics	ND	75.2	201	U, *	UJ	124410-001	SW846-3535A/8015D
04-Jun-25	Gasoline Range Organics	ND	16.7	100	U		124410-002	SW846-8015D GRO
CYN-MW14A	Diesel Range Organics	ND	77.9	208	U		124396-003	SW846-3535A/8015D
29-May-25	Gasoline Range Organics	ND	16.7	100	U		124396-004	SW846-8015D GRO
CYN-MW16	Diesel Range Organics	ND	75.0	200	U		124391-003	SW846-3535A/8015D
27-May-25	Gasoline Range Organics	ND	16.7	100	U		124391-004	SW846-8015D GRO
CYN-MW17	Diesel Range Organics	ND	79.1	211	U, h	UJ	124373-003	SW846-3535A/8015D
14-May-25	Gasoline Range Organics	ND	16.7	100	U		124373-004	SW846-8015D GRO
CYN-MW18	Diesel Range Organics	88.4	75.0	200	J		124387-003	SW846-3535A/8015D
21-May-25	Gasoline Range Organics	ND	16.7	100	U		124387-004	SW846-8015D GRO
CYN-MW18 (Duplicate)	Diesel Range Organics	ND	82.0	219	U		124388-001	SW846-3535A/8015D
21-May-25	Gasoline Range Organics	ND	16.7	100	U		124388-002	SW846-8015D GRO
CYN-MW19	Diesel Range Organics	ND	75.0	200	U, *	UJ	124380-003	SW846-3535A/8015D
19-May-25	Gasoline Range Organics	ND	16.7	100	U		124380-004	SW846-8015D GRO

See notes at end of tables.

Table 4B-2 (concluded)
Summary of Diesel Range Organics and Gasoline Range Organics Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (µg/L)	MDL[b] (µg/L)	PQL[c] (µg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW4	Diesel Range Organics	ND	75.0	200	U, *	UJ	130780-002	SW846-3535A/8015D
06-Nov-25	Gasoline Range Organics	ND	16.7	100	U		130780-001	SW846-8015D GRO
CYN-MW7	Diesel Range Organics	ND	80.5	215	U	UJ	130787-002	SW846-3535A/8015D
21-Oct-25	Gasoline Range Organics	ND	16.7	100	U		130787-001	SW846-8015D GRO
CYN-MW7 (Duplicate)	Diesel Range Organics	ND	80.2	214	U		130788-002	SW846-3535A/8015D
21-Oct-25	Gasoline Range Organics	ND	16.7	100	U		130788-001	SW846-8015D GRO
CYN-MW8	Diesel Range Organics	94.9	75.0	200	J, *	J	130792-002	SW846-3535A/8015D
22-Oct-25	Gasoline Range Organics	ND	16.7	100	U		130792-001	SW846-8015D GRO
CYN-MW9	Diesel Range Organics	ND	79.8	213	U, *	UJ	130821-002	SW846-3535A/8015D
13-Nov-25	Gasoline Range Organics	ND	16.7	100	U		130821-001	SW846-8015D GRO
CYN-MW10	Diesel Range Organics	ND	75.0	200	U, *	UJ	130814-002	SW846-3535A/8015D
11-Nov-25	Gasoline Range Organics	ND	16.7	100	U		130814-001	SW846-8015D GRO
CYN-MW10 (Duplicate)	Diesel Range Organics	ND	78.0	208	U, *	UJ	130815-002	SW846-3535A/8015D
11-Nov-25	Gasoline Range Organics	ND	16.7	100	U		130815-001	SW846-8015D GRO
CYN-MW11	Diesel Range Organics	ND	75.0	200	U		130802-002	SW846-3535A/8015D
04-Nov-25	Gasoline Range Organics	ND	16.7	100	U		130802-001	SW846-8015D GRO
CYN-MW12	Diesel Range Organics	ND	87.2	233	U, *	UJ	130810-002	SW846-3535A/8015D
10-Nov-25	Gasoline Range Organics	ND	16.7	100	U		130810-001	SW846-8015D GRO
CYN-MW13	Diesel Range Organics	ND	79.3	211	U, *	UJ	130819-002	SW846-3535A/8015D
12-Nov-25	Gasoline Range Organics	ND	16.7	100	U		130819-001	SW846-8015D GRO
CYN-MW14A	Diesel Range Organics	ND	79.0	211	U		130806-002	SW846-3535A/8015D
05-Nov-25	Gasoline Range Organics	ND	16.7	100	U		130806-001	SW846-8015D GRO
CYN-MW14A (Duplicate)	Diesel Range Organics	ND	80.6	215	U		130807-002	SW846-3535A/8015D
05-Nov-25	Gasoline Range Organics	ND	16.7	100	U		130807-001	SW846-8015D GRO
CYN-MW16	Diesel Range Organics	85.7	75.0	200	J	J+	130798-002	SW846-3535A/8015D
30-Oct-25	Gasoline Range Organics	ND	16.7	100	U		130798-001	SW846-8015D GRO
CYN-MW16 (Duplicate)	Diesel Range Organics	109	76.9	212	J	J+	130799-002	SW846-3535A/8015D
30-Oct-25	Gasoline Range Organics	ND	16.7	100	U		130799-001	SW846-8015D GRO
CYN-MW17	Diesel Range Organics	106	78.5	209	B, J	209UJ	130783-002	SW846-3535A/8015D
21-Oct-25	Gasoline Range Organics	ND	16.7	100	U		130783-001	SW846-8015D GRO
CYN-MW18	Diesel Range Organics	ND	75.0	200	U		130794-002	SW846-3535A/8015D
03-Nov-25	Gasoline Range Organics	ND	16.7	100	U		130794-001	SW846-8015D GRO
CYN-MW19	Diesel Range Organics	ND	75.0	200	U		130790-002	SW846-3535A/8015D
20-Oct-25	Gasoline Range Organics	ND	16.7	100	U		130790-001	SW846-8015D GRO

See notes at end of tables.

Table 4B-3
Summary of Detected Volatile Organic Compounds and High Explosive Compounds, Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (µg/L)	MDL[b] (µg/L)	PQL[c] (µg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW4 13-May-25	Methylene chloride	2.15	0.500	5.00	B, J	5.00UJ	124372-001	SW846-8260D
CYN-MW7 15-May-25	Methylene chloride	1.27	0.500	5.00	B, J	5.00UJ	124375-001	SW846-8260D
CYN-MW8 20-Jun-25	Methylene chloride	1.74	0.500	5.00	B, J	5.00UJ	124382-001	SW846-8260D
CYN-MW9	Acetone	4.27	1.74	5.00	B, J	5.00UJ	124413-001	SW846-8260D
05-Jun-25	Methylene chloride	1.11	0.500	5.00	B, J	5.00UJ	124413-001	SW846-8260D
CYN-MW10	Methylene chloride	0.780	0.500	5.00	J	5.00UJ	124405-001	SW846-8260D
03-Jun-25	HMX	0.238	0.0850	0.266	J	J	124405-002	SW846-8260D
CYN-MW11 28-May-25	Methylene chloride	1.01	0.500	5.00	B, J	5.00UJ	124395-001	SW846-8260D
CYN-MW12 02-Jun-25	Methylene chloride	0.690	0.500	5.00	J	5.00UJ	124400-001	SW846-8260D
CYN-MW13 04-Jun-25	Methylene chloride	1.82	0.500	5.00	B, J	5.00UJ	124409-001	SW846-8260D
CYN-MW14A 29-May-25	Methylene chloride	1.09	0.500	5.00	B, J	5.00UJ	124396-001	SW846-8260D
CYN-MW16	Methylene chloride	1.02	0.500	5.00	B, J	5.00UJ	124391-001	SW846-8260D
27-May-25	HMX	0.869	0.400	1.25	J, h	J	124391-002	SW846-8260D
CYN-MW17 14-May-25	Methylene chloride	2.11	0.500	5.00	B, J	5.00UJ	124373-001	SW846-8260D
CYN-MW18 21-May-25	Methylene chloride	3.66	0.500	5.00	J, N	5.00UJ	124387-001	SW846-8260D
CYN-MW19 19-May-25	Methylene chloride	1.26	0.500	5.00	B, J	5.00UJ	124380-001	SW846-8260D

See notes at end of tables.

Table 4B-4
Method Detection Limits for Volatile Organic Compounds (EPA Method[f] SW846-8260D), Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Analyte	MDL[b] (µg/L)	Analyte	MDL[b] (µg/L)
1,1,1-Trichloroethane	0.333	Chlorobenzene	0.333
1,1,2,2-Tetrachloroethane	0.333	Chloroethane	0.333
1,1,2-Trichloroethane	0.333	Chloroform	0.333
1,1-Dichloroethane	0.333	Chloromethane	0.333
1,1-Dichloroethene	0.333	Cyclohexane	0.333
1,2,3-Trichlorobenzene	0.333	Dibromochloromethane	0.333
1,2,4-Trichlorobenzene	0.333	Dichlorodifluoromethane	0.355
1,2-Dibromo-3-chloropropane	0.333	Ethylbenzene	0.333
1,2-Dibromoethane	0.333	Isopropylbenzene	0.333
1,2-Dichlorobenzene	0.333	Methyl acetate	1.67
1,2-Dichloroethane	0.333	Methylcyclohexane	0.333
1,2-Dichloropropane	0.333	Methylene chloride	0.500
1,3-Dichlorobenzene	0.333	Styrene	0.333
1,4-Dichlorobenzene	0.333	Tert-butyl methyl ether	0.333
2,2-trifluoroethane, 1,1,2-Trichloro-1	1.67	Tetrachloroethene	0.333
2-Butanone	1.67	Toluene	0.333
2-Hexanone	1.67	Trichloroethene	0.333
4-methyl-, 2-Pentanone	1.67	Trichlorofluoromethane	0.333
Acetone	1.74	Vinyl chloride	0.333
Benzene	0.333	Xylene	1.00
Bromochloromethane	0.333	cis-1,2-Dichloroethene	0.333
Bromodichloromethane	0.333	cis-1,3-Dichloropropene	0.333
Bromoform	0.333	m-,p-Xylene	0.500
Bromomethane	0.337	o-Xylene	0.333
Carbon disulfide	1.67	trans-1,2-Dichloroethene	0.333
Carbon tetrachloride	0.333	trans-1,3-Dichloropropene	0.333

See notes at end of tables.

Table 4B-5
Method Detection Limits for High Explosive Compounds (EPA Method[f] SW846-8330B), Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Analyte	MDL[b] (µg/L)
1,3,5-Trinitrobenzene	0.0828 – 0.0905
1,3-Dinitrobenzene	0.0828 – 0.0905
2,4,6-Trinitrotoluene	0.0828 – 0.0905
2,4-Dinitrotoluene	0.0828 – 0.0905
2,6-Dinitrotoluene	0.0828 – 0.0905
2-Amino-4,6-dinitrotoluene	0.0828 – 0.0905
2-Nitrotoluene	0.0848 – 0.0928
3-Nitrotoluene	0.0828 – 0.0905
4-Amino-2,6-dinitrotoluene	0.0828 – 0.0905
4-Nitrotoluene	0.155 – 0.170
HMX	0.0828 – 0.4000
Nitro-benzene	0.0828 – 0.0905
Pentaerythritol tetranitrate	0.103 – 0.113
RDX	0.0828 – 0.0905
Tetryl	0.0828 – 0.0905

See notes at end of tables.

Table 4B-6
Summary of Anion and Alkalinity Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW4	Bromide	0.359	0.0670	0.200			124372-006	SW846-9056A
13-May-25	Chloride	24.7	0.670	2.00			124372-006	SW846-9056A
	Fluoride	0.773	0.0330	0.100			124372-006	SW846-9056A
	Sulfate	134	1.33	4.00			124372-006	SW846-9056A
	Total Alkalinity as $CaCO_3$	238	0.725	2.00			124372-007	SM 2320B
CYN-MW7	Bromide	0.589	0.0670	0.200			124375-006	SW846-9056A
15-May-25	Chloride	41.4	0.670	2.00			124375-006	SW846-9056A
	Fluoride	1.37	0.0330	0.100			124375-006	SW846-9056A
	Sulfate	85.1	1.33	4.00			124375-006	SW846-9056A
	Total Alkalinity as $CaCO_3$	270	0.725	2.00			124375-007	SM 2320B
CYN-MW8	Bromide	0.761	0.0670	0.200			124382-006	SW846-9056A
20-May-25	Chloride	56.2	0.670	2.00			124382-006	SW846-9056A
	Fluoride	1.35	0.0330	0.100			124382-006	SW846-9056A
	Sulfate	123	1.33	4.00			124382-006	SW846-9056A
	Total Alkalinity as $CaCO_3$	248	0.725	2.00			124382-007	SM 2320B
CYN-MW9	Bromide	0.747	0.0670	0.200			124413-006	SW846-9056A
05-Jun-25	Chloride	53.3	0.670	2.00			124413-006	SW846-9056A
	Fluoride	0.570	0.0330	0.100			124413-006	SW846-9056A
	Sulfate	138	1.33	4.00			124413-006	SW846-9056A
	Total Alkalinity as $CaCO_3$	262	0.725	2.00			124413-007	SM 2320B
CYN-MW10	Bromide	0.908	0.0670	0.200			124405-006	SW846-9056A
03-Jun-25	Chloride	60.9	1.34	4.00			124405-006	SW846-9056A
	Fluoride	0.565	0.0330	0.100			124405-006	SW846-9056A
	Sulfate	175	2.66	8.00			124405-006	SW846-9056A
	Total Alkalinity as $CaCO_3$	262	0.725	2.00			124405-007	SM 2320B
CYN-MW11	Bromide	1.15	0.0670	0.200			124395-006	SW846-9056A
28-May-25	Chloride	89.1	1.34	4.00			124395-006	SW846-9056A
	Fluoride	0.796	0.0330	0.100			124395-006	SW846-9056A
	Sulfate	211	2.66	8.00			124395-006	SW846-9056A
	Total Alkalinity as $CaCO_3$	227	0.725	2.00			124395-007	SM 2320B
CYN-MW12	Bromide	1.61	0.0670	0.200			124400-006	SW846-9056A
02-Jun-25	Chloride	128	3.35	10.0			124400-006	SW846-9056A
	Fluoride	1.01	0.0330	0.100			124400-006	SW846-9056A
	Sulfate	378	6.65	20.0			124400-006	SW846-9056A
	Total Alkalinity as $CaCO_3$	231	0.725	2.00			124400-007	SM 2320B

See notes at end of tables.

Table 4B-6 (concluded)
Summary of Anion and Alkalinity Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW13 04-Jun-25	Bromide	0.413	0.0670	0.200			124409-006	SW846-9056A
	Chloride	25.5	0.670	2.00			124409-006	SW846-9056A
	Fluoride	1.63	0.0330	0.100			124409-006	SW846-9056A
	Sulfate	93.4	1.33	4.00			124409-006	SW846-9056A
	Total Alkalinity as $CaCO_3$	189	0.725	2.00			124409-007	SM 2320B
CYN-MW14A 29-May-25	Bromide	0.822	0.0670	0.200			124396-006	SW846-9056A
	Chloride	62.1	1.34	4.00			124396-006	SW846-9056A
	Fluoride	0.924	0.0330	0.100			124396-006	SW846-9056A
	Sulfate	187	2.66	8.00			124396-006	SW846-9056A
	Total Alkalinity as $CaCO_3$	239	0.725	2.00			124396-007	SM 2320B
CYN-MW16 27-May-25	Bromide	0.625	0.0670	0.200			124391-006	SW846-9056A
	Chloride	41.9	0.670	2.00			124391-006	SW846-9056A
	Fluoride	1.56	0.0330	0.100			124391-006	SW846-9056A
	Sulfate	113	1.33	4.00			124391-006	SW846-9056A
	Total Alkalinity as $CaCO_3$	210	0.725	2.00			124391-007	SM 2320B
CYN-MW17 14-May-25	Bromide	0.632	0.0670	0.200			124373-006	SW846-9056A
	Chloride	34.3	0.335	1.00			124373-006	SW846-9056A
	Fluoride	1.81	0.0330	0.100			124373-006	SW846-9056A
	Sulfate	83.7	0.665	2.00			124373-006	SW846-9056A
	Total Alkalinity as $CaCO_3$	183	0.725	2.00			124373-007	SM 2320B
CYN-MW18 21-May-25	Bromide	0.641	0.0670	0.200			124387-006	SW846-9056A
	Chloride	44.5	1.34	4.00			124387-006	SW846-9056A
	Fluoride	2.02	0.0330	0.100			124387-006	SW846-9056A
	Sulfate	196	2.66	8.00			124387-006	SW846-9056A
	Total Alkalinity as $CaCO_3$	200	0.725	2.00			124387-007	SM 2320B
CYN-MW19 19-May-25	Bromide	0.512	0.0670	0.200			124380-006	SW846-9056A
	Chloride	31.6	0.670	2.00			124380-006	SW846-9056A
	Fluoride	0.653	0.0330	0.100			124380-006	SW846-9056A
	Sulfate	127	1.33	4.00			124380-006	SW846-9056A
	Total Alkalinity as $CaCO_3$	248	0.725	2.00			124380-007	SM 2320B

See notes at end of tables.

Table 4B-7
Summary of Target Analyte List Metals Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW4	Aluminum	ND	0.0193	0.0500	U		124372-008	SW846-3005A/6020B
13-May-25	Antimony	0.00127	0.00100	0.00300	J		124372-008	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		124372-008	SW846-3005A/6020B
	Barium	0.0386	0.000670	0.00400			124372-008	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		124372-008	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		124372-008	SW846-3005A/6020B
	Calcium	75.3	0.400	1.00			124372-008	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		124372-008	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		124372-008	SW846-3005A/6020B
	Copper	0.000352	0.000300	0.00200	J		124372-008	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		124372-008	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		124372-008	SW846-3005A/6020B
	Magnesium	36.4	0.0100	0.0300			124372-008	SW846-3005A/6020B
	Manganese	0.00277	0.00100	0.00500	J		124372-008	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		124372-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		124372-008	SW846-3005A/6020B
	Potassium	6.32	0.0800	0.300			124372-008	SW846-3005A/6020B
	Selenium	0.0141	0.00150	0.00500			124372-008	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		124372-008	SW846-3005A/6020B
	Sodium	41.6	0.0800	0.250			124372-008	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		124372-008	SW846-3005A/6020B
	Vanadium	ND	0.00330	0.0200	U		124372-008	SW846-3005A/6020B
	Zinc	0.00538	0.00330	0.0200	J		124372-008	SW846-3005A/6020B

See notes at end of tables.

Table 4B-7 (continued)
Summary of Target Analyte List Metals Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW7	Aluminum	ND	0.0193	0.0500	U		124375-008	SW846-3005A/6020B
15-May-25	Antimony	ND	0.00100	0.00300	U		124375-008	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		124375-008	SW846-3005A/6020B
	Barium	0.104	0.000670	0.00400			124375-008	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U, N		124375-008	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		124375-008	SW846-3005A/6020B
	Calcium	96.1	0.800	2.00			124375-008	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		124375-008	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		124375-008	SW846-3005A/6020B
	Copper	0.000392	0.000300	0.00200	J		124375-008	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		124375-008	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		124375-008	SW846-3005A/6020B
	Magnesium	20.1	0.0100	0.0300			124375-008	SW846-3005A/6020B
	Manganese	0.00134	0.00100	0.00500	J		124375-008	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		124375-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		124375-008	SW846-3005A/6020B
	Potassium	2.38	0.0800	0.300			124375-008	SW846-3005A/6020B
	Selenium	0.00436	0.00150	0.00500	J		124375-008	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		124375-008	SW846-3005A/6020B
	Sodium	36.8	0.0800	0.250			124375-008	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		124375-008	SW846-3005A/6020B
	Vanadium	0.00482	0.00330	0.0200	J		124375-008	SW846-3005A/6020B
	Zinc	0.00465	0.00330	0.0200	J		124375-008	SW846-3005A/6020B

See notes at end of tables.

Table 4B-7 (continued)
Summary of Target Analyte List Metals Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW8	Aluminum	ND	0.0193	0.0500	U		124382-008	SW846-3005A/6020B
20-May-25	Antimony	ND	0.00100	0.00300	U		124382-008	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		124382-008	SW846-3005A/6020B
	Barium	0.0535	0.000670	0.00400			124382-008	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U, N		124382-008	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		124382-008	SW846-3005A/6020B
	Calcium	104	0.800	2.00			124382-008	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		124382-008	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		124382-008	SW846-3005A/6020B
	Copper	0.000559	0.000300	0.00200	J		124382-008	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		124382-008	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		124382-008	SW846-3005A/6020B
	Magnesium	23.6	0.0100	0.0300			124382-008	SW846-3005A/6020B
	Manganese	0.00107	0.00100	0.00500	J	J-	124382-008	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		124382-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		124382-008	SW846-3005A/6020B
	Potassium	2.26	0.0800	0.300			124382-008	SW846-3005A/6020B
	Selenium	0.00675	0.00150	0.00500			124382-008	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		124382-008	SW846-3005A/6020B
	Sodium	42.5	0.0800	0.250			124382-008	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		124382-008	SW846-3005A/6020B
	Vanadium	0.00531	0.00330	0.0200	J		124382-008	SW846-3005A/6020B
	Zinc	0.00608	0.00330	0.0200	J		124382-008	SW846-3005A/6020B

See notes at end of tables.

Table 4B-7 (continued)
Summary of Target Analyte List Metals Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW9	Aluminum	ND	0.0193	0.0500	U		124413-008	SW846-3005A/6020B
05-Jun-25	Antimony	ND	0.00100	0.00300	U		124413-008	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		124413-008	SW846-3005A/6020B
	Barium	0.0642	0.000670	0.00400			124413-008	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		124413-008	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		124413-008	SW846-3005A/6020B
	Calcium	138	0.800	2.00			124413-008	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		124413-008	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		124413-008	SW846-3005A/6020B
	Copper	0.000641	0.000300	0.00200	J	0.002U	124413-008	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		124413-008	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		124413-008	SW846-3005A/6020B
	Magnesium	42.7	0.0100	0.0300			124413-008	SW846-3005A/6020B
	Manganese	ND	0.00100	0.00500	U	R	124413-008	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		124413-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		124413-008	SW846-3005A/6020B
	Potassium	2.31	0.0800	0.300			124413-008	SW846-3005A/6020B
	Selenium	0.00620	0.00150	0.00500			124413-008	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		124413-008	SW846-3005A/6020B
	Sodium	33.0	0.0800	0.250			124413-008	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		124413-008	SW846-3005A/6020B
	Vanadium	ND	0.00330	0.0200	U		124413-008	SW846-3005A/6020B
	Zinc	0.00436	0.00330	0.0200	J		124413-008	SW846-3005A/6020B

See notes at end of tables.

Table 4B-7 (continued)
Summary of Target Analyte List Metals Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW10	Aluminum	0.0397	0.0193	0.0500	J		124405-008	SW846-3005A/6020B
03-Jun-25	Antimony	ND	0.00100	0.00300	U		124405-008	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		124405-008	SW846-3005A/6020B
	Barium	0.0755	0.000670	0.00400			124405-008	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		124405-008	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		124405-008	SW846-3005A/6020B
	Calcium	147	0.800	2.00			124405-008	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		124405-008	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		124405-008	SW846-3005A/6020B
	Copper	0.00107	0.000300	0.00200	J		124405-008	SW846-3005A/6020B
	Iron	0.0610	0.0330	0.100	J		124405-008	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		124405-008	SW846-3005A/6020B
	Magnesium	42.3	0.0100	0.0300			124405-008	SW846-3005A/6020B
	Manganese	0.00254	0.00100	0.00500	J	J-	124405-008	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		124405-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		124405-008	SW846-3005A/6020B
	Potassium	2.07	0.0800	0.300			124405-008	SW846-3005A/6020B
	Selenium	0.00810	0.00150	0.00500			124405-008	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		124405-008	SW846-3005A/6020B
	Sodium	40.1	0.0800	0.250			124405-008	SW846-3005A/6020B
	Thallium	0.000634	0.000600	0.00200	J		124405-008	SW846-3005A/6020B
	Vanadium	0.00434	0.00330	0.0200	J		124405-008	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		124405-008	SW846-3005A/6020B

See notes at end of tables.

Table 4B-7 (continued)
Summary of Target Analyte List Metals Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW11	Aluminum	ND	0.0193	0.0500	U		124395-008	SW846-3005A/6020B
28-May-25	Antimony	0.00165	0.00100	0.00300	J		124395-008	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		124395-008	SW846-3005A/6020B
	Barium	0.0639	0.000670	0.00400			124395-008	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U, N		124395-008	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		124395-008	SW846-3005A/6020B
	Calcium	125	0.800	2.00			124395-008	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		124395-008	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		124395-008	SW846-3005A/6020B
	Copper	ND	0.000300	0.00200	U		124395-008	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		124395-008	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		124395-008	SW846-3005A/6020B
	Magnesium	42.9	0.0100	0.0300			124395-008	SW846-3005A/6020B
	Manganese	0.00140	0.00100	0.00500	J	0.005UJ	124395-008	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		124395-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		124395-008	SW846-3005A/6020B
	Potassium	3.33	0.0800	0.300			124395-008	SW846-3005A/6020B
	Selenium	0.00627	0.00150	0.00500			124395-008	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		124395-008	SW846-3005A/6020B
	Sodium	37.2	0.0800	0.250			124395-008	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		124395-008	SW846-3005A/6020B
	Vanadium	ND	0.00330	0.0200	U		124395-008	SW846-3005A/6020B
	Zinc	0.00802	0.00330	0.0200	J		124395-008	SW846-3005A/6020B

See notes at end of tables.

Table 4B-7 (continued)
Summary of Target Analyte List Metals Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW12 02-Jun-25	Aluminum	ND	0.0193	0.0500	U		124400-008	SW846-3005A/6020B
	Antimony	0.00113	0.00100	0.00300	J		124400-008	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		124400-008	SW846-3005A/6020B
	Barium	0.0428	0.000670	0.00400			124400-008	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U, N		124400-008	SW846-3005A/6020B
	Cadmium	0.000469	0.000300	0.00100	J		124400-008	SW846-3005A/6020B
	Calcium	202	0.800	2.00			124400-008	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		124400-008	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		124400-008	SW846-3005A/6020B
	Copper	0.000511	0.000300	0.00200	J		124400-008	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		124400-008	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		124400-008	SW846-3005A/6020B
	Magnesium	57.7	0.100	0.300			124400-008	SW846-3005A/6020B
	Manganese	0.00219	0.00100	0.00500	J	J-	124400-008	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		124400-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		124400-008	SW846-3005A/6020B
	Potassium	2.85	0.0800	0.300			124400-008	SW846-3005A/6020B
	Selenium	0.0168	0.00150	0.00500			124400-008	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		124400-008	SW846-3005A/6020B
	Sodium	49.4	0.0800	0.250			124400-008	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		124400-008	SW846-3005A/6020B
	Vanadium	ND	0.00330	0.0200	U		124400-008	SW846-3005A/6020B
	Zinc	0.0196	0.00330	0.0200	J		124400-008	SW846-3005A/6020B

See notes at end of tables.

Table 4B-7 (continued)
Summary of Target Analyte List Metals Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW13	Aluminum	ND	0.0193	0.0500	U		124409-008	SW846-3005A/6020B
04-Jun-25	Antimony	0.00159	0.00100	0.00300	J		124409-008	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		124409-008	SW846-3005A/6020B
	Barium	0.0924	0.000670	0.00400			124409-008	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		124409-008	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		124409-008	SW846-3005A/6020B
	Calcium	102	0.800	2.00			124409-008	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		124409-008	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		124409-008	SW846-3005A/6020B
	Copper	0.000981	0.000300	0.00200	J	0.002U	124409-008	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		124409-008	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		124409-008	SW846-3005A/6020B
	Magnesium	22.2	0.0100	0.0300			124409-008	SW846-3005A/6020B
	Manganese	ND	0.00100	0.00500	U	R	124409-008	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		124409-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		124409-008	SW846-3005A/6020B
	Potassium	1.89	0.0800	0.300			124409-008	SW846-3005A/6020B
	Selenium	0.00419	0.00150	0.00500	J		124409-008	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		124409-008	SW846-3005A/6020B
	Sodium	27.8	0.0800	0.250			124409-008	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		124409-008	SW846-3005A/6020B
	Vanadium	0.00471	0.00330	0.0200	J		124409-008	SW846-3005A/6020B
	Zinc	0.00460	0.00330	0.0200	J		124409-008	SW846-3005A/6020B

See notes at end of tables.

Table 4B-7 (continued)
Summary of Target Analyte List Metals Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW14A 29-May-25	Aluminum	ND	0.0193	0.0500	U		124396-008	SW846-3005A/6020B
	Antimony	ND	0.00100	0.00300	U		124396-008	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		124396-008	SW846-3005A/6020B
	Barium	0.0386	0.000670	0.00400			124396-008	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U, N		124396-008	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		124396-008	SW846-3005A/6020B
	Calcium	123	0.800	2.00			124396-008	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		124396-008	SW846-3005A/6020B
	Cobalt	0.00150	0.000300	0.00100			124396-008	SW846-3005A/6020B
	Copper	0.000437	0.000300	0.00200	J		124396-008	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		124396-008	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		124396-008	SW846-3005A/6020B
	Magnesium	34.3	0.0100	0.0300			124396-008	SW846-3005A/6020B
	Manganese	ND	0.00100	0.00500	U	UJ	124396-008	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		124396-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		124396-008	SW846-3005A/6020B
	Potassium	2.06	0.0800	0.300			124396-008	SW846-3005A/6020B
	Selenium	0.0118	0.00150	0.00500			124396-008	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		124396-008	SW846-3005A/6020B
	Sodium	38.1	0.0800	0.250			124396-008	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		124396-008	SW846-3005A/6020B
	Vanadium	ND	0.00330	0.0200	U		124396-008	SW846-3005A/6020B
	Zinc	0.00432	0.00330	0.0200	J		124396-008	SW846-3005A/6020B

See notes at end of tables.

Table 4B-7 (continued)
Summary of Target Analyte List Metals Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW16 27-May-25	Aluminum	ND	0.0193	0.0500	U		124391-008	SW846-3005A/6020B
	Antimony	ND	0.00100	0.00300	U		124391-008	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		124391-008	SW846-3005A/6020B
	Barium	0.0659	0.000670	0.00400			124391-008	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U, N		124391-008	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		124391-008	SW846-3005A/6020B
	Calcium	98.8	0.800	2.00			124391-008	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		124391-008	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		124391-008	SW846-3005A/6020B
	Copper	ND	0.000300	0.00200	U		124391-008	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		124391-008	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		124391-008	SW846-3005A/6020B
	Magnesium	18.3	0.0100	0.0300			124391-008	SW846-3005A/6020B
	Manganese	0.00143	0.00100	0.00500	J		124391-008	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		124391-008	SW846-7470A
	Nickel	0.000784	0.000600	0.00200	J		124391-008	SW846-3005A/6020B
	Potassium	2.18	0.0800	0.300			124391-008	SW846-3005A/6020B
	Selenium	0.00652	0.00150	0.00500			124391-008	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		124391-008	SW846-3005A/6020B
	Sodium	34.2	0.0800	0.250			124391-008	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		124391-008	SW846-3005A/6020B
	Vanadium	0.00625	0.00330	0.0200	J		124391-008	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		124391-008	SW846-3005A/6020B

See notes at end of tables.

Table 4B-7 (continued)
Summary of Target Analyte List Metals Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW17	Aluminum	ND	0.0193	0.0500	U		124373-008	SW846-3005A/6020B
14-May-25	Antimony	ND	0.00100	0.00300	U		124373-008	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		124373-008	SW846-3005A/6020B
	Barium	0.0781	0.000670	0.00400			124373-008	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	U		124373-008	SW846-3005A/6020B
	Cadmium	0.000349	0.000300	0.00100	J		124373-008	SW846-3005A/6020B
	Calcium	76.2	0.800	2.00			124373-008	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		124373-008	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		124373-008	SW846-3005A/6020B
	Copper	ND	0.000300	0.00200	U		124373-008	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		124373-008	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		124373-008	SW846-3005A/6020B
	Magnesium	16.7	0.0100	0.0300			124373-008	SW846-3005A/6020B
	Manganese	0.0147	0.00100	0.00500			124373-008	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		124373-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		124373-008	SW846-3005A/6020B
	Potassium	1.84	0.0800	0.300			124373-008	SW846-3005A/6020B
	Selenium	0.00526	0.00150	0.00500			124373-008	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		124373-008	SW846-3005A/6020B
	Sodium	31.7	0.0800	0.250			124373-008	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		124373-008	SW846-3005A/6020B
	Vanadium	0.00450	0.00330	0.0200	J		124373-008	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		124373-008	SW846-3005A/6020B

See notes at end of tables.

Table 4B-7 (continued)
Summary of Target Analyte List Metals Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW18	Aluminum	ND	0.0193	0.0500	U		124387-008	SW846-3005A/6020B
21-May-25	Antimony	ND	0.00100	0.00300	U		124387-008	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		124387-008	SW846-3005A/6020B
	Barium	0.0382	0.000670	0.00400			124387-008	SW846-3005A/6020B
	Beryllium	0.00175	0.000200	0.000500			124387-008	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		124387-008	SW846-3005A/6020B
	Calcium	128	0.400	1.00			124387-008	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		124387-008	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		124387-008	SW846-3005A/6020B
	Copper	0.000372	0.000300	0.00200	B, J	0.002U	124387-008	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		124387-008	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		124387-008	SW846-3005A/6020B
	Magnesium	30.6	0.0100	0.0300			124387-008	SW846-3005A/6020B
	Manganese	0.0495	0.00100	0.00500			124387-008	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		124387-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		124387-008	SW846-3005A/6020B
	Potassium	1.86	0.0800	0.300			124387-008	SW846-3005A/6020B
	Selenium	0.00644	0.00150	0.00500			124387-008	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		124387-008	SW846-3005A/6020B
	Sodium	36.8	0.0800	0.250			124387-008	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		124387-008	SW846-3005A/6020B
	Vanadium	ND	0.00330	0.0200	U		124387-008	SW846-3005A/6020B
	Zinc	0.00360	0.00330	0.0200	J		124387-008	SW846-3005A/6020B

See notes at end of tables.

Table 4B-7 (concluded)
Summary of Target Analyte List Metals Results,
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result[a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW19	Aluminum	ND	0.0193	0.0500	U		124380-008	SW846-3005A/6020B
19-May-25	Antimony	ND	0.00100	0.00300	U		124380-008	SW846-3005A/6020B
	Arsenic	ND	0.00200	0.00500	U		124380-008	SW846-3005A/6020B
	Barium	0.0572	0.000670	0.00400			124380-008	SW846-3005A/6020B
	Beryllium	ND	0.000200	0.000500	UN		124380-008	SW846-3005A/6020B
	Cadmium	ND	0.000300	0.00100	U		124380-008	SW846-3005A/6020B
	Calcium	96.6	0.400	1.00			124380-008	SW846-3005A/6020B
	Chromium	ND	0.00300	0.0100	U		124380-008	SW846-3005A/6020B
	Cobalt	ND	0.000300	0.00100	U		124380-008	SW846-3005A/6020B
	Copper	0.000501	0.000300	0.00200	J		124380-008	SW846-3005A/6020B
	Iron	ND	0.0330	0.100	U		124380-008	SW846-3005A/6020B
	Lead	ND	0.000500	0.00200	U		124380-008	SW846-3005A/6020B
	Magnesium	30.8	0.0100	0.0300			124380-008	SW846-3005A/6020B
	Manganese	ND	0.00100	0.00500	U	UJ	124380-008	SW846-3005A/6020B
	Mercury	ND	0.0000670	0.000200	U		124380-008	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		124380-008	SW846-3005A/6020B
	Potassium	1.91	0.0800	0.300			124380-008	SW846-3005A/6020B
	Selenium	0.00698	0.00150	0.00500			124380-008	SW846-3005A/6020B
	Silver	ND	0.000300	0.00100	U		124380-008	SW846-3005A/6020B
	Sodium	23.5	0.0800	0.250			124380-008	SW846-3005A/6020B
	Thallium	ND	0.000600	0.00200	U		124380-008	SW846-3005A/6020B
	Vanadium	0.00465	0.00330	0.0200	J		124380-008	SW846-3005A/6020B
	Zinc	ND	0.00330	0.0200	U		124380-008	SW846-3005A/6020B

See notes at end of tables.

Table 4B-8
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, and Tritium Results, Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW4	Americium-241	-0.233 ± 5.02	8.25	3.92	U	BD	124372-009	EPA 901.1
13-May-25	Cesium-137	-0.798 ± 1.88	3.22	1.46	U	BD	124372-009	EPA 901.1
	Cobalt-60	1.15 ± 2.13	4.23	1.90	U	BD	124372-009	EPA 901.1
	Potassium-40	18.5 ± 40.8	34.2	14.9	U	BD	124372-009	EPA 901.1
	Gross Alpha	-14.22	NA	NA	NA	None	124372-010	EPA 900.0
	Gross Beta	12.5 ± 1.25	1.32	0.637			124372-010	EPA 900.0
	Uranium-233/234	32.3 ± 2.84	0.0421	0.0185			124372-011	HASL-300
	Uranium-235/236	0.563 ± 0.0860	0.0358	0.0148			124372-011	HASL-300
	Uranium-238	4.16 ± 0.399	0.0418	0.0184			124372-011	HASL-300
	Tritium	-49.1 ± 90.3	163	77.9	U	BD	124372-012	EPA 906.0M
CYN-MW7	Americium-241	-3.52 ± 6.78	11.4	5.34	U	BD	124375-009	EPA 901.1
15-May-25	Cesium-137	0.363 ± 2.42	4.64	2.06	U	BD	124375-009	EPA 901.1
	Cobalt-60	1.21 ± 2.65	5.61	2.41	U	BD	124375-009	EPA 901.1
	Potassium-40	27.7 ± 45.0	45.7	18.9	U	BD	124375-009	EPA 901.1
	Gross Alpha	-8.04	NA	NA	NA	None	124375-010	EPA 900.0
	Gross Beta	6.57 ± 1.16	1.62	0.785			124375-010	EPA 900.0
	Uranium-233/234	17.7 ± 1.58	0.0440	0.0194			124375-011	HASL-300
	Uranium-235/236	0.158 ± 0.0426	0.0374	0.0155			124375-011	HASL-300
	Uranium-238	2.18 ± 0.228	0.0438	0.0193			124375-011	HASL-300
	Tritium	-4.35 ± 116	204	97.4	U	BD	124375-012	EPA 906.0M
CYN-MW8	Americium-241	-0.752 ± 12.3	20.5	9.72	U	BD	124382-009	EPA 901.1
20-May-25	Cesium-137	-0.0929 ± 2.77	4.53	2.04	U	BD	124382-009	EPA 901.1
	Cobalt-60	1.48 ± 2.75	5.65	2.47	U	BD	124382-009	EPA 901.1
	Potassium-40	32.3 ± 59.9	47.8	20.3	U	BD	124382-009	EPA 901.1
	Gross Alpha	-3.20	NA	NA	NA	None	124382-010	EPA 900.0
	Gross Beta	19.9 ± 6.08	7.21	3.18		J	124382-010	EPA 900.0
	Uranium-233/234	22.5 ± 2.30	0.0768	0.0332			124382-011	HASL-300
	Uranium-235/236	0.274 ± 0.0771	0.0658	0.0265			124382-011	HASL-300
	Uranium-238	2.53 ± 0.316	0.0763	0.0330			124382-011	HASL-300
	Tritium	36.2 ± 74.1	131	57.6	U	BD	124382-012	EPA 906.0M

See notes at end of tables.

Table 4B-8 (continued)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, and Tritium Results, Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW9	Americium-241	0.833 ± 4.48	7.85	3.71	U	BD	124413-009	EPA 901.1
05-Jun-25	Cesium-137	-0.878 ± 3.42	6.09	2.69	U	BD	124413-009	EPA 901.1
	Cobalt-60	4.73 ± 4.26	8.58	3.72	U	BD	124413-009	EPA 901.1
	Potassium-40	-15.2 ± 87.7	102	45.2	U	BD	124413-009	EPA 901.1
	Gross Alpha	0.31	NA	NA	NA	None	124413-010	EPA 900.0
	Gross Beta	5.63 ± 1.55	2.28	1.10		J	124413-010	EPA 900.0
	Uranium-233/234	8.95 ± 0.939	0.0675	0.0299			124413-011	HASL-300
	Uranium-235/236	0.193 ± 0.0573	0.0606	0.0255			124413-011	HASL-300
	Uranium-238	2.35 ± 0.283	0.0633	0.0278			124413-011	HASL-300
	Tritium	5.77 ± 66.2	126	54.8	U	BD	124413-012	EPA 906.0M
CYN-MW10	Americium-241	5.82 ± 7.95	13.2	6.26	U	BD	124405-009	EPA 901.1
03-Jun-25	Cesium-137	-0.398 ± 2.42	4.44	1.96	U	BD	124405-009	EPA 901.1
	Cobalt-60	0.878 ± 2.43	5.20	2.20	U	BD	124405-009	EPA 901.1
	Potassium-40	-17.0 ± 43.1	76.4	34.3	U	BD	124405-009	EPA 901.1
	Gross Alpha	-1.97	NA	NA	NA	None	124405-010	EPA 900.0
	Gross Beta	3.87 ± 1.59	2.49	1.20		J	124405-010	EPA 900.0
	Uranium-233/234	6.17 ± 0.695	0.0797	0.0353			124405-011	HASL-300
	Uranium-235/236	0.133 ± 0.0523	0.0715	0.0302		J	124405-011	HASL-300
	Uranium-238	2.17 ± 0.279	0.0747	0.0328			124405-011	HASL-300
	Tritium	37.8 ± 83.4	148	65.6	U	BD	124405-012	EPA 906.0M
CYN-MW11	Americium-241	-1.04 ± 6.38	11.3	5.31	U	BD	124395-009	EPA 901.1
28-May-25	Cesium-137	3.39 ± 3.11	5.69	2.59	U	BD	124395-009	EPA 901.1
	Cobalt-60	2.15 ± 3.02	6.25	2.73	U	BD	124395-009	EPA 901.1
	Potassium-40	-7.70 ± 50.3	73.2	32.7	U	BD	124395-009	EPA 901.1
	Gross Alpha	-2.53	NA	NA	NA	None	124395-010	EPA 900.0
	Gross Beta	6.27 ± 1.33	1.90	0.917			124395-010	EPA 900.0
	Uranium-233/234	5.21 ± 0.590	0.0791	0.0342			124395-011	HASL-300
	Uranium-235/236	0.151 ± 0.0562	0.0677	0.0273		J	124395-011	HASL-300
	Uranium-238	1.56 ± 0.219	0.0785	0.0339			124395-011	HASL-300
	Tritium	26.6 ± 75.1	136	59.6	U	BD	124395-012	EPA 906.0M

See notes at end of tables.

Table 4B-8 (continued)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, and Tritium Results, Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW12	Americium-241	-1.57 ± 4.96	7.74	3.70	U	BD	124400-009	EPA 901.1
02-Jun-25	Cesium-137	0.00529 ± 4.03	7.49	3.44	U	BD	124400-009	EPA 901.1
	Cobalt-60	-1.34 ± 3.87	7.07	3.04	U	BD	124400-009	EPA 901.1
	Potassium-40	33.6 ± 96.9	76.5	33.2	U	BD	124400-009	EPA 901.1
	Gross Alpha	-0.64	NA	NA	NA	None	124400-010	EPA 900.0
	Gross Beta	7.27 ± 2.01	2.97	1.43		J	124400-010	EPA 900.0
	Uranium-233/234	14.0 ± 1.61	0.119	0.0525			124400-011	HASL-300
	Uranium-235/236	0.234 ± 0.0860	0.107	0.0448		J	124400-011	HASL-300
	Uranium-238	2.81 ± 0.389	0.112	0.0488			124400-011	HASL-300
	Tritium	2.37 ± 80.5	151	67.3	U	BD	124400-012	EPA 906.0M
CYN-MW13	Americium-241	-9.00 ± 12.3	18.3	8.59	U	BD	124409-009	EPA 901.1
04-Jun-25	Cesium-137	-0.936 ± 2.80	4.85	2.20	U	BD	124409-009	EPA 901.1
	Cobalt-60	0.173 ± 2.80	5.49	2.39	U	BD	124409-009	EPA 901.1
	Potassium-40	8.43 ± 50.3	54.1	23.5	U	BD	124409-009	EPA 901.1
	Gross Alpha	-5.72	NA	NA	NA	None	124409-010	EPA 900.0
	Gross Beta	12.6 ± 20.4	34.5	16.7	U	BD	124409-010	EPA 900.0
	Uranium-233/234	9.68 ± 1.01	0.0669	0.0296			124409-011	HASL-300
	Uranium-235/236	0.171 ± 0.0520	0.0601	0.0253		J	124409-011	HASL-300
	Uranium-238	1.73 ± 0.219	0.0627	0.0275			124409-011	HASL-300
	Tritium	-13.2 ± 78.2	151	67.2	U	BD	124409-012	EPA 906.0M
CYN-MW14A	Americium-241	6.70 ± 7.08	12.2	5.78	U	BD	124396-009	EPA 901.1
29-May-25	Cesium-137	-1.12 ± 2.75	4.69	2.09	U	BD	124396-009	EPA 901.1
	Cobalt-60	2.11 ± 2.93	5.78	2.50	U	BD	124396-009	EPA 901.1
	Potassium-40	54.6 ± 60.8	46.4	19.3	X	R	124396-009	EPA 901.1
	Gross Alpha	-4.37	NA	NA	NA	None	124396-010	EPA 900.0
	Gross Beta	6.60 ± 1.42	1.96	0.942			124396-010	EPA 900.0
	Uranium-233/234	10.6 ± 1.18	0.0924	0.0400			124396-011	HASL-300
	Uranium-235/236	0.173 ± 0.0674	0.0791	0.0319		J	124396-011	HASL-300
	Uranium-238	2.49 ± 0.334	0.0918	0.0397			124396-011	HASL-300
	Tritium	47.7 ± 80.5	140	61.4	U	BD	124396-012	EPA 906.0M

See notes at end of tables.

Table 4B-8 (continued)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, and Tritium Results, Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW16	Americium-241	4.87 ± 12.8	22.3	10.7	U	BD	124391-009	EPA 901.1
27-May-25	Cesium-137	1.75 ± 2.60	3.52	1.65	U	BD	124391-009	EPA 901.1
	Cobalt-60	3.46 ± 3.16	5.39	2.52	U	BD	124391-009	EPA 901.1
	Potassium-40	50.0 ± 50.0	37.5	17.0	X	R	124391-009	EPA 901.1
	Gross Alpha	-2.50	NA	NA	NA	None	124391-010	EPA 900.0
	Gross Beta	5.26 ± 1.14	1.59	0.763			124391-010	EPA 900.0
	Uranium-233/234	9.11 ± 1.00	0.0857	0.0370			124391-011	HASL-300
	Uranium-235/236	0.105 ± 0.0520	0.0734	0.0295		J	124391-011	HASL-300
	Uranium-238	1.76 ± 0.247	0.0851	0.0368			124391-011	HASL-300
	Tritium	85.5 ± 85.7	138	60.6	U	BD	124391-012	EPA 906.0M
CYN-MW17	Americium-241	-5.12 ± 7.84	12.9	6.08	U	BD	124373-009	EPA 901.1
14-May-25	Cesium-137	1.07 ± 2.80	5.17	2.36	U	BD	124373-009	EPA 901.1
	Cobalt-60	0.0888 ± 2.68	5.17	2.23	U	BD	124373-009	EPA 901.1
	Potassium-40	31.7 ± 59.0	50.0	21.4	U	BD	124373-009	EPA 901.1
	Gross Alpha	-1.61	NA	NA	NA	None	124373-010	EPA 900.0
	Gross Beta	5.12 ± 0.860	1.18	0.570			124373-010	EPA 900.0
	Uranium-233/234	5.08 ± 0.486	0.0458	0.0202			124373-011	HASL-300
	Uranium-235/236	0.0647 ± 0.0282	0.0389	0.0161		J	124373-011	HASL-300
	Uranium-238	1.01 ± 0.125	0.0455	0.0200			124373-011	HASL-300
	Tritium	-16.6 ± 84.9	151	72.0	U	BD	124373-012	EPA 906.0M
CYN-MW18	Americium-241	2.77 ± 14.5	25.9	12.6	U	BD	124387-009	EPA 901.1
21-May-25	Cesium-137	1.63 ± 2.60	3.87	1.83	U	BD	124387-009	EPA 901.1
	Cobalt-60	0.00325 ± 2.31	4.26	1.96	U	BD	124387-009	EPA 901.1
	Potassium-40	0.855 ± 59.4	34.5	15.5	U	BD	124387-009	EPA 901.1
	Gross Alpha	-2.44	NA	NA	NA	None	124387-010	EPA 900.0
	Gross Beta	6.23 ± 1.09	1.47	0.707			124387-010	EPA 900.0
	Uranium-233/234	5.86 ± 0.757	0.120	0.0519			124387-011	HASL-300
	Uranium-235/236	0.118 ± 0.0616	0.103	0.0414		J	124387-011	HASL-300
	Uranium-238	1.58 ± 0.261	0.119	0.0515			124387-011	HASL-300
	Tritium	-65.7 ± 91.4	167	79.7	U	BD	124387-012	EPA 906.0M

See notes at end of tables.

Table 4B-8 (concluded)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, and Tritium Results, Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity[a] (pCi/L)	MDA[b] (pCi/L)	Critical Level[c] (pCi/L)	Laboratory Qualifier[d]	Validation Qualifier[e]	Sample No.	Analytical Method[f]
CYN-MW19	Americium-241	5.48 ± 8.27	13.9	6.58	U	BD	124380-009	EPA 901.1
19-May-25	Cesium-137	-0.727 ± 2.45	4.22	1.89	U	BD	124380-009	EPA 901.1
	Cobalt-60	-0.754 ± 2.86	5.14	2.22	U	BD	124380-009	EPA 901.1
	Potassium-40	35.8 ± 64.7	58.6	25.7	U	BD	124380-009	EPA 901.1
	Gross Alpha	-1.36	NA	NA	NA	None	124380-010	EPA 900.0
	Gross Beta	5.44 ± 1.37	2.04	0.988		J	124380-010	EPA 900.0
	Uranium-233/234	5.34 ± 0.504	0.0433	0.0191			124380-011	HASL-300
	Uranium-235/236	0.153 ± 0.0406	0.0368	0.0152			124380-011	HASL-300
	Uranium-238	2.14 ± 0.224	0.0431	0.0189			124380-011	HASL-300
	Tritium	24.7 ± 78.8	143	63.2	U	BD	124380-012	EPA 906.0M

See notes at end of tables.

Table 4B-9
Summary of Field Water Quality Parameter Measurements[g],
Burn Site Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Sample Date	Temperature (°C)	Specific Conductivity (µmho/cm)	Oxidation Reduction Potential (mV)	pH	Turbidity (NTU)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)
CYN-MW4	13-May-25	18.77	751.51	101.4	7.35	0.94	66.22	4.83
CYN-MW7	15-May-25	18.03	811.03	117.8	7.13	0.54	73.77	5.53
CYN-MW8	20-May-25	16.94	907.48	99.4	7.14	0.27	75.06	5.77
CYN-MW9	05-Jun-25	20.36	1158.4	111.5	6.99	0.98	70.38	5.17
CYN-MW10	03-Jun-25	19.20	1224.9	82.9	7.34	1.77	83.70	6.10
CYN-MW11	28-May-25	19.11	1144.0	99.9	7.28	0.23	17.16	1.30
CYN-MW12	02-Jun-25	17.28	1639.6	89.3	6.93	0.14	27.96	2.11
CYN-MW13	04-Jun-25	18.84	804.57	77.0	7.22	0.16	62.55	4.63
CYN-MW14A	29-May-25	20.51	1073.3	84.2	7.22	0.33	50.98	3.68
CYN-MW16	27-May-25	18.75	864.01	76.3	7.23	0.32	21.02	1.58
CYN-MW17	14-May-25	18.53	624.07	77.2	7.05	0.22	56.40	4.16
CYN-MW18	21-May-25	19.00	949.39	88.7	6.89	0.19	16.91	1.17
CYN-MW19	19-May-25	15.72	809.90	139.5	7.48	0.26	80.02	6.24
CYN-MW4	06-Nov-25	16.57	735.0	108.6	7.43	0.92	60.55	4.68
CYN-MW7	21-Oct-25	19.07	799.6	103.0	7.20	0.36	73.05	5.56
CYN-MW8	22-Oct-25	18.64	899.5	99.4	7.24	1.38	61.92	4.75
CYN-MW9	13-Nov-25	17.06	1112	74.0	7.03	1.61	51.20	3.92
CYN-MW10	11-Nov-25	17.80	1007	73.5	7.44	0.91	116.3	8.85
CYN-MW11	04-Nov-25	18.03	1170	88.5	7.34	0.36	24.36	1.84
CYN-MW12	10-Nov-25	16.86	1562	83.9	7.05	0.39	25.91	1.80
CYN-MW13	12-Nov-25	19.19	788.9	62.2	7.32	0.54	59.10	4.36
CYN-MW14A	05-Nov-25	19.54	1070	83.8	7.30	0.37	30.05	2.20
CYN-MW16	30-Oct-25	18.03	795.8	63.1	7.32	0.39	12.89	1.01
CYN-MW17	21-Oct-25	18.72	628.6	80.6	7.13	0.47	47.65	3.74
CYN-MW18	03-Nov-25	19.44	836.9	83.6	6.96	0.61	10.65	0.78
CYN-MW19	20-Oct-25	16.83	726.3	107.2	7.50	0.52	85.35	6.46

See notes at end of tables.

Notes for Burn Site Groundwater Area of Concern Analytical Results Tables

%	= percent
$CaCO_3$	= calcium carbonate
CFR	= Code of Federal Regulations
EPA	= U.S. Environmental Protection Agency
HMX	= octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
ID	= identifier
µg/L	= micrograms per liter
MCL	= maximum contaminant level
mg/L	= milligrams per liter
No.	= number
pCi/L	= picocuries per liter
RDX	= hexahydro-1,3,5-trinitro-1,3,5-triazine
Tetryl	= methyl-2,4,6-trinitrophenylnitramine

[a]Result or Activity

Result applies to Tables 4B-1 and 4B-4 through 4B-7. Activity applies to Table 4B-8.

Activity	= Gross alpha activity measurements were corrected by subtracting the total uranium activity (40 CFR Part 141). Activities of zero or less are considered to be not detected.
ND	= not detected (at MDL)

[b]MDL or MDA

The MDL applies to Tables 4B-1 through 4B-7. The MDA applies to Table 4B-8.

MDA	= The minimal detectable activity or minimum measured activity in a sample required to ensure a 95% probability that the measured activity is accurately quantified above the critical level.
MDL	= Method detection limit. The minimum concentration or activity that can be measured and reported with 99% confidence that the analyte is greater than zero; analyte is matrix specific.
NA	= Not applicable for gross alpha activities. The MDA could not be calculated as the gross alpha activity was corrected by subtracting the total uranium activity.

[c]PQL or Critical Level

The PQL applies to Tables 4B-1 and 4B-4 through 4B-7. The critical level applies to Table 4B-8.

Critical Level	= The minimum activity that can be measured and reported with 99% confidence that the analyte is greater than zero; analyte is matrix specific.
NA	= Not applicable for gross alpha activities. The critical level could not be calculated as the gross alpha activity was corrected by subtracting the total uranium activity.
PQL	= Practical quantitation limit. The lowest concentration of analytes in a sample that can be reliably determined within specified limits of precision and accuracy by the indicated method under routine laboratory operating conditions.

[d]Laboratory Qualifier

If cell is blank, then all quality control samples met acceptance criteria with respect to submitted samples.

B	= The analyte was detected in the blank above the effective MDL.
h	= Prep holding time exceeded.
J	= Estimated value; the analyte concentration fell above the effective MDL and below the effective PQL.
N	= Results associated with a spike analysis that was outside control limits.
NA	= not applicable
U	= Analyte is absent or below the MDL.
X	= Data rejected due to peak not meeting identification criteria.
*	= Recovery or percent relative percent difference not within acceptance limits and/or spike amount not compatible with the sample or the duplicate relative percent differences are not applicable where the concentration falls below the effective practical quantitation limit.

[e]Validation Qualifier

If cell is blank, then all quality control samples met acceptance criteria with respect to submitted samples.

BD	= Below detection limit as used in radiochemistry to identify results that are not statistically different from zero.
J	= The associated value is an estimated quantity.
J-	= The associated numerical value is an estimated quantity with a suspected negative bias.
J+	= The associated numerical value is an estimated quantity with a suspected positive bias.
N	= Results associated with a spike analysis that was outside control limits.
None	= No data validation for corrected gross alpha activity.
R	= The data are unusable. Resampling and/or reanalysis may be required for verification.
U	= The analyte was analyzed for but was not detected.
UJ	= The analyte was analyzed for but was not detected. The associated numerical value is an estimate and may be inaccurate or imprecise.

Notes for Burn Site Groundwater Area of Concern Analytical Results Tables (concluded)

[f]Analytical Method

Rice, E.W., Baird, R.B., Eaton, A.D., and Clesceri, L.S. (2012). *Standard Methods for the Examination of Water and Wastewater*, 23rd ed., American Public Health Association, American Water Works Association, and Water Environment Federation.

U.S. Department of Energy (1997). *EML Procedures Manual*, 27th ed., Vol. 1, Rev. 1992, HASL-300.

U.S. Environmental Protection Agency. (1980). *Prescribed Procedures for Measurement of Radioactivity in Drinking Water*, EPA-600/4-80-032

U.S. Environmental Protection Agency (1984). *Methods for Chemical Analysis of Water and Wastes*, EPA 600-4-79-020.

U.S. Environmental Protection Agency. (1986, as updated). *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, 3rd ed., Rev. 1.

HASL = Health and Safety Laboratory
SM = Standard Method
SW = Solid Waste

[g]Field Water Quality Parameter Measurements

Field measurements collected prior to sampling.

°C = degrees Celsius
% Sat = percent saturation
µmho/cm = micromhos per centimeter
mg/L = milligrams per liter
mV = millivolts
NTU = nephelometric turbidity units
pH = potential of hydrogen (negative logarithm of the hydrogen ion concentration)

Attachment 4C
Burn Site Groundwater Area of Concern
Concentration Trend Plots

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Attachment 4C Concentration Trend Plots

Figure 4C-1 Nitrate plus Nitrite Concentrations, CYN-MW9 ..... 4C-5
Figure 4C-2 Nitrate plus Nitrite Concentrations, CYN-MW10 ..... 4C-6
Figure 4C-3 Nitrate plus Nitrite Concentrations, CYN-MW11 ..... 4C-7
Figure 4C-4 Nitrate plus Nitrite Concentrations, CYN-MW12 ..... 4C-8
Figure 4C-5 Nitrate plus Nitrite Concentrations, CYN-MW13 ..... 4C-9
Figure 4C-6 Nitrate plus Nitrite Concentrations, CYN-NW14A 4C-10

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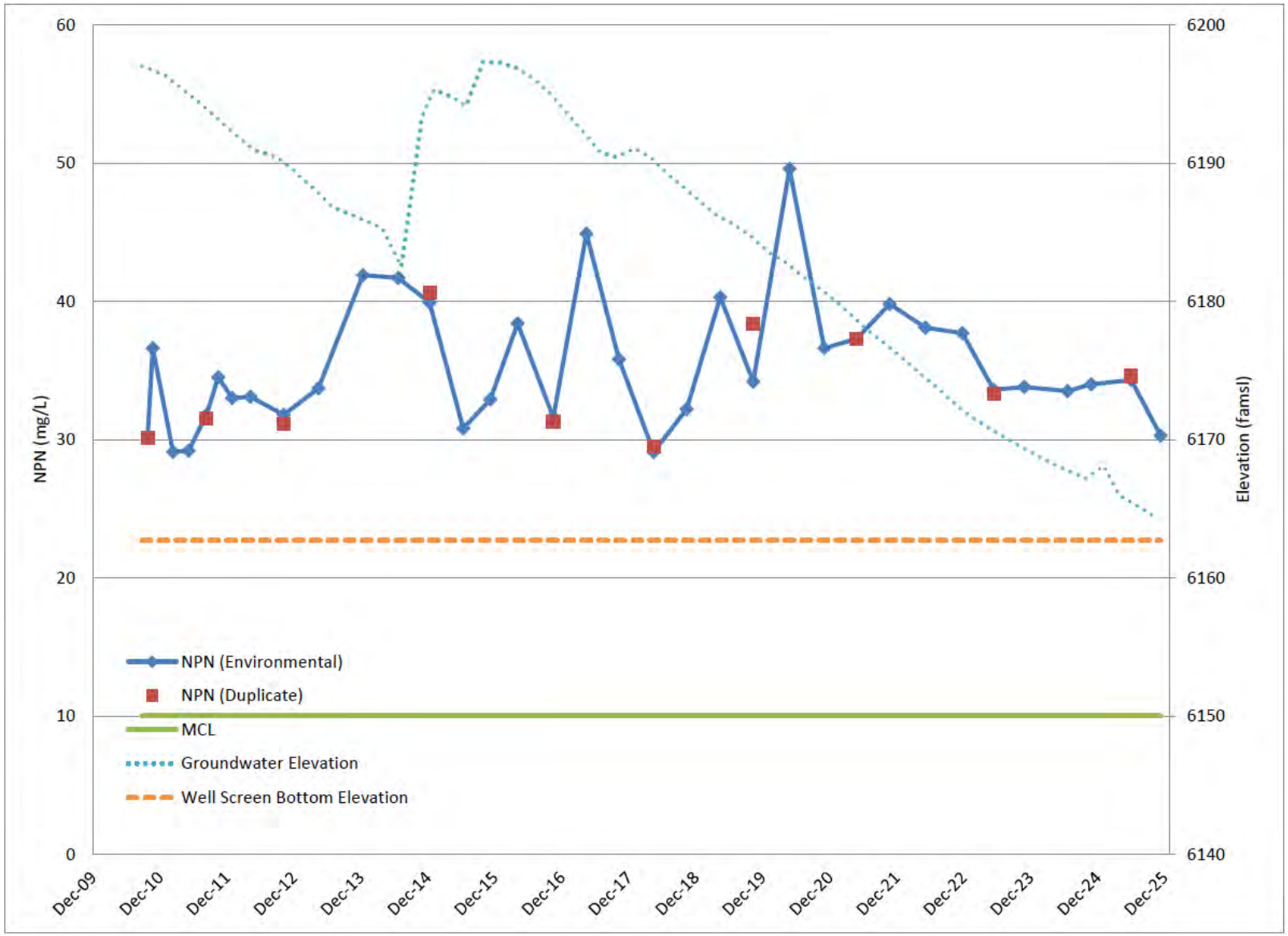


Figure 4C-1
Nitrate plus Nitrite Concentrations, CYN-MW9

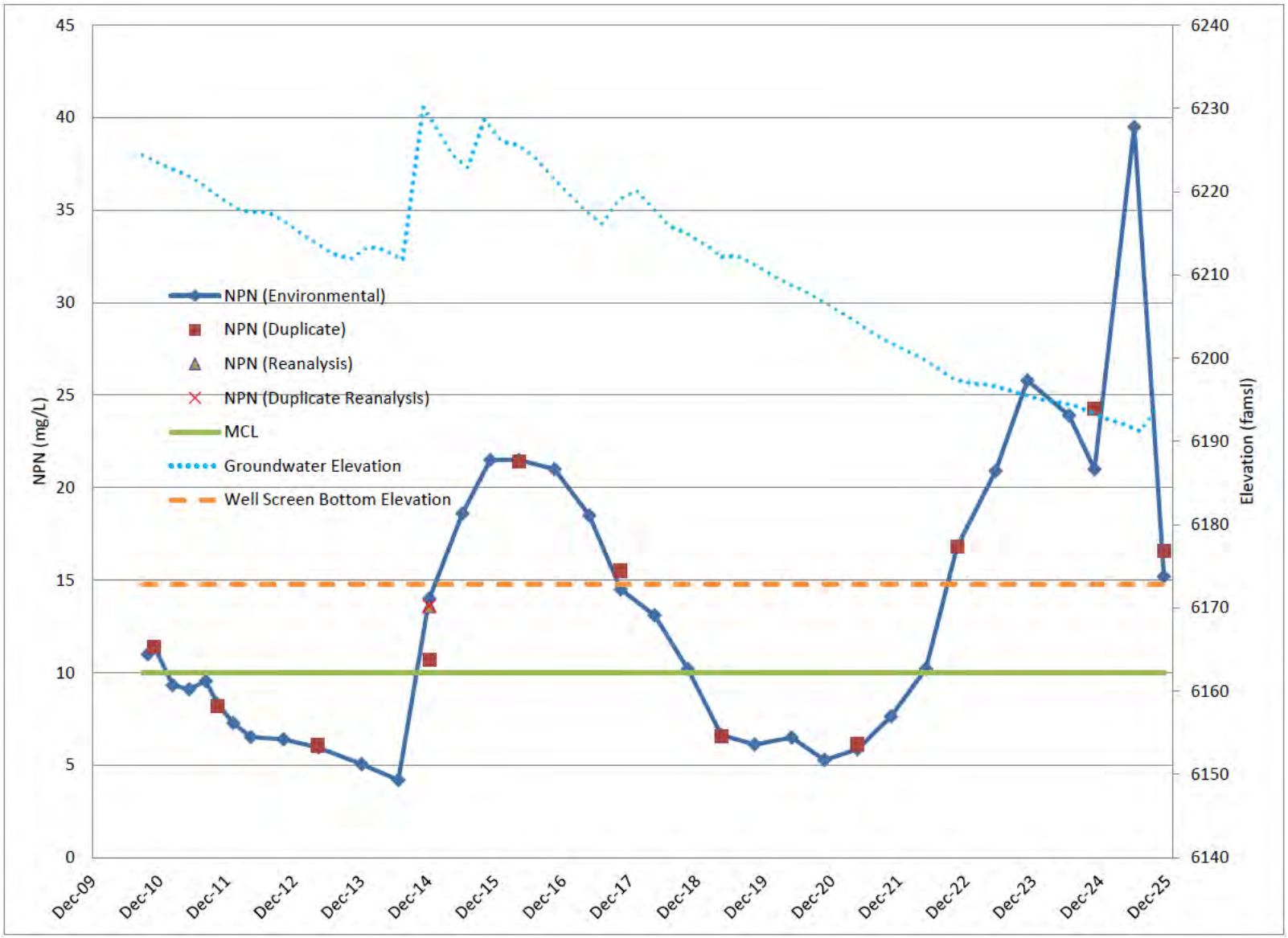


Figure 4C-2
Nitrate plus Nitrite Concentrations, CYN-MW10

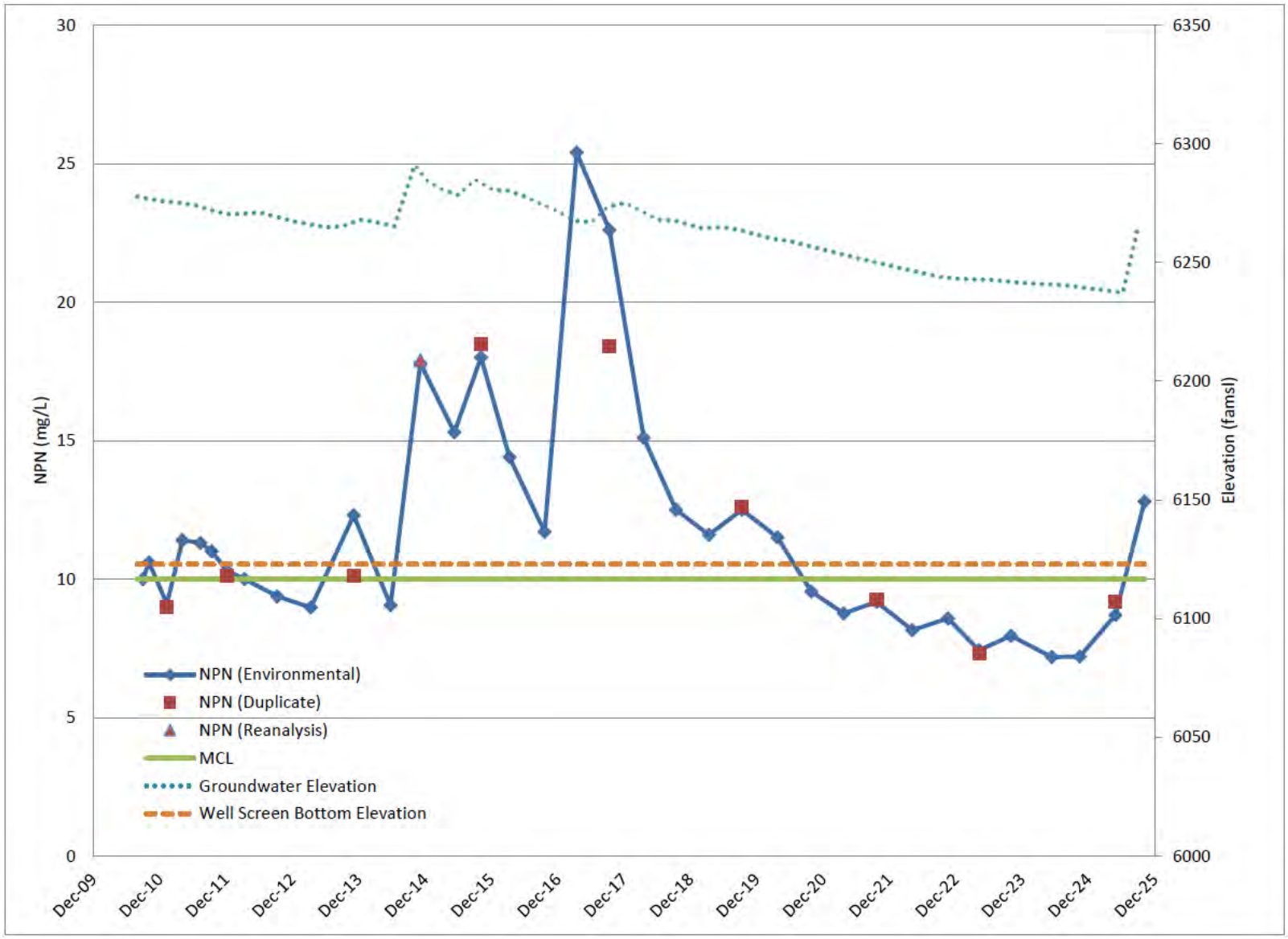


Figure 4C-3
Nitrate plus Nitrite Concentrations, CYN-MW11

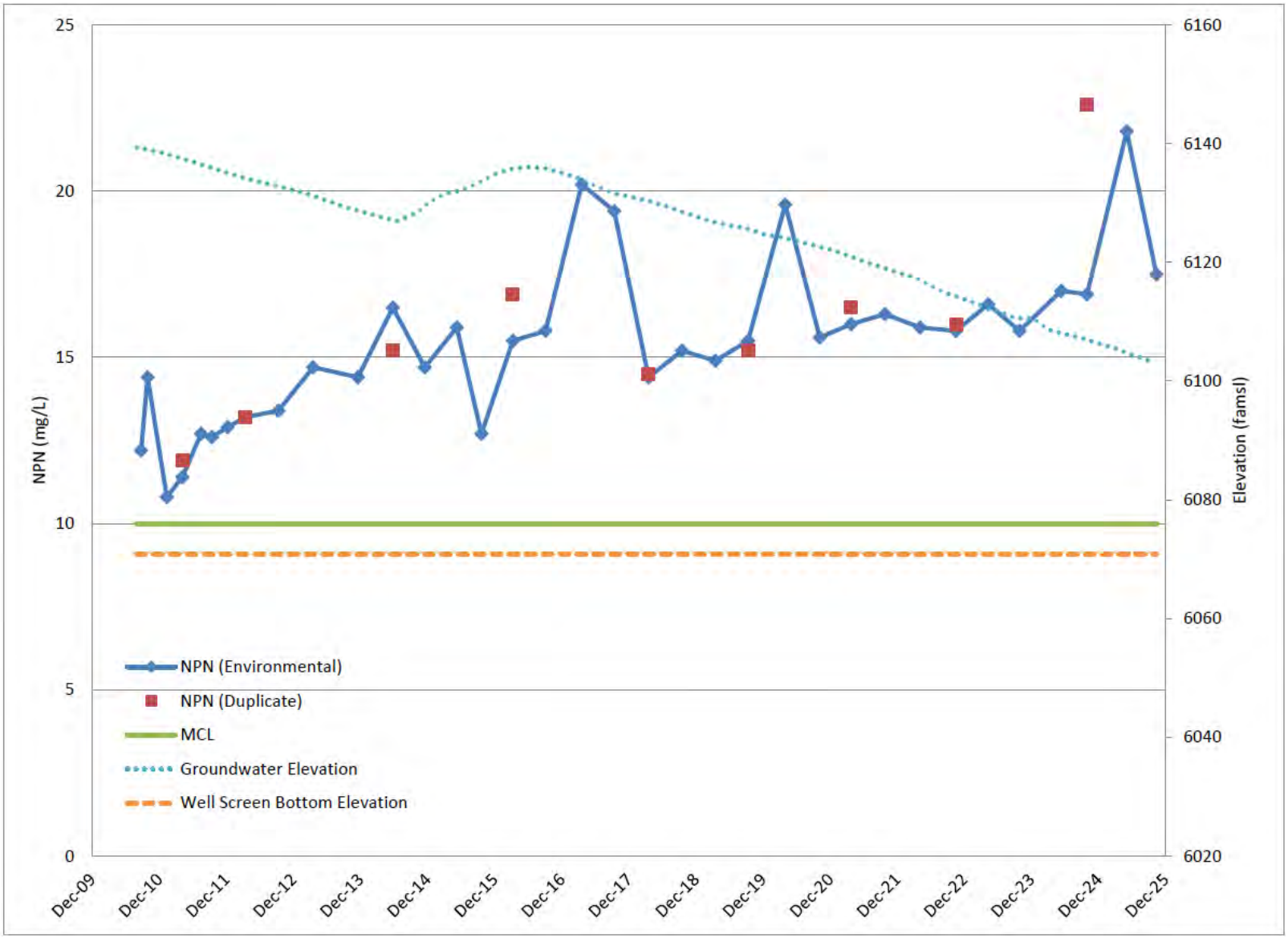


Figure 4C-4
Nitrate plus Nitrite Concentrations, CYN-MW12



Figure 4C-5
Nitrate plus Nitrite Concentrations, CYN-MW13

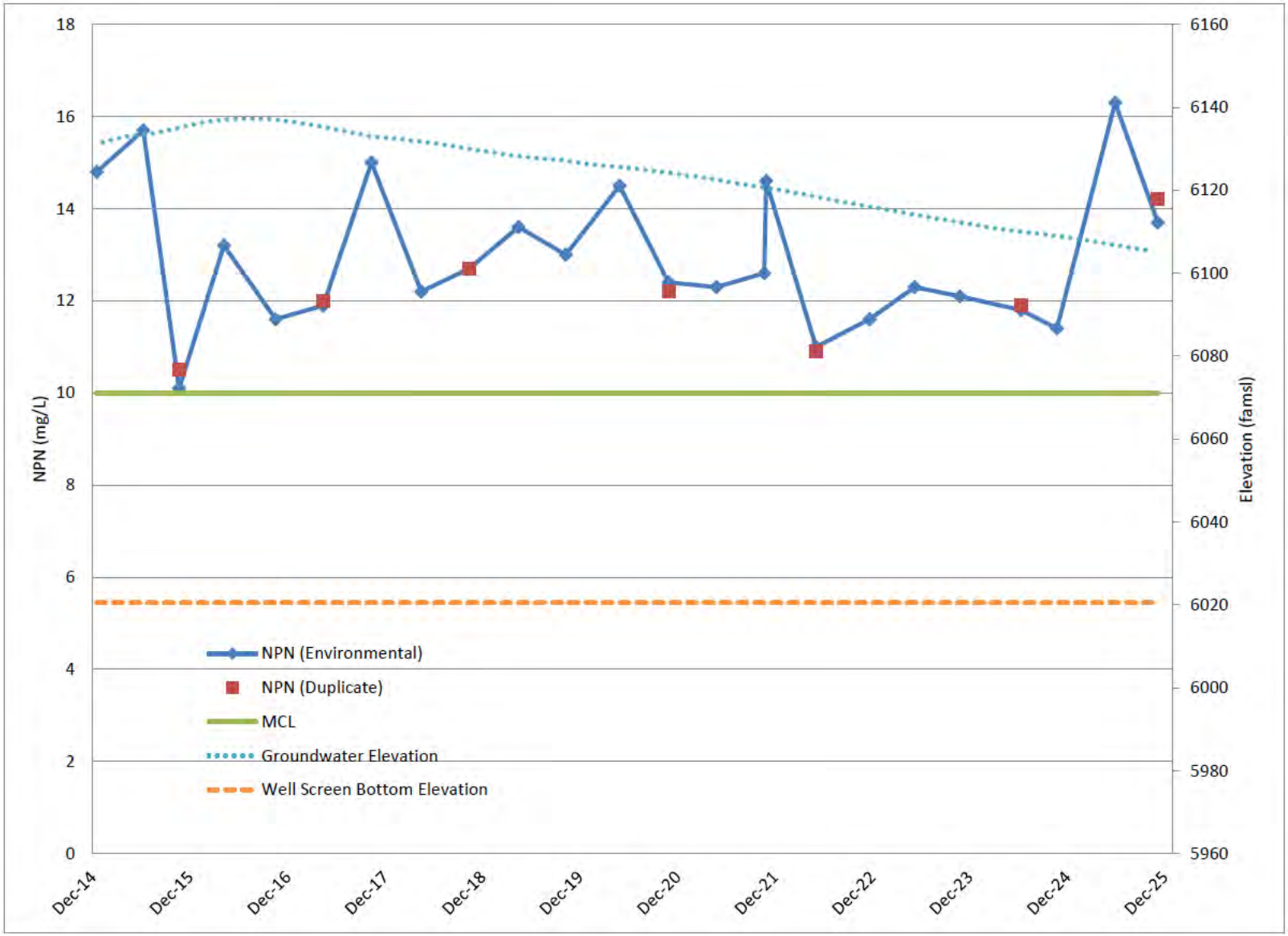


Figure 4C-6
Nitrate plus Nitrite Concentrations, CYN-MW14A

Attachment 5A
Tijeras Arroyo Groundwater Area of Concern
Monitoring Well Hydrographs

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Attachment 5A Monitoring Well Hydrographs

Figure 5A-1 Tijeras Arroyo Groundwater Area of Concern Wells (1 of 7) 5A-5
Figure 5A-2 Tijeras Arroyo Groundwater Area of Concern Wells (2 of 7) 5A-6
Figure 5A-3 Tijeras Arroyo Groundwater Area of Concern Wells (3 of 7) 5A-7
Figure 5A-4 Tijeras Arroyo Groundwater Area of Concern Wells (4 of 7) 5A-8
Figure 5A-5 Tijeras Arroyo Groundwater Area of Concern Wells (5 of 7) 5A-9
Figure 5A-6 Tijeras Arroyo Groundwater Area of Concern Wells (6 of 7) 5A-10
Figure 5A-7 Tijeras Arroyo Groundwater Area of Concern Wells (7 of 7) 5A-11

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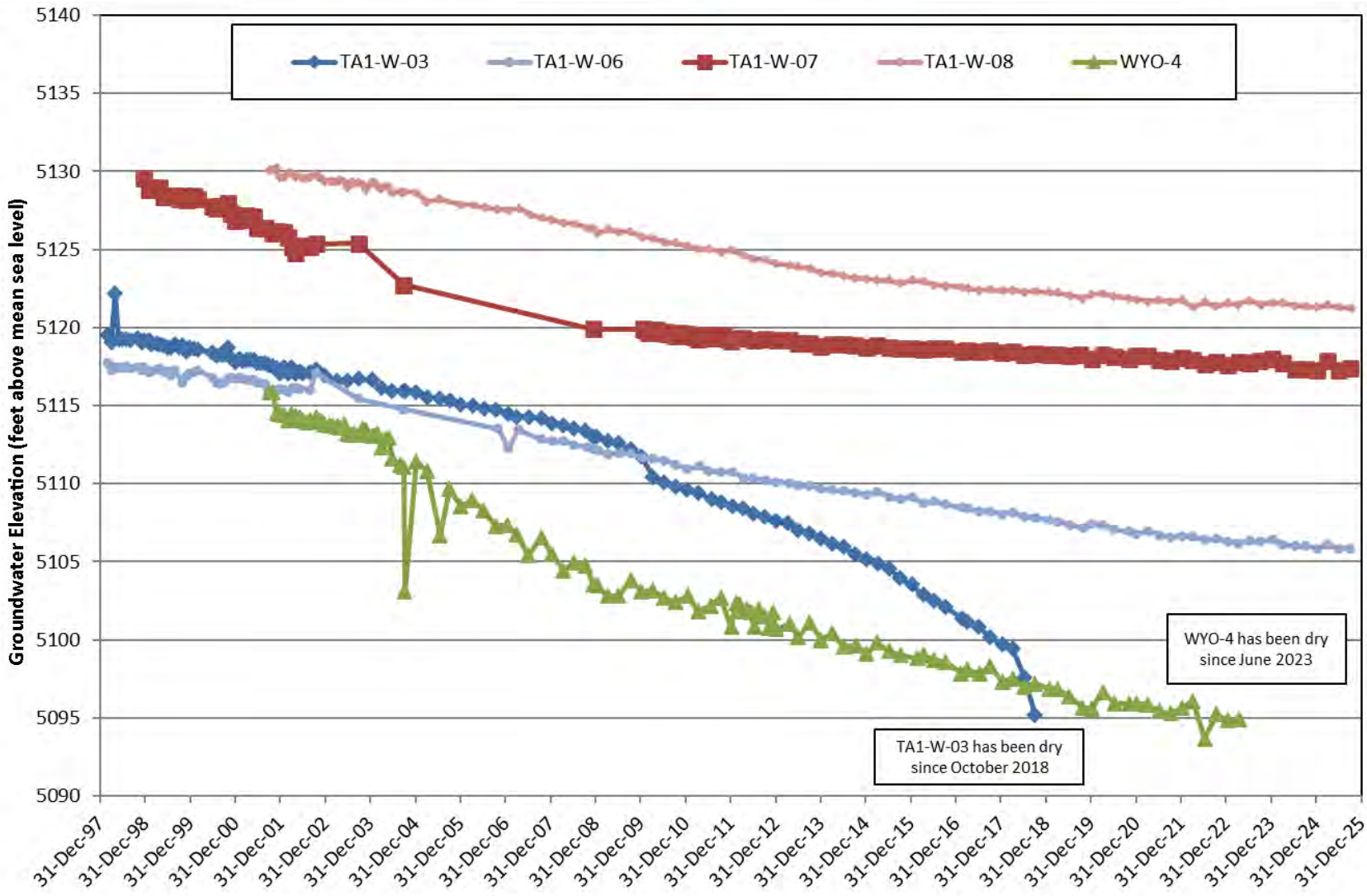


Figure 5A-1
Tijeras Arroyo Groundwater Area of Concern Wells (1 of 7)



Figure 5A-2
Tijeras Arroyo Groundwater Area of Concern Wells (2 of 7)

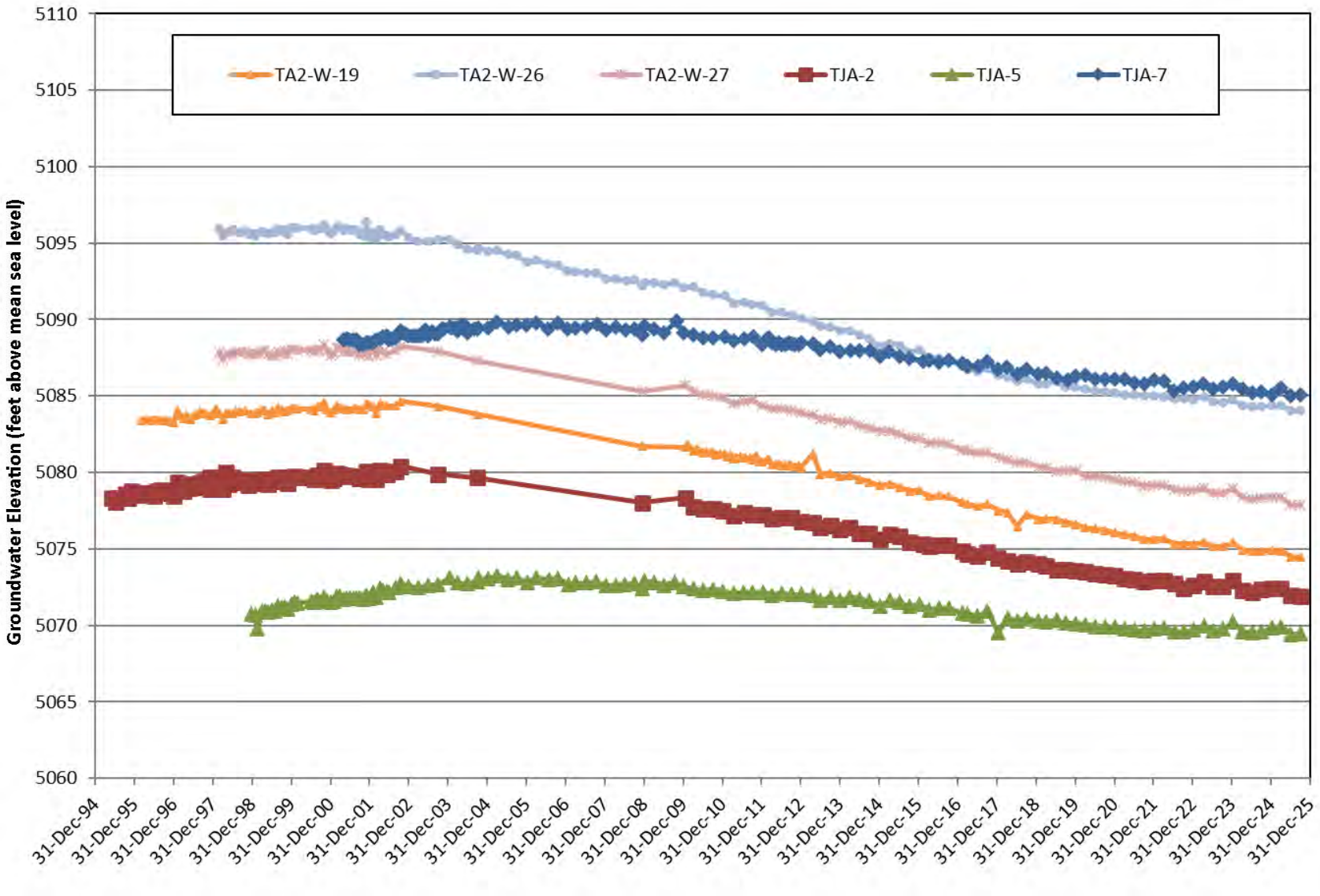


Figure 5A-3
Tijeras Arroyo Groundwater Area of Concern Wells (3 of 7)

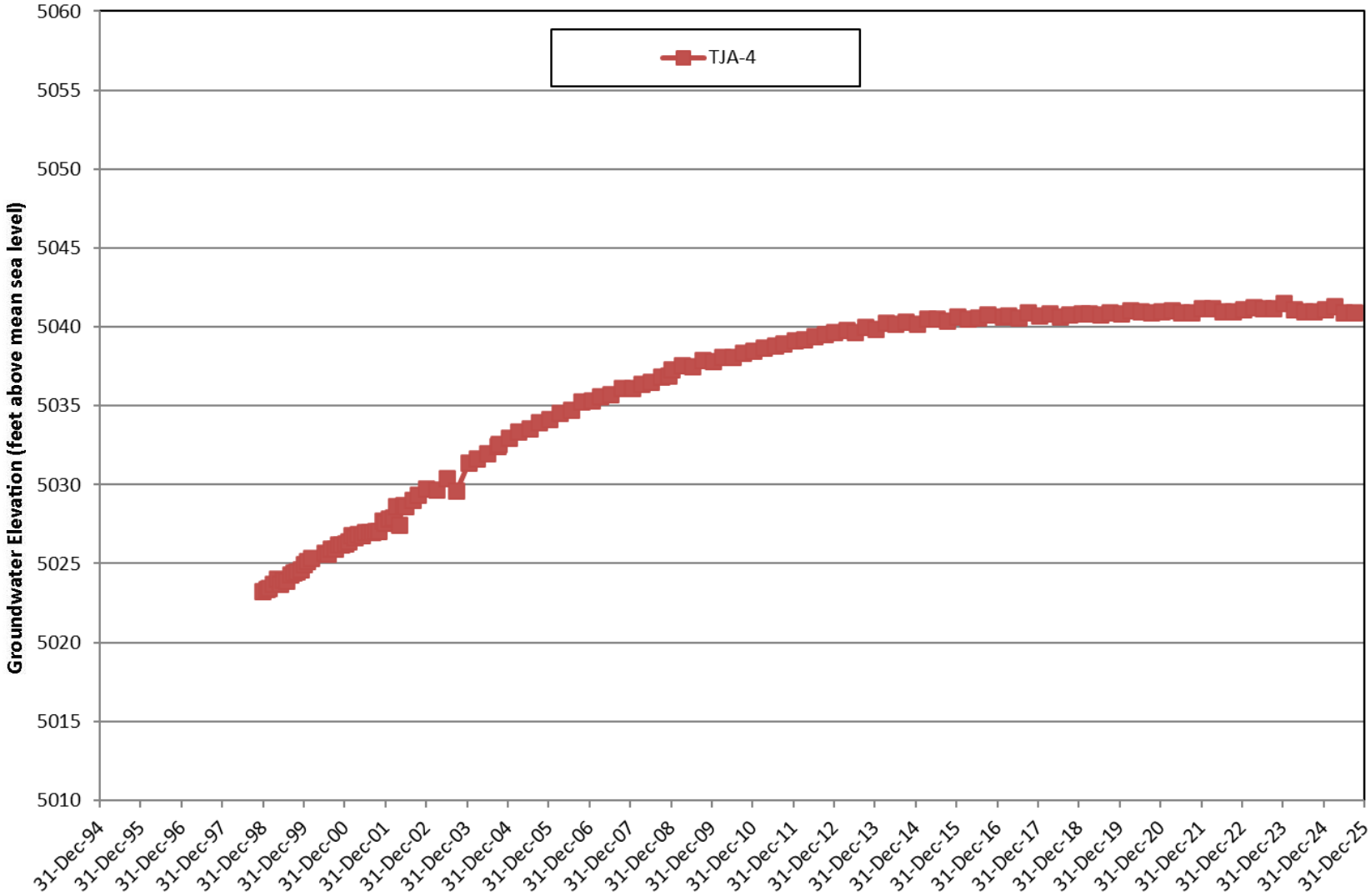


Figure 5A-4
Tijeras Arroyo Groundwater Area of Concern Wells (4 of 7)

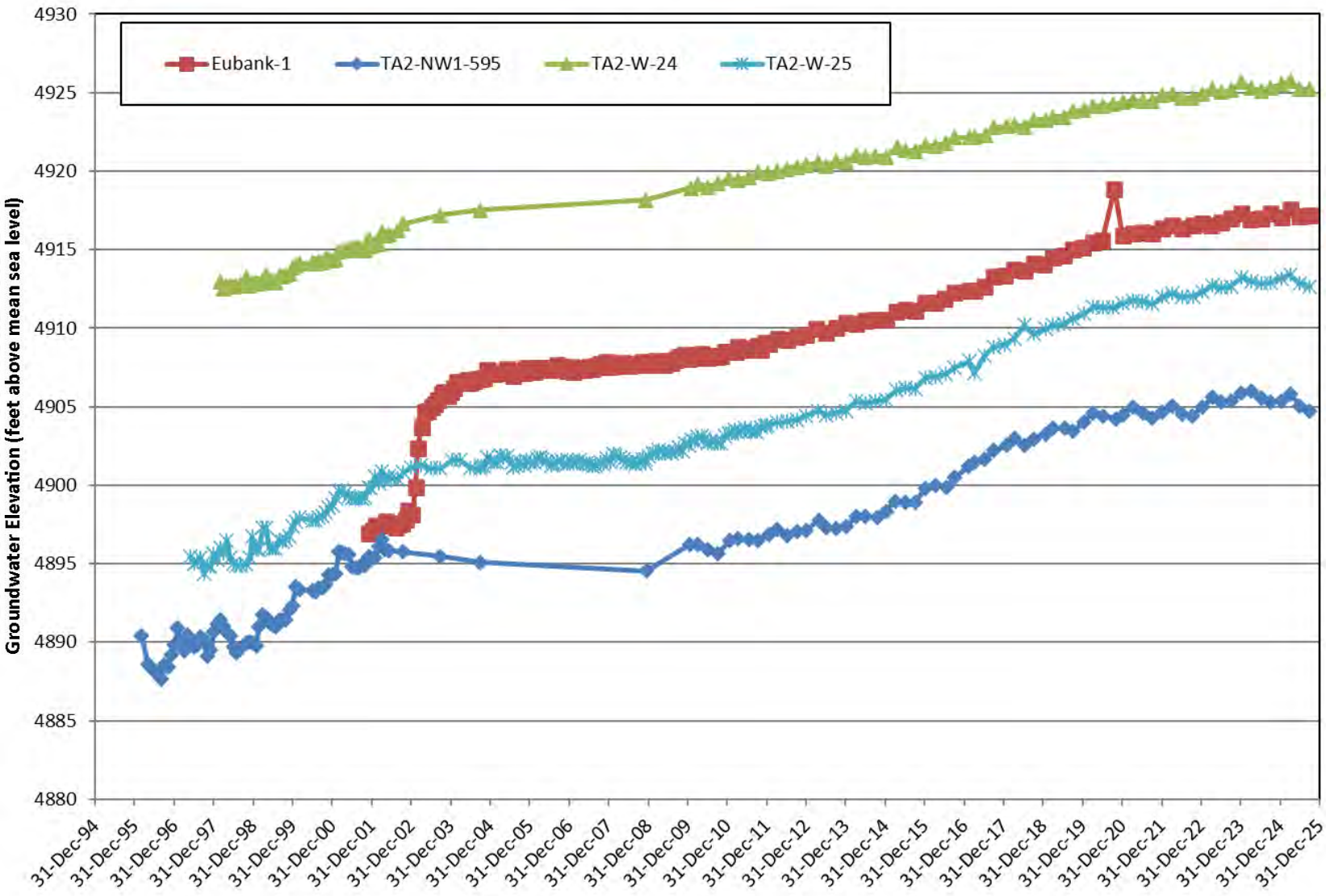


Figure 5A-5
Tijeras Arroyo Groundwater Area of Concern Wells (5 of 7)

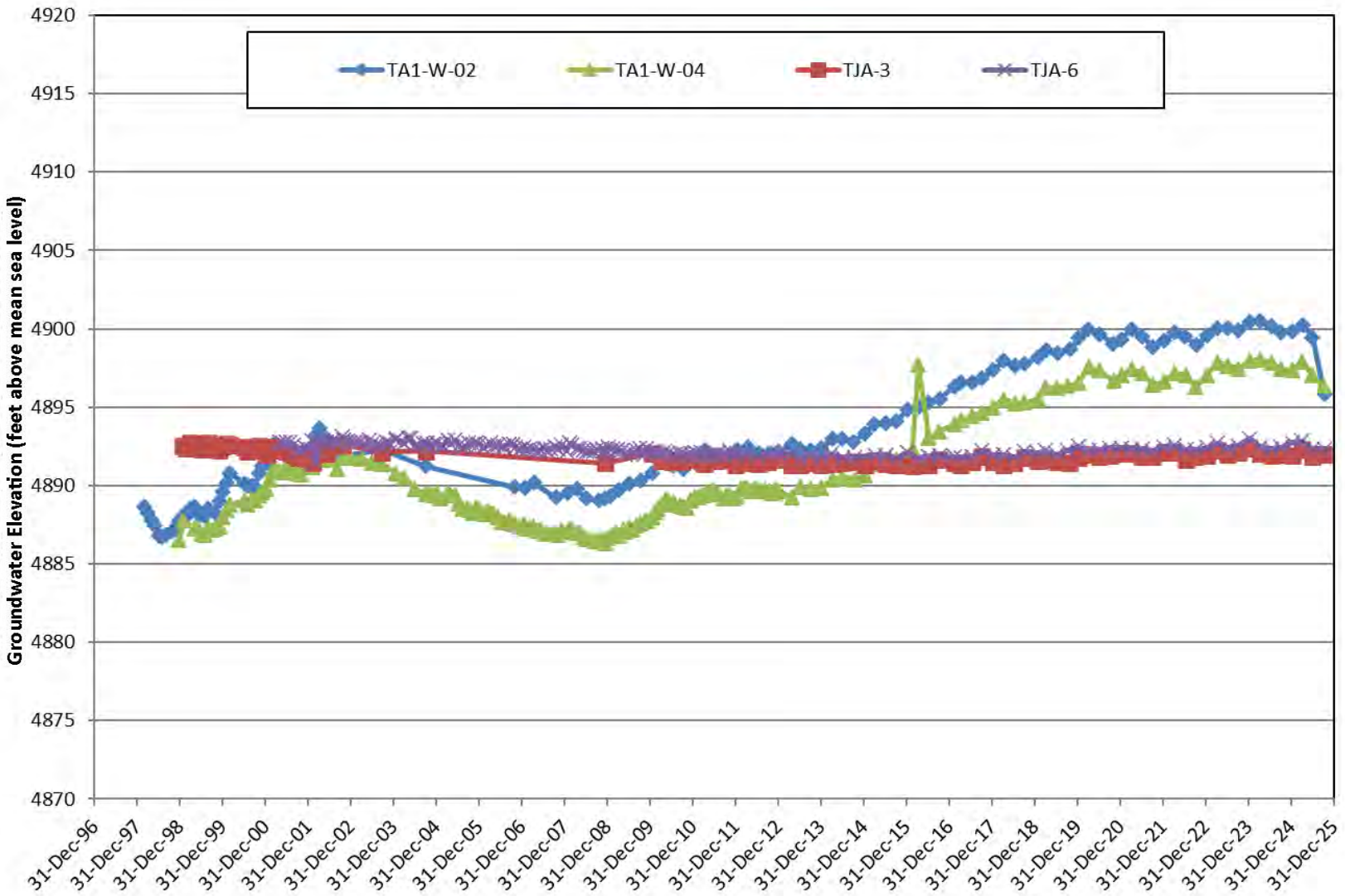


Figure 5A-6
Tijeras Arroyo Groundwater Area of Concern Wells (6 of 7)

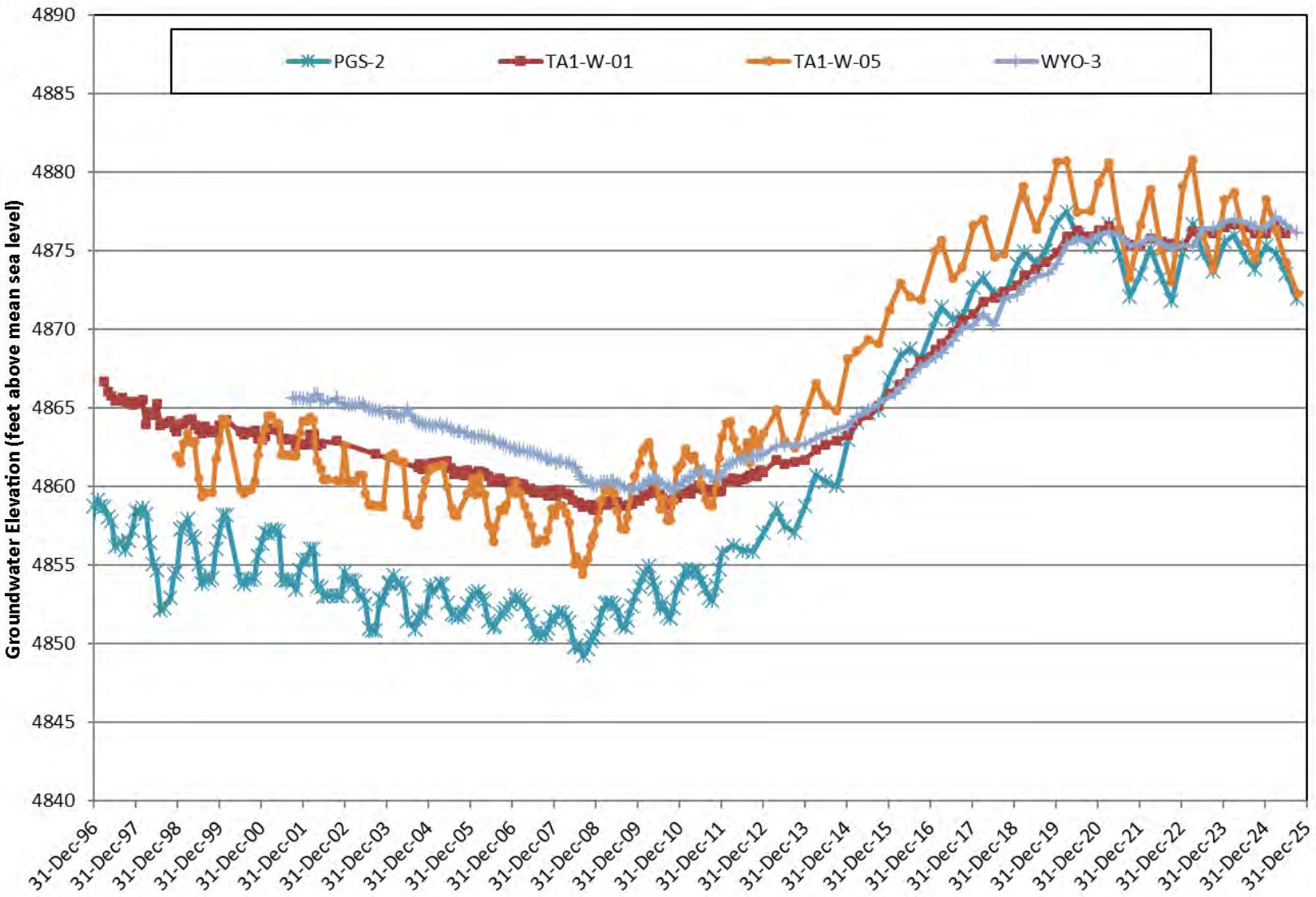


Figure 5A-7
Tijeras Arroyo Groundwater Area of Concern Wells (7 of 7)

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Attachment 5B
Tijeras Arroyo Groundwater Area of Concern
Analytical Results Tables

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Attachment 5B Analytical Results Tables

Table 5B-1 Summary of Nitrate plus Nitrite Results, Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 5B-5

Table 5B-2 Summary of Detected Volatile Organic Compounds, Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 5B-8

Table 5B-3 Method Detection Limits for Volatile Organic Compounds (EPA Method SW846-8260D), Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 5B-10

Table 5B-4 Summary of Anion and Alkalinity Results, Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 5B-11

Table 5B-5 Summary of Target Analyte List Metals plus Uranium Results, Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 5B-15

Table 5B-6 Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, and Tritium Results, Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 5B-34

Table 5B-7 Summary of Field Water Quality Parameter Measurements, Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025 ..... 5B-38

Notes for Tijeras Arroyo Groundwater Area of Concern Analytical Results Tables 5B-39

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Table 5B-1
Summary of Nitrate plus Nitrite Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA1-W-06 19-Feb-25	Nitrate plus nitrite	3.73	0.170	0.500			123899-001	EPA 353.2
TA1-W-08 27-Feb-25	Nitrate plus nitrite	8.90	0.170	0.500			123900-001	EPA 353.2
TA2-NW1-325 24-Feb-25	Nitrate plus nitrite	4.55	0.170	0.500			123902-001	EPA 353.2
TA2-W-01 20-Feb-25	Nitrate plus nitrite	3.94	0.170	0.500			123903-001	EPA 353.2
TA2-W-19 04-Mar-25	Nitrate plus nitrite	**12.2**	0.850	2.50			123904-001	EPA 353.2
TA2-W-26 26-Feb-25	Nitrate plus nitrite	4.99	0.170	0.500			123905-001	EPA 353.2
TA2-W-27 25-Feb-25	Nitrate plus nitrite	4.04	0.170	0.500			123906-001	EPA 353.2
TA2-W-27 (Duplicate) 25-Feb-25	Nitrate plus nitrite	4.00	0.170	0.500			123907-001	EPA 353.2
TA2-W-28 06-Mar-25	Nitrate plus nitrite	**16.9**	0.850	2.50			123908-001	EPA 353.2
TA2-W-28 (Duplicate) 06-Mar-25	Nitrate plus nitrite	**18.4**	0.850	2.50			123909-001	EPA 353.2
TJA-2 03-Mar-25	Nitrate plus nitrite	**11.0**	0.170	0.500			123910-001	EPA 353.2
TJA-2 (Duplicate) 03-Mar-25	Nitrate plus nitrite	**12.7**	0.170	0.500			123911-001	EPA 353.2
TJA-5 05-Mar-25	Nitrate plus nitrite	**11.6**	0.850	2.50			123912-001	EPA 353.2
TJA-5 (Duplicate) 05-Mar-25	Nitrate plus nitrite	**11.3**	0.170	0.500			123913-001	EPA 353.2
TJA-7 10-Mar-25	Nitrate plus nitrite	**21.8**	0.850	2.50			123914-001	EPA 353.2

Bold indicates that the nitrate plus nitrite concentration exceeds the EPA MCL of 10 mg/L.
See notes at end of tables.

Table 5B-1 (continued)
Summary of Nitrate plus Nitrite Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA1-W-02 16-Jul-25	Nitrate plus nitrite	1.18	0.0170	0.0500			125170-002	EPA 353.2
TA1-W-02 (Duplicate) 16-Jul-25	Nitrate plus nitrite	1.20	0.0170	0.0500			125171-001	EPA 353.2
TA1-W-06 01-Aug-25	Nitrate plus nitrite	3.81	0.170	0.500			125201-002	EPA 353.2
TA1-W-08 04-Aug-25	Nitrate plus nitrite	8.98	0.170	0.500			125204-002	EPA 353.2
TA2-NW1-325 28-Jul-25	Nitrate plus nitrite	4.60	0.170	0.500			125190-002	EPA 353.2
TA2-NW1-595 24-Jul-25	Nitrate plus nitrite	4.38	0.170	0.500			125187-002	EPA 353.2
TA2-W-01 30-Jul-25	Nitrate plus nitrite	3.99	0.170	0.500			125197-002	EPA 353.2
TA2-W-19 06-Aug-25	Nitrate plus nitrite	**12.0**	0.170	0.500			125210-002	EPA 353.2
TA2-W-19 (Duplicate) 06-Aug-25	Nitrate plus nitrite	**11.7**	0.170	0.500			125211-001	EPA 353.2
TA2-W-24 17-Jul-25	Nitrate plus nitrite	2.52	0.0850	0.250			125173-002	EPA 353.2
TA2-W-25 23-Jul-25	Nitrate plus nitrite	3.69	0.170	0.500			125184-002	EPA 353.2
TA2-W-25 (Duplicate) 23-Jul-25	Nitrate plus nitrite	4.24	0.170	0.500			125185-001	EPA 353.2
TA2-W-26 14-Aug-25	Nitrate plus nitrite	5.38	0.170	0.500			125224-002	EPA 353.2
TA2-W-26 (Duplicate) 14-Aug-25	Nitrate plus nitrite	5.26	0.170	0.500			125225-001	EPA 353.2
TA2-W-27 31-Jul-25	Nitrate plus nitrite	4.15	0.170	0.500			125199-002	EPA 353.2
TA2-W-28 08-Aug-25	Nitrate plus nitrite	**18.4**	0.850	2.50			125216-002	EPA 353.2
TJA-2 05-Aug-25	Nitrate plus nitrite	**12.6**	0.170	0.500			125206-002	EPA 353.2

Bold indicates that the nitrate plus nitrite concentration exceeds the EPA MCL of 10 mg/L.
See notes at end of tables.

Table 5B-1 (concluded)
Summary of Nitrate plus Nitrite Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TJA-3 29-Jul-25	Nitrate plus nitrite	2.95	0.170	0.500			125195-002	EPA 353.2
TJA-4 12-Aug-25	Nitrate plus nitrite	**30.4**	0.850	2.50			125218-002	EPA 353.2
TJA-5 07-Aug-25	Nitrate plus nitrite	**11.4**	0.170	0.500			125214-002	EPA 353.2
TJA-6 22-Jul-25	Nitrate plus nitrite	2.73	0.0850	0.250			125179-002	EPA 353.2
TJA-6 (Duplicate) 22-Jul-25	Nitrate plus nitrite	2.97	0.0850	0.250			125180-001	EPA 353.2
TJA-7 13-Aug-25	Nitrate plus nitrite	**23.0**	0.850	2.50			125220-002	EPA 353.2
WYO-3 21-Jul-25	Nitrate plus nitrite	2.69	0.0850	0.250			125175-002	EPA 353.2

Bold indicates that the nitrate plus nitrite concentration exceeds the EPA MCL of 10 mg/L.
See notes at end of tables.

Table 5B-2
Summary of Detected Volatile Organic Compounds,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (µg/L)	MDL[b] (µg/L)	PQL[c] (µg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA1-W-02 16-Jul-25	Toluene	0.340	0.333	1.00	J	1.00U	125170-001	SW846-8260D
TA1-W-06 01-Aug-25	1,1-Dichloroethene	1.01	0.333	1.00			125201-001	SW846-8260D
	Chloroform	0.340	0.333	1.00	J		125201-001	SW846-8260D
	Methylene chloride	2.77	0.500	5.00	J	5.0UJ	125201-001	SW846-8260D
	Trichloroethene	0.620	0.333	1.00	J		125201-001	SW846-8260D
TA1-W-08 04-Aug-25	Methylene chloride	3.35	0.500	5.00	J	5.0UJ	125204-001	SW846-8260D
TA2-NW1-325 28-Jul-25	Chloroform	0.340	0.333	1.00	J	1.0U	125190-001	SW846-8260D
	Toluene	1.09	0.333	1.00			125190-001	SW846-8260D
	Trichloroethene	0.520	0.333	1.00	J		125190-001	SW846-8260D
TA2-NW1-595 24-Jul-25	Methylene chloride	0.780	0.500	5.00	J	5.0UJ	125187-001	SW846-8260D
TA2-W-01 30-Jul-25	Methylene chloride	0.980	0.500	5.00	B, J	5.00UJ	125197-001	SW846-8260D
	Trichloroethene	1.10	0.333	1.00			125197-001	SW846-8260D
TA2-W-19 06-Aug-25	Trichloroethene	2.93	0.333	1.00			125210-001	SW846-8260D
TA2-W-25 23-Jul-25	Methylene chloride	0.770	0.500	5.00	J	5.0UJ	125184-001	SW846-8260D
TA2-W-26 14-Aug-25	1,1-Dichloroethane	4.66	0.333	1.00			125224-001	SW846-8260D
	1,1-Dichloroethene	1.86	0.333	1.00			125224-001	SW846-8260D
	Chloroform	0.520	0.333	1.00	J	J	125224-001	SW846-8260D
	Tetrachloroethene	6.09	0.333	1.00			125224-001	SW846-8260D
	Trichloroethene	17.8	0.333	1.00			125224-001	SW846-8260D
	cis 1,2-Dichloroethene	6.92	0.333	1.00			125224-001	SW846-8260D
TA2-W-27 31-Jul-25	Methylene chloride	0.950	0.500	5.00	B, J	5.00UJ	125199-001	SW846-8260D
	Tetrachloroethene	1.12	0.333	1.00			125199-001	SW846-8260D
	Trichloroethene	1.14	0.333	1.00			125199-001	SW846-8260D
TA2-W-28 08-Aug-25	Methylene chloride	2.51	0.500	5.00	J	5.0UJ	125216-001	SW846-8260D
TJA-2 05-Aug-25	1,1-Dichloroethane	0.350	0.333	1.00	J		125206-001	SW846-8260D
	Methylene chloride	3.26	0.500	5.00	J	5.0UJ	125206-001	SW846-8260D
	Trichloroethene	4.49	0.333	1.00			125206-001	SW846-8260D
TJA-3 29-Jul-25	Trichloroethene	0.580	0.333	1.00	J		125195-001	SW846-8260D

See notes at end of tables.

Table 5B-2 (concluded)
Summary of Detected Volatile Organic Compounds,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (µg/L)	MDL[b] (µg/L)	PQL[c] (µg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TJA-5 07-Aug-25	Methylene chloride	2.46	0.500	5.00	J	5.00UJ	125214-001	SW846-8260D
TJA-6 22-Jul-25	Methylene chloride	0.690	0.500	5.00	J	5.0UJ	125179-001	SW846-8260D
	Toluene	0.410	0.330	1.00	J		125179-001	SW846-8260D
TJA-7 13-Aug-25	Trichloroethene	5.13	0.333	1.00			125220-001	SW846-8260D
WYO-3 21-Jul-25	Methylene chloride	1.32	0.500	5.00	J	5.0UJ	125175-001	SW846-8260D
	Toluene	0.370	0.333	1.00	J		125175-001	SW846-8260D

See notes at end of tables.

Table 5B-3
Method Detection Limits for Volatile Organic Compounds (EPA Method[f] SW846-8260D), Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Analyte	MDL[b] (µg/L)	Analyte	MDL[b] (µg/L)
1,1,1-Trichloroethane	0.333	Chlorobenzene	0.333
1,1,2,2-Tetrachloroethane	0.333	Chloroethane	0.333
1,1,2-Trichloroethane	0.333	Chloroform	0.333
1,1-Dichloroethane	0.333	Chloromethane	0.333
1,1-Dichloroethene	0.333	Cyclohexane	0.333
1,2,3-Trichlorobenzene	0.333	Dibromochloromethane	0.333
1,2,4-Trichlorobenzene	0.333	Dichlorodifluoromethane	0.355
1,2-Dibromo-3-chloropropane	0.333	Ethylbenzene	0.333
1,2-Dibromoethane	0.333	Isopropylbenzene	0.333
1,2-Dichlorobenzene	0.333	Methyl acetate	1.67
1,2-Dichloroethane	0.333	Methylcyclohexane	0.333
1,2-Dichloropropane	0.333	Methylene chloride	0.500
1,3-Dichlorobenzene	0.333	Styrene	0.333
1,4-Dichlorobenzene	0.333	Tert-butyl methyl ether	0.333
2,2-trifluoroethane, 1,1,2-Trichloro-1	1.67	Tetrachloroethene	0.333
2-Butanone	1.67	Toluene	0.333
2-Hexanone	1.67	Trichloroethene	0.333
4-methyl-, 2-Pentanone	1.67	Trichlorofluoromethane	0.333
Acetone	1.74	Vinyl chloride	0.333
Benzene	0.333	Xylene	1.00
Bromochloromethane	0.333	cis-1,2-Dichloroethene	0.333
Bromodichloromethane	0.333	cis-1,3-Dichloropropene	0.333
Bromoform	0.333	m-, p-Xylene	0.500
Bromomethane	0.337	o-Xylene	0.333
Carbon disulfide	1.67	trans-1,2-Dichloroethene	0.333
Carbon tetrachloride	0.333	trans-1,3-Dichloropropene	0.333

See notes at end of tables.

Table 5B-4
Summary of Anion and Alkalinity Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA1-W-02	Bromide	0.225	0.0670	0.200			125170-003	SW846-9056A
16-Jul-25	Chloride	16.7	0.335	1.00			125170-003	SW846-9056A
	Fluoride	0.384	0.0330	0.100			125170-003	SW846-9056A
	Sulfate	81.7	0.665	2.00			125170-003	SW846-9056A
	Bicarbonate Alkalinity	171	0.725	2.00			125170-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125170-004	SM 2320B
TA1-W-06	Bromide	1.42	0.0670	0.200			125201-003	SW846-9056A
01-Aug-25	Chloride	106	1.34	4.00			125201-003	SW846-9056A
	Fluoride	0.255	0.0330	0.100			125201-003	SW846-9056A
	Sulfate	194	2.66	8.00			125201-003	SW846-9056A
	Bicarbonate Alkalinity	87.6	0.725	2.00			125201-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125201-004	SM 2320B
TA1-W-08	Bromide	2.99	0.0670	0.200			125204-003	SW846-9056A
04-Aug-25	Chloride	217	6.70	20.0		J	125204-003	SW846-9056A
	Fluoride	0.222	0.0330	0.100			125204-003	SW846-9056A
	Sulfate	640	13.3	40.0		J	125204-003	SW846-9056A
	Bicarbonate Alkalinity	77.0	0.725	2.00			125204-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125204-004	SM 2320B
TA2-NW1-325	Bromide	1.42	0.0670	0.200			125190-003	SW846-9056A
28-Jul-25	Chloride	109	1.34	4.00			125190-003	SW846-9056A
	Fluoride	0.344	0.0330	0.100			125190-003	SW846-9056A
	Sulfate	75.8	2.66	8.00			125190-003	SW846-9056A
	Bicarbonate Alkalinity	95.2	0.725	2.00			125190-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125190-004	SM 2320B
TA2-NW1-595	Bromide	0.811	0.0670	0.200			125187-003	SW846-9056A
24-Jul-25	Chloride	53.1	0.670	2.00	B		125187-003	SW846-9056A
	Fluoride	0.298	0.0330	0.100			125187-003	SW846-9056A
	Sulfate	71.4	1.33	4.00			125187-003	SW846-9056A
	Bicarbonate Alkalinity	148	0.725	2.00			125187-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125187-004	SM 2320B
TA2-W-01	Bromide	1.32	0.0670	0.200			125197-003	SW846-9056A
30-Jul-25	Chloride	93.4	1.34	4.00			125197-003	SW846-9056A
	Fluoride	0.371	0.0330	0.100			125197-003	SW846-9056A
	Sulfate	63.8	2.66	8.00			125197-003	SW846-9056A
	Bicarbonate Alkalinity	100	0.725	2.00			125197-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125197-004	SM 2320B

See notes at end of tables.

Table 5B-4 (continued)
Summary of Anion and Alkalinity Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA2-W-19 06-Aug-25	Bromide	0.831	0.0670	0.200			125210-003	SW846-9056A
	Chloride	55.3	0.670	2.00			125210-003	SW846-9056A
	Fluoride	0.396	0.0330	0.100			125210-003	SW846-9056A
	Sulfate	54.5	1.33	4.00			125210-003	SW846-9056A
	Bicarbonate Alkalinity	111	0.725	2.00			125210-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125210-004	SM 2320B
TA2-W-24 17-Jul-25	Bromide	0.175	0.0670	0.200	J		125173-003	SW846-9056A
	Chloride	13.2	0.335	1.00			125173-003	SW846-9056A
	Fluoride	0.416	0.0330	0.100			125173-003	SW846-9056A
	Sulfate	45.4	0.665	2.00			125173-003	SW846-9056A
	Bicarbonate Alkalinity	163	0.725	2.00			125173-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125173-004	SM 2320B
TA2-W-25 23-Jul-25	Bromide	0.246	0.0670	0.200			125184-003	SW846-9056A
	Chloride	16.6	0.335	1.00	B		125184-003	SW846-9056A
	Fluoride	0.327	0.0330	0.100			125184-003	SW846-9056A
	Sulfate	69.4	0.665	2.00			125184-003	SW846-9056A
	Bicarbonate Alkalinity	166	0.725	2.00			125184-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125184-004	SM 2320B
TA2-W-26 14-Aug-25	Bromide	0.497	0.0670	0.200			125224-003	SW846-9056A
	Chloride	42.4	0.670	2.00			125224-003	SW846-9056A
	Fluoride	0.243	0.0330	0.100			125224-003	SW846-9056A
	Sulfate	105	1.33	4.00		J	125224-003	SW846-9056A
	Bicarbonate Alkalinity	151	0.725	2.00			125224-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125224-004	SM 2320B
TA2-W-27 31-Jul-25	Bromide	1.37	0.0670	0.200			125199-003	SW846-9056A
	Chloride	101	1.34	4.00			125199-003	SW846-9056A
	Fluoride	0.310	0.0330	0.100			125199-003	SW846-9056A
	Sulfate	141	2.66	8.00			125199-003	SW846-9056A
	Bicarbonate Alkalinity	96.0	0.725	2.00			125199-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125199-004	SM 2320B
TA2-W-28 08-Aug-25	Bromide	0.765	0.0670	0.200			125216-003	SW846-9056A
	Chloride	47.4	0.670	2.00			125216-003	SW846-9056A
	Fluoride	0.360	0.0330	0.100			125216-003	SW846-9056A
	Sulfate	17.7	0.133	0.400			125216-003	SW846-9056A
	Bicarbonate Alkalinity	114	0.725	2.00			125216-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125216-004	SM 2320B

See notes at end of tables.

Table 5B-4 (continued)
Summary of Anion and Alkalinity Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TJA-2 05-Aug-25	Bromide	0.849	0.0670	0.200			125206-003	SW846-9056A
	Chloride	58.4	0.670	2.00			125206-003	SW846-9056A
	Fluoride	0.347	0.0330	0.100			125206-003	SW846-9056A
	Sulfate	51.1	1.33	4.00			125206-003	SW846-9056A
	Bicarbonate Alkalinity	111	0.725	2.00			125206-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125206-004	SM 2320B
TJA-3 29-Jul-25	Bromide	0.193	0.0670	0.200	J		125195-003	SW846-9056A
	Chloride	13.0	0.335	1.00			125195-003	SW846-9056A
	Fluoride	0.361	0.0330	0.100			125195-003	SW846-9056A
	Sulfate	79.1	0.665	2.00			125195-003	SW846-9056A
	Bicarbonate Alkalinity	170	0.725	2.00			125195-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125195-004	SM 2320B
TJA-4 12-Aug-25	Bromide	0.360	0.0670	0.200			125218-003	SW846-9056A
	Chloride	21.9	0.268	0.800			125218-003	SW846-9056A
	Fluoride	0.321	0.0330	0.100			125218-003	SW846-9056A
	Sulfate	17.2	0.133	0.400			125218-003	SW846-9056A
	Bicarbonate Alkalinity	135	0.725	2.00			125218-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125218-004	SM 2320B
TJA-5 07-Aug-25	Bromide	0.266	0.0670	0.200			125214-003	SW846-9056A
	Chloride	16.0	0.670	2.00			125214-003	SW846-9056A
	Fluoride	0.374	0.0330	0.100			125214-003	SW846-9056A
	Sulfate	112	1.33	4.00			125214-003	SW846-9056A
	Bicarbonate Alkalinity	127	0.725	2.00			125214-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125214-004	SM 2320B
TJA-6 22-Jul-25	Bromide	0.198	0.0670	0.200	J		125179-003	SW846-9056A
	Chloride	13.5	0.335	1.00	B		125179-003	SW846-9056A
	Fluoride	0.332	0.0330	0.100			125179-003	SW846-9056A
	Sulfate	59.8	0.665	2.00			125179-003	SW846-9056A
	Bicarbonate Alkalinity	165	0.725	2.00			125179-004	SM 2320B
	Carbonate Alkalinity	3.00	0.725	2.00			125179-004	SM 2320B
TJA-7 13-Aug-25	Bromide	0.438	0.0670	0.200			125220-003	SW846-9056A
	Chloride	24.4	0.268	0.800			125220-003	SW846-9056A
	Fluoride	0.328	0.0330	0.100			125220-003	SW846-9056A
	Sulfate	24.5	0.532	1.60			125220-003	SW846-9056A
	Bicarbonate Alkalinity	132	0.725	2.00			125220-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125220-004	SM 2320B

See notes at end of tables.

Table 5B-4 (concluded)
Summary of Anion and Alkalinity Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
WYO-3	Bromide	0.169	0.0670	0.200	J		125175-003	SW846-9056A
21-Jul-25	Chloride	13.0	0.335	1.00			125175-003	SW846-9056A
	Fluoride	0.444	0.0330	0.100			125175-003	SW846-9056A
	Sulfate	77.5	0.665	2.00			125175-003	SW846-9056A
	Bicarbonate Alkalinity	175	0.725	2.00			125175-004	SM 2320B
	Carbonate Alkalinity	ND	0.725	2.00	U		125175-004	SM 2320B

See notes at end of tables.

Table 5B-5
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA1-W-02	Aluminum	ND	0.0193	0.0500	U		125170-005	SW846-6020B
16-Jul-25	Antimony	ND	0.00100	0.00300	U		125170-005	SW846-6020B
	Arsenic	ND	0.00200	0.00500	U		125170-005	SW846-6020B
	Barium	0.0509	0.000670	0.00400			125170-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125170-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125170-005	SW846-6020B
	Calcium	75.2	0.800	2.00			125170-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125170-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125170-005	SW846-6020B
	Copper	ND	0.000300	0.00200	U		125170-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125170-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125170-005	SW846-6020B
	Magnesium	13.4	0.0100	0.0300			125170-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U		125170-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125170-005	SW846-7470A
	Nickel	0.00141	0.000600	0.00200	J		125170-005	SW846-6020B
	Potassium	2.22	0.0800	0.300			125170-005	SW846-6020B
	Selenium	ND	0.00150	0.00500	U		125170-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125170-005	SW846-6020B
	Sodium	24.4	0.0800	0.250			125170-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125170-005	SW846-6020B
	Uranium	0.00306	0.0000670	0.000200			125170-005	SW846-6020B
	Vanadium	0.00668	0.00330	0.0200	J		125170-005	SW846-6020B
	Zinc	0.00817	0.00330	0.0200	J	0.02U	125170-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA1-W-06	Aluminum	ND	0.0193	0.0500	U		125201-005	SW846-6020B
01-Aug-25	Antimony	ND	0.00100	0.00300	U		125201-005	SW846-6020B
	Arsenic	0.00303	0.00200	0.00500	J		125201-005	SW846-6020B
	Barium	0.0253	0.000670	0.00400			125201-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125201-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125201-005	SW846-6020B
	Calcium	131	0.800	2.00			125201-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125201-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125201-005	SW846-6020B
	Copper	ND	0.000300	0.00200	U		125201-005	SW846-6020B
	Iron	0.0337	0.0330	0.100	J		125201-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125201-005	SW846-6020B
	Magnesium	17.2	0.0100	0.0300			125201-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U		125201-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125201-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125201-005	SW846-6020B
	Potassium	2.24	0.0800	0.300			125201-005	SW846-6020B
	Selenium	0.00844	0.00150	0.00500			125201-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125201-005	SW846-6020B
	Sodium	32.4	0.0800	0.250			125201-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125201-005	SW846-6020B
	Uranium	0.00106	0.0000670	0.000200			125201-005	SW846-6020B
	Vanadium	0.00472	0.00330	0.0200	J		125201-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125201-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA1-W-08	Aluminum	ND	0.0193	0.0500	U		125204-005	SW846-6020B
04-Aug-25	Antimony	ND	0.00100	0.00300	U		125204-005	SW846-6020B
	Arsenic	0.00214	0.00200	0.00500	J		125204-005	SW846-6020B
	Barium	0.0171	0.000670	0.00400			125204-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125204-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125204-005	SW846-6020B
	Calcium	283	0.800	2.00			125204-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125204-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125204-005	SW846-6020B
	Copper	ND	0.000300	0.00200	U	UJ	125204-005	SW846-6020B
	Iron	0.0350	0.0330	0.100	J		125204-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125204-005	SW846-6020B
	Magnesium	37.5	0.100	0.300			125204-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U	R	125204-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125204-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125204-005	SW846-6020B
	Potassium	2.93	0.0800	0.300			125204-005	SW846-6020B
	Selenium	0.0281	0.00150	0.00500			125204-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125204-005	SW846-6020B
	Sodium	70.7	0.800	2.50			125204-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125204-005	SW846-6020B
	Uranium	0.00155	0.0000670	0.000200			125204-005	SW846-6020B
	Vanadium	0.00492	0.00330	0.0200	J		125204-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125204-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA2-NW1-325	Aluminum	ND	0.0193	0.0500	U		125190-005	SW846-6020B
28-Jul-25	Antimony	ND	0.00100	0.00300	U		125190-005	SW846-6020B
	Arsenic	ND	0.00200	0.00500	U		125190-005	SW846-6020B
	Barium	0.0580	0.000670	0.00400			125190-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125190-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125190-005	SW846-6020B
	Calcium	100	0.400	1.00			125190-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125190-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125190-005	SW846-6020B
	Copper	0.000391	0.000300	0.00200	J		125190-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125190-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125190-005	SW846-6020B
	Magnesium	14.3	0.0100	0.0300			125190-005	SW846-6020B
	Manganese	0.00654	0.00100	0.00500			125190-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125190-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125190-005	SW846-6020B
	Potassium	2.03	0.0800	0.300			125190-005	SW846-6020B
	Selenium	0.00552	0.00150	0.00500			125190-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125190-005	SW846-6020B
	Sodium	24.2	0.0800	0.250			125190-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125190-005	SW846-6020B
	Uranium	0.00118	0.0000670	0.000200			125190-005	SW846-6020B
	Vanadium	0.00628	0.00330	0.0200	J		125190-005	SW846-6020B
	Zinc	0.00469	0.00330	0.0200	J		125190-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA2-NW1-595	Aluminum	ND	0.0193	0.0500	U		125187-005	SW846-6020B
24-Jul-25	Antimony	ND	0.00100	0.00300	U		125187-005	SW846-6020B
	Arsenic	ND	0.00200	0.00500	U		125187-005	SW846-6020B
	Barium	0.0371	0.000670	0.00400			125187-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125187-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125187-005	SW846-6020B
	Calcium	103	0.800	2.00		J	125187-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125187-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125187-005	SW846-6020B
	Copper	ND	0.000300	0.00200	U		125187-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125187-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125187-005	SW846-6020B
	Magnesium	14.0	0.0100	0.0300			125187-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U		125187-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125187-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125187-005	SW846-6020B
	Potassium	2.13	0.0800	0.300			125187-005	SW846-6020B
	Selenium	0.00575	0.00150	0.00500			125187-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125187-005	SW846-6020B
	Sodium	26.7	0.0800	0.250			125187-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125187-005	SW846-6020B
	Uranium	0.00206	0.0000670	0.000200			125187-005	SW846-6020B
	Vanadium	0.00530	0.00330	0.0200	J		125187-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125187-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA2-W-01	Aluminum	ND	0.0193	0.0500	U		125197-005	SW846-6020B
30-Jul-25	Antimony	ND	0.00100	0.00300	U		125197-005	SW846-6020B
	Arsenic	0.00257	0.00200	0.00500	J		125197-005	SW846-6020B
	Barium	0.0580	0.000670	0.00400			125197-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125197-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125197-005	SW846-6020B
	Calcium	86.8	0.800	2.00			125197-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125197-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125197-005	SW846-6020B
	Copper	ND	0.000300	0.00200	U		125197-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125197-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125197-005	SW846-6020B
	Magnesium	13.0	0.0100	0.0300			125197-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U		125197-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125197-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125197-005	SW846-6020B
	Potassium	1.94	0.0800	0.300			125197-005	SW846-6020B
	Selenium	0.00577	0.00150	0.00500			125197-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125197-005	SW846-6020B
	Sodium	21.9	0.0800	0.250			125197-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125197-005	SW846-6020B
	Uranium	0.00107	0.0000670	0.000200			125197-005	SW846-6020B
	Vanadium	0.00508	0.00330	0.0200	J		125197-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125197-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA2-W-19	Aluminum	ND	0.0193	0.0500	U		125210-005	SW846-6020B
06-Aug-25	Antimony	ND	0.00100	0.00300	U		125210-005	SW846-6020B
	Arsenic	ND	0.00200	0.00500	U		125210-005	SW846-6020B
	Barium	0.0485	0.000670	0.00400			125210-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125210-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125210-005	SW846-6020B
	Calcium	79.1	0.800	2.00			125210-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125210-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125210-005	SW846-6020B
	Copper	0.000337	0.000300	0.00200	J		125210-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125210-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125210-005	SW846-6020B
	Magnesium	11.9	0.0100	0.0300			125210-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U		125210-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125210-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125210-005	SW846-6020B
	Potassium	1.86	0.0800	0.300			125210-005	SW846-6020B
	Selenium	0.00434	0.00150	0.00500	J		125210-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125210-005	SW846-6020B
	Sodium	22.3	0.0800	0.250			125210-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125210-005	SW846-6020B
	Uranium	0.00125	0.0000670	0.000200			125210-005	SW846-6020B
	Vanadium	0.00594	0.00330	0.0200	J		125210-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125210-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA2-W-24	Aluminum	0.0254	0.0193	0.0500	J		125173-005	SW846-6020B
17-Jul-25	Antimony	ND	0.00100	0.00300	U		125173-005	SW846-6020B
	Arsenic	ND	0.00200	0.00500	U		125173-005	SW846-6020B
	Barium	0.0942	0.000670	0.00400			125173-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125173-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125173-005	SW846-6020B
	Calcium	59.9	0.800	2.00			125173-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125173-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125173-005	SW846-6020B
	Copper	0.000790	0.000300	0.00200	J		125173-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125173-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125173-005	SW846-6020B
	Magnesium	10.5	0.0100	0.0300			125173-005	SW846-6020B
	Manganese	0.00102	0.00100	0.00500	J		125173-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125173-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125173-005	SW846-6020B
	Potassium	3.30	0.0800	0.300			125173-005	SW846-6020B
	Selenium	ND	0.00150	0.00500	U		125173-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125173-005	SW846-6020B
	Sodium	22.3	0.0800	0.250			125173-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125173-005	SW846-6020B
	Uranium	0.00258	0.0000670	0.000200			125173-005	SW846-6020B
	Vanadium	0.00615	0.00330	0.0200	J		125173-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125173-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA2-W-25	Aluminum	ND	0.0193	0.0500	U		125184-005	SW846-6020B
23-Jul-25	Antimony	ND	0.00100	0.00300	U		125184-005	SW846-6020B
	Arsenic	ND	0.00200	0.00500	U		125184-005	SW846-6020B
	Barium	0.0401	0.000670	0.00400			125184-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125184-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125184-005	SW846-6020B
	Calcium	88.8	0.800	2.00		J	125184-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125184-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125184-005	SW846-6020B
	Copper	ND	0.000300	0.00200	U		125184-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125184-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125184-005	SW846-6020B
	Magnesium	9.96	0.0100	0.0300			125184-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U		125184-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125184-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125184-005	SW846-6020B
	Potassium	1.69	0.0800	0.300			125184-005	SW846-6020B
	Selenium	0.00221	0.00150	0.00500	J		125184-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125184-005	SW846-6020B
	Sodium	25.3	0.0800	0.250			125184-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125184-005	SW846-6020B
	Uranium	0.00235	0.0000670	0.000200			125184-005	SW846-6020B
	Vanadium	0.00508	0.00330	0.0200	J		125184-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125184-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA2-W-26	Aluminum	0.809	0.0193	0.0500			125224-005	SW846-6020B
14-Aug-25	Antimony	ND	0.00100	0.00300	U		125224-005	SW846-6020B
	Arsenic	ND	0.00200	0.00500	U		125224-005	SW846-6020B
	Barium	0.0621	0.000670	0.00400			125224-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125224-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125224-005	SW846-6020B
	Calcium	101	0.400	1.00			125224-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125224-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125224-005	SW846-6020B
	Copper	0.000926	0.000300	0.00200	B, J	0.002U	125224-005	SW846-6020B
	Iron	0.727	0.0330	0.100			125224-005	SW846-6020B
	Lead	0.000538	0.000500	0.00200	J		125224-005	SW846-6020B
	Magnesium	13.3	0.0100	0.0300			125224-005	SW846-6020B
	Manganese	0.0113	0.00100	0.00500			125224-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125224-005	SW846-7470A
	Nickel	0.000699	0.000600	0.00200	J		125224-005	SW846-6020B
	Potassium	2.03	0.0800	0.300			125224-005	SW846-6020B
	Selenium	0.00459	0.00150	0.00500	J		125224-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125224-005	SW846-6020B
	Sodium	27.5	0.0800	0.250			125224-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125224-005	SW846-6020B
	Uranium	0.00209	0.0000670	0.000200			125224-005	SW846-6020B
	Vanadium	0.00497	0.00330	0.0200	J		125224-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125224-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA2-W-27	Aluminum	ND	0.0193	0.0500	U		125199-005	SW846-6020B
31-Jul-25	Antimony	ND	0.00100	0.00300	U		125199-005	SW846-6020B
	Arsenic	0.00277	0.00200	0.00500	J		125199-005	SW846-6020B
	Barium	0.0530	0.000670	0.00400			125199-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125199-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125199-005	SW846-6020B
	Calcium	113	0.800	2.00			125199-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125199-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125199-005	SW846-6020B
	Copper	ND	0.000300	0.00200	U		125199-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125199-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125199-005	SW846-6020B
	Magnesium	15.8	0.0100	0.0300			125199-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U		125199-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125199-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125199-005	SW846-6020B
	Potassium	2.07	0.0800	0.300			125199-005	SW846-6020B
	Selenium	0.00789	0.00150	0.00500			125199-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125199-005	SW846-6020B
	Sodium	27.5	0.0800	0.250			125199-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125199-005	SW846-6020B
	Uranium	0.00103	0.0000670	0.000200			125199-005	SW846-6020B
	Vanadium	0.00446	0.00330	0.0200	J		125199-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125199-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA2-W-28	Aluminum	ND	0.0193	0.0500	U		125216-005	SW846-6020B
08-Aug-25	Antimony	ND	0.00100	0.00300	U		125216-005	SW846-6020B
	Arsenic	ND	0.00200	0.00500	U		125216-005	SW846-6020B
	Barium	0.187	0.000670	0.00400			125216-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125216-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125216-005	SW846-6020B
	Calcium	67.1	0.800	2.00			125216-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125216-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125216-005	SW846-6020B
	Copper	0.000444	0.000300	0.00200	J		125216-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125216-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125216-005	SW846-6020B
	Magnesium	11.7	0.0100	0.0300			125216-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U		125216-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125216-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125216-005	SW846-6020B
	Potassium	1.95	0.0800	0.300			125216-005	SW846-6020B
	Selenium	0.00369	0.00150	0.00500	J		125216-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125216-005	SW846-6020B
	Sodium	18.7	0.0800	0.250			125216-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125216-005	SW846-6020B
	Uranium	0.00137	0.0000670	0.000200			125216-005	SW846-6020B
	Vanadium	0.00654	0.00330	0.0200	J		125216-005	SW846-6020B
	Zinc	0.00452	0.00330	0.0200	J		125216-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TJA-2	Aluminum	ND	0.0193	0.0500	U		125206-005	SW846-6020B
05-Aug-25	Antimony	ND	0.00100	0.00300	U		125206-005	SW846-6020B
	Arsenic	ND	0.00200	0.00500	U		125206-005	SW846-6020B
	Barium	0.0457	0.000670	0.00400			125206-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125206-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125206-005	SW846-6020B
	Calcium	69.8	0.800	2.00			125206-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125206-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125206-005	SW846-6020B
	Copper	0.000511	0.000300	0.00200	B, J	0.002UJ	125206-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125206-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125206-005	SW846-6020B
	Magnesium	10.7	0.100	0.300			125206-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U		125206-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125206-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125206-005	SW846-6020B
	Potassium	1.73	0.0800	0.300			125206-005	SW846-6020B
	Selenium	0.00412	0.00150	0.00500	J		125206-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125206-005	SW846-6020B
	Sodium	21.1	0.0800	0.250			125206-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125206-005	SW846-6020B
	Uranium	0.00123	0.0000670	0.000200			125206-005	SW846-6020B
	Vanadium	0.00689	0.00330	0.0200	J		125206-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125206-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TJA-3	Aluminum	ND	0.0193	0.0500	U		125195-005	SW846-6020B
29-Jul-25	Antimony	ND	0.00100	0.00300	U		125195-005	SW846-6020B
	Arsenic	ND	0.00200	0.00500	U		125195-005	SW846-6020B
	Barium	0.0446	0.000670	0.00400			125195-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125195-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125195-005	SW846-6020B
	Calcium	70.6	0.400	1.00			125195-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125195-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125195-005	SW846-6020B
	Copper	ND	0.000300	0.00200	U		125195-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125195-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125195-005	SW846-6020B
	Magnesium	11.7	0.0100	0.0300			125195-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U		125195-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125195-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125195-005	SW846-6020B
	Potassium	1.94	0.0800	0.300			125195-005	SW846-6020B
	Selenium	0.00178	0.00150	0.00500	J		125195-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125195-005	SW846-6020B
	Sodium	25.3	0.0800	0.250			125195-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125195-005	SW846-6020B
	Uranium	0.00261	0.0000670	0.000200			125195-005	SW846-6020B
	Vanadium	0.00595	0.00330	0.0200	J		125195-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125195-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TJA-4	Aluminum	ND	0.0193	0.0500	U		125218-005	SW846-6020B
12-Aug-25	Antimony	ND	0.00100	0.00300	U		125218-005	SW846-6020B
	Arsenic	ND	0.00200	0.00500	U		125218-005	SW846-6020B
	Barium	0.172	0.000670	0.00400			125218-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125218-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125218-005	SW846-6020B
	Calcium	71.3	0.800	2.00		J	125218-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125218-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125218-005	SW846-6020B
	Copper	0.000328	0.000300	0.00200	J		125218-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125218-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125218-005	SW846-6020B
	Magnesium	14.2	0.0100	0.0300			125218-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U		125218-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125218-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125218-005	SW846-6020B
	Potassium	3.00	0.0800	0.300			125218-005	SW846-6020B
	Selenium	0.00298	0.00150	0.00500	J		125218-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125218-005	SW846-6020B
	Sodium	24.0	0.0800	0.250			125218-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125218-005	SW846-6020B
	Uranium	0.00272	0.0000670	0.000200			125218-005	SW846-6020B
	Vanadium	0.00560	0.00330	0.0200	J		125218-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125218-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TJA-5	Aluminum	ND	0.0193	0.0500	U		125214-005	SW846-6020B
07-Aug-25	Antimony	ND	0.00100	0.00300	U		125214-005	SW846-6020B
	Arsenic	ND	0.00200	0.00500	U		125214-005	SW846-6020B
	Barium	0.0501	0.000670	0.00400			125214-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125214-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125214-005	SW846-6020B
	Calcium	77.8	0.800	2.00			125214-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125214-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125214-005	SW846-6020B
	Copper	ND	0.000300	0.00200	U		125214-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125214-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125214-005	SW846-6020B
	Magnesium	13.4	0.0100	0.0300			125214-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U		125214-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125214-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125214-005	SW846-6020B
	Potassium	1.80	0.0800	0.300			125214-005	SW846-6020B
	Selenium	0.00486	0.00150	0.00500	J		125214-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125214-005	SW846-6020B
	Sodium	21.0	0.0800	0.250			125214-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125214-005	SW846-6020B
	Uranium	0.00220	0.0000670	0.000200			125214-005	SW846-6020B
	Vanadium	0.00619	0.00330	0.0200	J		125214-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125214-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TJA-6	Aluminum	0.0262	0.0193	0.0500	J		125179-005	SW846-6020B
22-Jul-25	Antimony	ND	0.00100	0.00300	U		125179-005	SW846-6020B
	Arsenic	ND	0.00200	0.00500	U		125179-005	SW846-6020B
	Barium	0.0651	0.000670	0.00400			125179-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125179-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125179-005	SW846-6020B
	Calcium	60.5	0.800	2.00			125179-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125179-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125179-005	SW846-6020B
	Copper	ND	0.000300	0.00200	U		125179-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125179-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125179-005	SW846-6020B
	Magnesium	12.1	0.0100	0.0300			125179-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U		125179-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125179-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125179-005	SW846-6020B
	Potassium	2.21	0.0800	0.300			125179-005	SW846-6020B
	Selenium	ND	0.00150	0.00500	U		125179-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125179-005	SW846-6020B
	Sodium	22.5	0.0800	0.250			125179-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125179-005	SW846-6020B
	Uranium	0.00389	0.0000670	0.000200	*	J	125179-005	SW846-6020B
	Vanadium	0.00718	0.00330	0.0200	J		125179-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125179-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (continued)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TJA-7	Aluminum	ND	0.0193	0.0500	U		125220-005	SW846-6020B
13-Aug-25	Antimony	ND	0.00100	0.00300	U		125220-005	SW846-6020B
	Arsenic	ND	0.00200	0.00500	U		125220-005	SW846-6020B
	Barium	0.244	0.000670	0.00400			125220-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125220-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125220-005	SW846-6020B
	Calcium	70.8	0.400	1.00			125220-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125220-005	SW846-6020B
	Cobalt	0.00134	0.000300	0.00100			125220-005	SW846-6020B
	Copper	ND	0.000300	0.00200	U		125220-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125220-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125220-005	SW846-6020B
	Magnesium	12.5	0.0100	0.0300			125220-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U		125220-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125220-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125220-005	SW846-6020B
	Potassium	2.03	0.0800	0.300			125220-005	SW846-6020B
	Selenium	0.00447	0.00150	0.00500	J		125220-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125220-005	SW846-6020B
	Sodium	19.1	0.0800	0.250			125220-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125220-005	SW846-6020B
	Uranium	0.00174	0.0000670	0.000200			125220-005	SW846-6020B
	Vanadium	0.00618	0.00330	0.0200	J		125220-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125220-005	SW846-6020B

See notes at end of tables.

Table 5B-5 (concluded)
Summary of Target Analyte List Metals plus Uranium Results,
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Result [a] (mg/L)	MDL[b] (mg/L)	PQL[c] (mg/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
WYO-3	Aluminum	0.0197	0.0193	0.0500	J		125175-005	SW846-6020B
21-Jul-25	Antimony	ND	0.00100	0.00300	U		125175-005	SW846-6020B
	Arsenic	ND	0.00200	0.00500	U		125175-005	SW846-6020B
	Barium	0.0486	0.000670	0.00400			125175-005	SW846-6020B
	Beryllium	ND	0.000200	0.000500	U		125175-005	SW846-6020B
	Cadmium	ND	0.000300	0.00100	U		125175-005	SW846-6020B
	Calcium	66.7	0.800	2.00			125175-005	SW846-6020B
	Chromium	ND	0.00300	0.0100	U		125175-005	SW846-6020B
	Cobalt	ND	0.000300	0.00100	U		125175-005	SW846-6020B
	Copper	ND	0.000300	0.00200	U		125175-005	SW846-6020B
	Iron	ND	0.0330	0.100	U		125175-005	SW846-6020B
	Lead	ND	0.000500	0.00200	U		125175-005	SW846-6020B
	Magnesium	13.0	0.0100	0.0300			125175-005	SW846-6020B
	Manganese	ND	0.00100	0.00500	U		125175-005	SW846-6020B
	Mercury	ND	0.0000670	0.000200	U		125175-005	SW846-7470A
	Nickel	ND	0.000600	0.00200	U		125175-005	SW846-6020B
	Potassium	2.40	0.0800	0.300			125175-005	SW846-6020B
	Selenium	0.00165	0.00150	0.00500	J		125175-005	SW846-6020B
	Silver	ND	0.000300	0.00100	U		125175-005	SW846-6020B
	Sodium	26.3	0.0800	0.250			125175-005	SW846-6020B
	Thallium	ND	0.000600	0.00200	U		125175-005	SW846-6020B
	Uranium	0.00364	0.0000670	0.000200			125175-005	SW846-6020B
	Vanadium	0.00619	0.00330	0.0200	J		125175-005	SW846-6020B
	Zinc	ND	0.00330	0.0200	U		125175-005	SW846-6020B

See notes at end of tables.

Table 5B-6
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, and Tritium Results, Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity [a] (pCi/L)	MDA [b] (pCi/L)	Critical Level [c] (pCi/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA1-W-02	Americium-241	1.53 ± 10.5	17.6	8.36	U	BD	125170-006	EPA 901.1
16-Jul-25	Cesium-137	1.19 ± 2.16	4.08	1.86	U	BD	125170-006	EPA 901.1
	Cobalt-60	-0.0637 ± 1.85	3.66	1.54	U	BD	125170-006	EPA 901.1
	Potassium-40	19.1 ± 52.7	47.1	20.7	U	BD	125170-006	EPA 901.1
	Gross Alpha	1.30	NA	NA	NA	None	125170-007	EPA 900.0/SW846-9310
	Gross Beta	2.65 ± 0.698	1.03	0.493		J	125170-007	EPA 900.0/SW846-9310
	Tritium	9.37 ± 79.5	148	65.7	U	BD	125170-008	EPA 906.0M
TA1-W-06	Americium-241	1.17 ± 5.83	11.1	5.24	U	BD	125201-006	EPA 901.1
01-Aug-25	Cesium-137	2.06 ± 3.32	6.09	2.80	U	BD	125201-006	EPA 901.1
	Cobalt-60	-0.112 ± 2.53	4.85	2.05	U	BD	125201-006	EPA 901.1
	Potassium-40	66.1 ± 70.1	54.2	23.4		BD	125201-006	EPA 901.1
	Gross Alpha	-0.04	NA	NA	NA	None	125201-007	EPA 900.0/SW846-9310
	Gross Beta	2.67 ± 1.15	1.82	0.880	*	J	125201-007	EPA 900.0/SW846-9310
	Tritium	-52.4 ± 68.5	139	62.8	U	BD	125201-008	EPA 906.0M
TA1-W-08	Americium-241	-1.59 ± 8.75	15.1	7.19	U	BD	125204-006	EPA 901.1
04-Aug-25	Cesium-137	-1.61 ± 2.59	4.42	1.99	U	BD	125204-006	EPA 901.1
	Cobalt-60	-0.0145 ± 2.83	5.33	2.32	U	BD	125204-006	EPA 901.1
	Potassium-40	-9.12 ± 46.0	82.8	38.0	U	BD	125204-006	EPA 901.1
	Gross Alpha	-0.08	NA	NA	NA	None	125204-007	EPA 900.0/SW846-9310
	Gross Beta	5.06 ± 2.27	3.62	1.75		J	125204-007	EPA 900.0/SW846-9310
	Tritium	-26.6 ± 63.6	132	57.2	U	BD	125204-008	EPA 906.0M
TA2-NW1-325	Americium-241	3.10 ± 5.26	9.87	4.64	U	BD	125190-006	EPA 901.1
28-Jul-25	Cesium-137	1.97 ± 2.13	4.27	1.90	U	BD	125190-006	EPA 901.1
	Cobalt-60	1.31 ± 2.73	5.70	2.48	U	BD	125190-006	EPA 901.1
	Potassium-40	-8.67 ± 44.3	85.7	39.2	U	BD	125190-006	EPA 901.1
	Gross Alpha	0.53	NA	NA	NA	None	125190-007	EPA 900.0/SW846-9310
	Gross Beta	2.33 ± 0.937	1.48	0.716		J	125190-007	EPA 900.0/SW846-9310
	Tritium	85.8 ± 105	175	83.5	U	BD	125190-008	EPA 906.0M
TA2-NW1-595	Americium-241	0.742 ± 3.98	7.48	3.52	U	BD	125187-006	EPA 901.1
24-Jul-25	Cesium-137	2.00 ± 3.97	7.52	3.41	U	BD	125187-006	EPA 901.1
	Cobalt-60	-1.06 ± 4.01	6.41	2.64	U	BD	125187-006	EPA 901.1
	Potassium-40	-52.3 ± 53.8	77.4	33.0	U	BD	125187-006	EPA 901.1
	Gross Alpha	0.23	NA	NA	NA	None	125187-007	EPA 900.0/SW846-9310
	Gross Beta	2.57 ± 0.735	1.09	0.525		J	125187-007	EPA 900.0/SW846-9310
	Tritium	19.2 ± 71.1	128	57.8	U	BD	125187-008	EPA 906.0M

See notes at end of tables.

Table 5B-6 (continued)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, and Tritium Results, Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity [a] (pCi/L)	MDA [b] (pCi/L)	Critical Level [c] (pCi/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA2-W-01	Americium-241	0.0342 ± 5.95	9.87	4.66	U	BD	125197-006	EPA 901.1
30-Jul-25	Cesium-137	-0.874 ± 2.49	4.28	1.93	U	BD	125197-006	EPA 901.1
	Cobalt-60	-2.35 ± 2.61	3.81	1.59	U	BD	125197-006	EPA 901.1
	Potassium-40	38.2 ± 46.1	44.0	18.9	U	BD	125197-006	EPA 901.1
	Gross Alpha	0.08	NA	NA	NA	None	125197-007	EPA 900.0/SW846-9310
	Gross Beta	2.41 ± 1.08	1.72	0.829	*	J	125197-007	EPA 900.0/SW846-9310
	Tritium	5.71 ± 79.4	147	66.1	U	BD	125197-008	EPA 906.0M
TA2-W-19	Americium-241	2.30 ± 4.02	6.96	3.30	U	BD	125210-006	EPA 901.1
06-Aug-25	Cesium-137	1.27 ± 3.84	7.07	3.26	U	BD	125210-006	EPA 901.1
	Cobalt-60	-2.60 ± 3.87	5.06	2.07	U	BD	125210-006	EPA 901.1
	Potassium-40	-40.5 ± 56.9	80.8	35.8	U	BD	125210-006	EPA 901.1
	Gross Alpha	-0.27	NA	NA	NA	None	125210-007	EPA 900.0/SW846-9310
	Gross Beta	2.88 ± 0.769	1.15	0.555		NJ+	125210-007	EPA 900.0/SW846-9310
	Tritium	32.5 ± 94.4	169	75.7	U	BD	125210-008	EPA 906.0M
TA2-W-24	Americium-241	0.326 ± 3.70	6.90	3.26	U	BD	125173-006	EPA 901.1
17-Jul-25	Cesium-137	3.79 ± 4.10	6.99	3.20	U	BD	125173-006	EPA 901.1
	Cobalt-60	0.0106 ± 3.46	6.74	2.89	U	BD	125173-006	EPA 901.1
	Potassium-40	73.3 ± 53.6	57.7	24.0		J	125173-006	EPA 901.1
	Gross Alpha	2.32	NA	NA	NA	None	125173-007	EPA 900.0/SW846-9310
	Gross Beta	4.62 ± 0.668	0.828	0.398			125173-007	EPA 900.0/SW846-9310
	Tritium	-80.2 ± 92.9	170	81.4	U	BD	125173-008	EPA 906.0M
TA2-W-25	Americium-241	-2.48 ± 10.3	18.3	8.60	U	BD	125184-006	EPA 901.1
23-Jul-25	Cesium-137	-1.05 ± 2.36	4.00	1.78	U	BD	125184-006	EPA 901.1
	Cobalt-60	1.01 ± 2.66	5.40	2.36	U	BD	125184-006	EPA 901.1
	Potassium-40	-24.9 ± 45.1	72.9	33.0	U	BD	125184-006	EPA 901.1
	Gross Alpha	0.29	NA	NA	NA	None	125184-007	EPA 900.0/SW846-9310
	Gross Beta	1.45 ± 0.759	1.22	0.591		NJ+	125184-007	EPA 900.0/SW846-9310
	Tritium	-34.4 ± 63.5	127	56.9	U	BD	125184-008	EPA 906.0M
TA2-W-26	Americium-241	0.304 ± 4.58	7.94	3.78	U	BD	125224-006	EPA 901.1
14-Aug-25	Cesium-137	-0.456 ± 1.82	3.31	1.50	U	BD	125224-006	EPA 901.1
	Cobalt-60	0.952 ± 2.25	4.51	2.01	U	BD	125224-006	EPA 901.1
	Potassium-40	-12.1 ± 42.0	67.8	31.5	U	BD	125224-006	EPA 901.1
	Gross Alpha	0.47	NA	NA	NA	None	125224-007	EPA 900.0/SW846-9310
	Gross Beta	2.43 ± 0.885	1.39	0.675		NJ+	125224-007	EPA 900.0/SW846-9310
	Tritium	96.5 ± 87.9	140	62.3	U	BD	125224-008	EPA 906.0M

See notes at end of tables.

Table 5B-6 (continued)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, and Tritium Results, Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity [a] (pCi/L)	MDA [b] (pCi/L)	Critical Level [c] (pCi/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TA2-W-27 31-Jul-25	Americium-241	-1.70 ± 5.80	9.79	4.60	U	BD	125199-006	EPA 901.1
	Cesium-137	2.19 ± 2.49	4.84	2.18	U	BD	125199-006	EPA 901.1
	Cobalt-60	1.72 ± 2.96	6.01	2.64	U	BD	125199-006	EPA 901.1
	Potassium-40	16.7 ± 55.4	45.6	19.1	U	BD	125199-006	EPA 901.1
	Gross Alpha	-0.51	NA	NA	NA	None	125199-007	EPA 900.0/SW846-9310
	Gross Beta	2.96 ± 1.12	1.75	0.845	*	J	125199-007	EPA 900.0/SW846-9310
	Tritium	-46.1 ± 73.6	146	66.2	U	BD	125199-008	EPA 906.0M
TA2-W-28 08-Aug-25	Americium-241	-7.84 ± 9.61	15.2	7.22	U	BD	125216-006	EPA 901.1
	Cesium-137	1.07 ± 2.10	3.86	1.78	U	BD	125216-006	EPA 901.1
	Cobalt-60	1.05 ± 2.33	4.16	1.85	U	BD	125216-006	EPA 901.1
	Potassium-40	-22.2 ± 37.6	61.1	28.3	U	BD	125216-006	EPA 901.1
	Gross Alpha	0.81	NA	NA	NA	None	125216-007	EPA 900.0/SW846-9310
	Gross Beta	5.95 ± 0.868	1.15	0.553	*	J	125216-007	EPA 900.0/SW846-9310
	Tritium	25.8 ± 79.9	144	64.1	U	BD	125216-008	EPA 906.0M
TJA-2 05-Aug-25	Americium-241	5.96 ± 10.8	19.6	9.26	U	BD	125206-006	EPA 901.1
	Cesium-137	2.09 ± 2.58	4.85	2.21	U	BD	125206-006	EPA 901.1
	Cobalt-60	0.775 ± 2.60	5.25	2.28	U	BD	125206-006	EPA 901.1
	Potassium-40	-50.6 ± 46.9	68.5	30.8	U	BD	125206-006	EPA 901.1
	Gross Alpha	-0.01	NA	NA	NA	None	125206-007	EPA 900.0/SW846-9310
	Gross Beta	3.29 ± 0.840	1.26	0.612		J	125206-007	EPA 900.0/SW846-9310
	Tritium	12.4 ± 69.9	131	57.0	U	BD	125206-008	EPA 906.0M
TJA-3 29-Jul-25	Americium-241	-0.248 ± 10.4	17.3	8.21	U	BD	125195-006	EPA 901.1
	Cesium-137	1.84 ± 2.32	4.00	1.83	U	BD	125195-006	EPA 901.1
	Cobalt-60	-0.618 ± 2.42	4.42	1.94	U	BD	125195-006	EPA 901.1
	Potassium-40	-23.3 ± 42.8	65.3	29.9	U	BD	125195-006	EPA 901.1
	Gross Alpha	0.83	NA	NA	NA	None	125195-007	EPA 900.0/SW846-9310
	Gross Beta	1.60 ± 0.624	0.979	0.472		J	125195-007	EPA 900.0/SW846-9310
	Tritium	76.5 ± 104	174	83.1	U	BD	125195-008	EPA 906.0M
TJA-4 12-Aug-25	Americium-241	-0.794 ± 3.41	5.75	2.73	U	BD	125218-006	EPA 901.1
	Cesium-137	-2.01 ± 3.44	4.85	2.19	U	BD	125218-006	EPA 901.1
	Cobalt-60	0.569 ± 3.35	6.49	2.87	U	BD	125218-006	EPA 901.1
	Potassium-40	7.60 ± 62.6	61.4	26.9	U	BD	125218-006	EPA 901.1
	Gross Alpha	0.66	NA	NA	NA	None	125218-007	EPA 900.0/SW846-9310
	Gross Beta	5.46 ± 0.845	1.14	0.549			125218-007	EPA 900.0/SW846-9310
	Tritium	-94.0 ± 94.7	194	88.4	U	BD	125218-008	EPA 906.0M

See notes at end of tables.

Table 5B-6 (concluded)
Summary of Gamma Spectroscopy, Gross Alpha, Gross Beta, and Tritium Results, Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Analyte	Activity [a] (pCi/L)	MDA [b] (pCi/L)	Critical Level [c] (pCi/L)	Laboratory Qualifier [d]	Validation Qualifier [e]	Sample No.	Analytical Method [f]
TJA-5 07-Aug-25	Americium-241	-0.988 ± 6.56	10.5	5.00	U	BD	125214-006	EPA 901.1
	Cesium-137	-0.902 ± 2.28	4.04	1.87	U	BD	125214-006	EPA 901.1
	Cobalt-60	3.30 ± 2.88	5.19	2.37	U	BD	125214-006	EPA 901.1
	Potassium-40	36.3 ± 47.1	39.6	17.5	U	BD	125214-006	EPA 901.1
	Gross Alpha	0.36	NA	NA	NA	None	125214-007	EPA 900.0/SW846-9310
	Gross Beta	3.23 ± 0.822	1.23	0.594	*	J	125214-007	EPA 900.0/SW846-9310
	Tritium	23.1 ± 88.0	158	71.6	U	BD	125214-008	EPA 906.0M
TJA-6 22-Jul-25	Americium-241	3.04 ± 7.27	12.3	5.79	U	BD	125179-006	EPA 901.1
	Cesium-137	0.684 ± 2.71	5.11	2.30	U	BD	125179-006	EPA 901.1
	Cobalt-60	-0.813 ± 2.48	4.58	1.90	U	BD	125179-006	EPA 901.1
	Potassium-40	23.3 ± 52.2	48.3	20.3	U	BD	125179-006	EPA 901.1
	Gross Alpha	-0.44	NA	NA	NA	None	125179-007	EPA 900.0/SW846-9310
	Gross Beta	1.64 ± 0.732	1.17	0.566		J	125179-007	EPA 900.0/SW846-9310
	Tritium	59.5 ± 90.9	155	69.8	U	BD	125179-008	EPA 906.0M
TJA-7 13-Aug-25	Americium-241	2.22 ± 5.38	9.66	4.59	U	BD	125220-006	EPA 901.1
	Cesium-137	0.177 ± 2.03	3.77	1.71	U	BD	125220-006	EPA 901.1
	Cobalt-60	0.563 ± 2.41	4.74	2.11	U	BD	125220-006	EPA 901.1
	Potassium-40	-1.73 ± 39.1	70.2	32.5	U	BD	125220-006	EPA 901.1
	Gross Alpha	0.35	NA	NA	NA	None	125220-007	EPA 900.0/SW846-9310
	Gross Beta	3.09 ± 0.716	1.05	0.508		J	125220-007	EPA 900.0/SW846-9310
	Tritium	66.2 ± 74.9	124	55.5	U	BD	125220-008	EPA 906.0M
WYO-3 21-Jul-24	Americium-241	-1.45 ± 5.86	10.3	4.83	U	BD	125175-006	EPA 901.1
	Cesium-137	-0.819 ± 2.46	4.30	1.94	U	BD	125175-006	EPA 901.1
	Cobalt-60	-0.582 ± 2.89	5.43	2.38	U	BD	125175-006	EPA 901.1
	Potassium-40	28.1 ± 60.2	45.5	19.4	U	BD	125175-006	EPA 901.1
	Gross Alpha	0.95	NA	NA	NA	None	125175-007	EPA 900.0/SW846-9310
	Gross Beta	3.29 ± 0.867	1.30	0.628		J	125175-007	EPA 900.0/SW846-9310
	Tritium	-11.0 ± 60.3	122	52.2	U	BD	125175-008	EPA 906.0M

See notes at end of tables.

Table 5B-7
Summary of Field Water Quality Parameter Measurements[g],
Tijeras Arroyo Groundwater Monitoring, Sandia National Laboratories, New Mexico, Calendar Year 2025

Well ID	Sample Date	Temperature (^{0}C)	Specific Conductivity (µmho/cm)	Oxidation Reduction Potential (mV)	pH	Turbidity (NTU)	Dissolved Oxygen (% Sat)	Dissolved Oxygen (mg/L)
TA1-W-06	19-Feb-25	15.77	1118.7	92.8	7.61	0.81	86.45	7.08
TA1-W-08	27-Feb-25	14.69	2329.0	120.5	7.51	0.33	86.76	7.24
TA2-NW1-325	24-Feb-25	11.49	871.62	181.0	6.48	0.38	87.68	7.88
TA2-W-01	20-Feb-25	15.74	794.75	141.5	7.73	0.11	89.30	7.26
TA2-W-19	04-Mar-25	17.33	667.68	108.8	7.72	0.61	104.42	8.31
TA2-W-26	26-Feb-25	14.88	783.58	138.6	7.65	12.9	88.83	7.36
TA2-W-27	25-Feb-25	18.98	952.42	98.8	7.62	0.43	97.47	7.14
TA2-W-28	06-Mar-25	17.33	612.70	109.4	7.75	0.43	92.11	7.75
TJA-2	03-Mar-25	15.58	672.93	105.6	7.69	0.38	94.73	7.67
TJA-5	05-Mar-25	16.78	664.04	115.7	7.65	0.57	103.17	8.23
TJA-7	10-Mar-25	17.47	593.56	120.6	7.68	0.22	87.59	6.89
TA1-W-02	16-Jul-25	22.04	538.2	103.4	7.49	1.10	78.62	5.61
TA1-W-06	01-Aug-25	22.89	930.4	62.4	7.66	0.50	100.5	7.15
TA1-W-08	04-Aug-25	23.61	2089	62.0	7.49	0.52	99.09	6.97
TA2-NW1-325	28-Jul-25	27.66	767.9	156.8	7.59	0.44	101.9	6.73
TA2-NW1-595	24-Jul-25	20.74	677.8	166.9	7.45	0.20	107.6	8.37
TA2-W-01	30-Jul-25	23.95	668.3	56.6	7.75	0.19	99.75	6.92
TA2-W-19	06-Aug-25	19.51	593.3	65.1	7.59	0.20	111.7	8.79
TA2-W-24	17-Jul-25	22.59	465.0	77.6	7.56	0.41	56.64	4.05
TA2-W-25	23-Jul-25	20.37	541.9	169.5	7.47	0.41	104.7	7.79
TA2-W-26	14-Aug-25	24.90	672.8	45.3	7.54	19.2	110.9	7.57
TA2-W-27	31-Jul-25	23.94	839.4	58.3	7.61	0.26	104.6	7.06
TA2-W-28	08-Aug-25	22.90	502.6	53.7	7.79	0.43	102.2	7.76
TJA-2	05-Aug-25	22.62	631.6	58.2	7.70	0.19	104.5	7.51
TJA-3	29-Jul-25	20.52	531.0	137.3	7.48	0.17	94.69	7.06
TJA-4	12-Aug-25	20.38	531.9	61.0	7.64	0.94	72.88	5.64
TJA-5	07-Aug-25	20.78	559.9	50.2	7.68	0.57	113.6	8.40
TJA-6	22-Jul-25	23.19	488.8	174.0	7.54	0.54	86.90	6.14
TJA-7	13-Aug-25	20.86	525.3	44.9	7.59	0.29	103.9	7.72
WYO-3	21-Jul-25	22.19	547.6	116.5	7.61	0.40	114.9	8.21

See notes at end of tables.

Notes for Tijeras Arroyo Groundwater Area of Concern Analytical Results Tables

%	= percent
CFR	= Code of Federal Regulations
EPA	= U.S. Environmental Protection Agency
ID	= Identifier
µg/L	= micrograms per liter
MCL	= maximum contaminant level
mg/L	= milligrams per liter
mrem/yr	= millirem per year
No.	= Number
pCi/L	= picocuries per liter
RPD	= relative percent difference

[a]Result or Activity

Result applies to Tables 5C-1, 5C-2, 5C-4, and 5C-5. Activity applies to Table 5C-6.

Activity	= Gross alpha activity measurements were corrected by subtracting out the total uranium activity (40 CFR Part 141). Activities of zero or less are considered not detected.
ND	= not detected (at MDL).

[b]MDL or MDA

The MDL applies to Tables 5C-1 through 5C-5. MDA applies to Table 5C-6.

MDA	= The minimal detectable activity or minimum measured activity in a sample required to ensure a 95% probability that the measured activity is accurately quantified above the critical level.
MDL	= Method detection limit. The minimum concentration or activity that can be measured and reported with 99% confidence that the analyte is greater than zero, analyte is matrix specific.
NA	= Not applicable for gross alpha activities. The MDA could not be calculated as the gross alpha activity was corrected by subtracting the total uranium activity.

[c]PQL or Critical Level

The PQL applies to 5C-1, 5C-2, 5C-4, and 5C-5. The critical level applies to Table 5C-6.

Critical Level	= The minimum activity that can be measured and reported with 99% confidence that the analyte is greater than zero; analyte is matrix specific.
NA	= Not applicable for gross alpha activities. The critical level could not be calculated as the gross alpha activity was corrected by subtracting the total uranium activity.
PQL	= Practical quantitation limit. The lowest concentration of analytes in a sample that can be reliably determined within specified limits of precision and accuracy by the indicated method under routine laboratory operating conditions.

[d]Lab Qualifier

B	= The analyte was found in the blank above the effective MDL.
J	= Estimated value; the analyte concentration fell above the effective MDL and below the effective PQL.
NA	= Not applicable.
U	= Analyte is absent or below the MDL.
*	= Recovery or %RPD not within acceptance limits and/or spike amount not compatible with the sample or the duplicate RPDs are not applicable where the concentration falls below the effective PQL.

[e]Validation Qualifier

If cell is blank, then all quality control samples met acceptance criteria with respect to submitted samples.

BD	= Below detection limit as used in radiochemistry to identify results that are not statistically different from zero.
J	= The associated value is an estimated quantity.
None	= No data validation for corrected gross alpha activity.
NJ+	= Presumptive evidence of the presence of the material at an estimated quantity with a suspected positive bias.
U	= The analytes was analyzed for but was not detected.
UJ	= The analyte was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	= The data are unusable. Resampling and/or reanalysis may be required for verification.

Notes for Tijeras Arroyo Groundwater Area of Concern Analytical Results Tables (concluded)

[f]Analytical Method

Rice, E.W., Baird, R.B., Eaton, A.D., and Clesceri, L.S. (2012). *Standard Methods for the Examination of Water and Wastewater*, 23rd ed., American Public Health Association, American Water Works Association, and Water Environment Federation.

U.S. Environmental Protection Agency. (1980). *Prescribed Procedures for Measurement of Radioactivity in Drinking Water*, EPA-600/4-80-032

U.S. Environmental Protection Agency. (1984). *Methods for Chemical Analysis of Water and Wastes*, EPA 600-4-79-020.

U.S. Environmental Protection Agency. (1986, as updated). *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, 3rd ed., Rev. 1.

SM = Standard Method
SW = Solid Waste

[g]Field Water Quality Parameter Measurements

Field measurements collected prior to sampling.
°C = degrees Celsius
% Sat = percent saturation
µmho/cm = micromhos per centimeter
mg/L = milligrams per liter
mV = millivolts
NTU = nephelometric turbidity units
pH = potential of hydrogen (negative logarithm of the hydrogen ion concentration)

Attachment 5C
Tijeras Arroyo Groundwater Area of Concern
Concentration Trend Plots

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Attachment 5C Concentration Trend Plots

Figure 5C-1 Nitrate plus Nitrite Concentrations, PGWS Monitoring Well TA2-W-19 ..... 5C-5

Figure 5C-2 Nitrate plus Nitrite Concentrations, PGWS Monitoring Wells TA2-SW1-320 and TA2-W-28..... 5C-6

Figure 5C-3 Nitrate plus Nitrite Concentrations, PGWS Monitoring Well TJA-2..... 5C-7

Figure 5C-4 Nitrate plus Nitrite Concentrations, Merging Zone Monitoring Well TJA-4..... 5C-8

Figure 5C-5 Nitrate plus Nitrite Concentrations, PGWS Monitoring Well TJA-5..... 5C-9

Figure 5C-6 Nitrate plus Nitrite Concentrations, PGWS Monitoring Well TJA-7..... 5C-10

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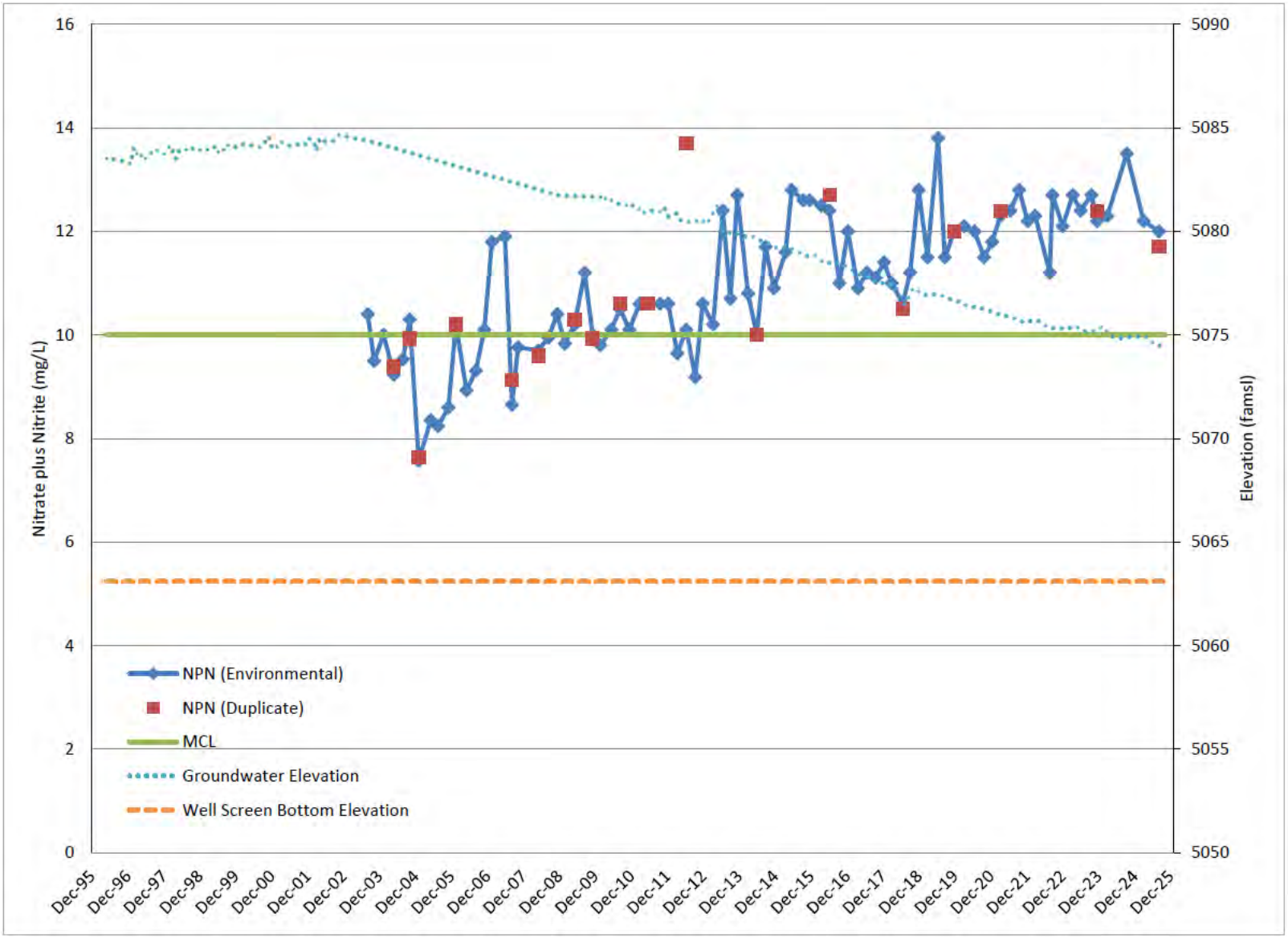


Figure 5C-1
Nitrate plus Nitrite Concentrations, PGWS Monitoring Well TA2-W-19

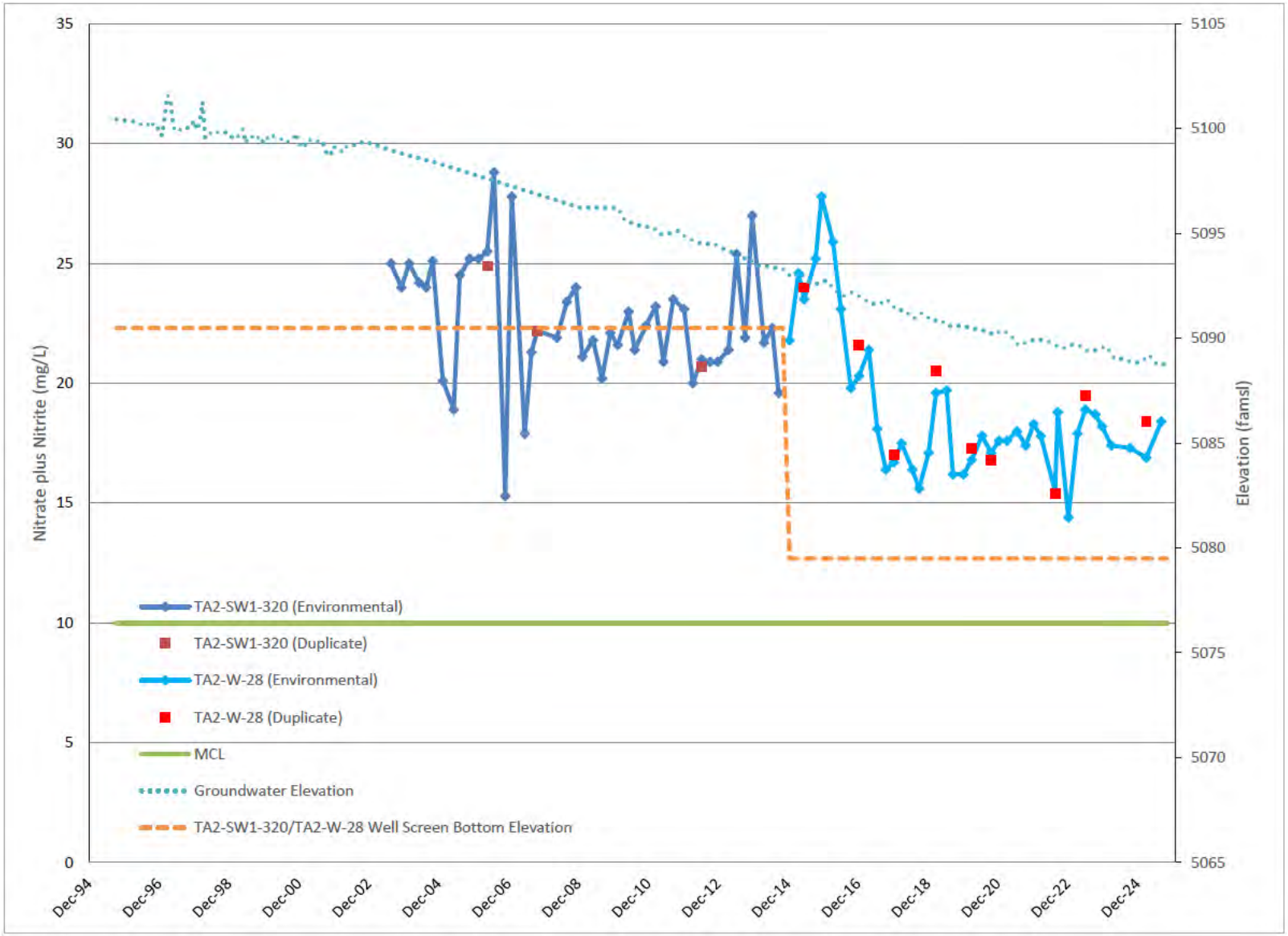


Figure 5C-2
Nitrate plus Nitrite Concentrations, PGWS Monitoring Wells TA2-SW1-320 and TA2-W-28

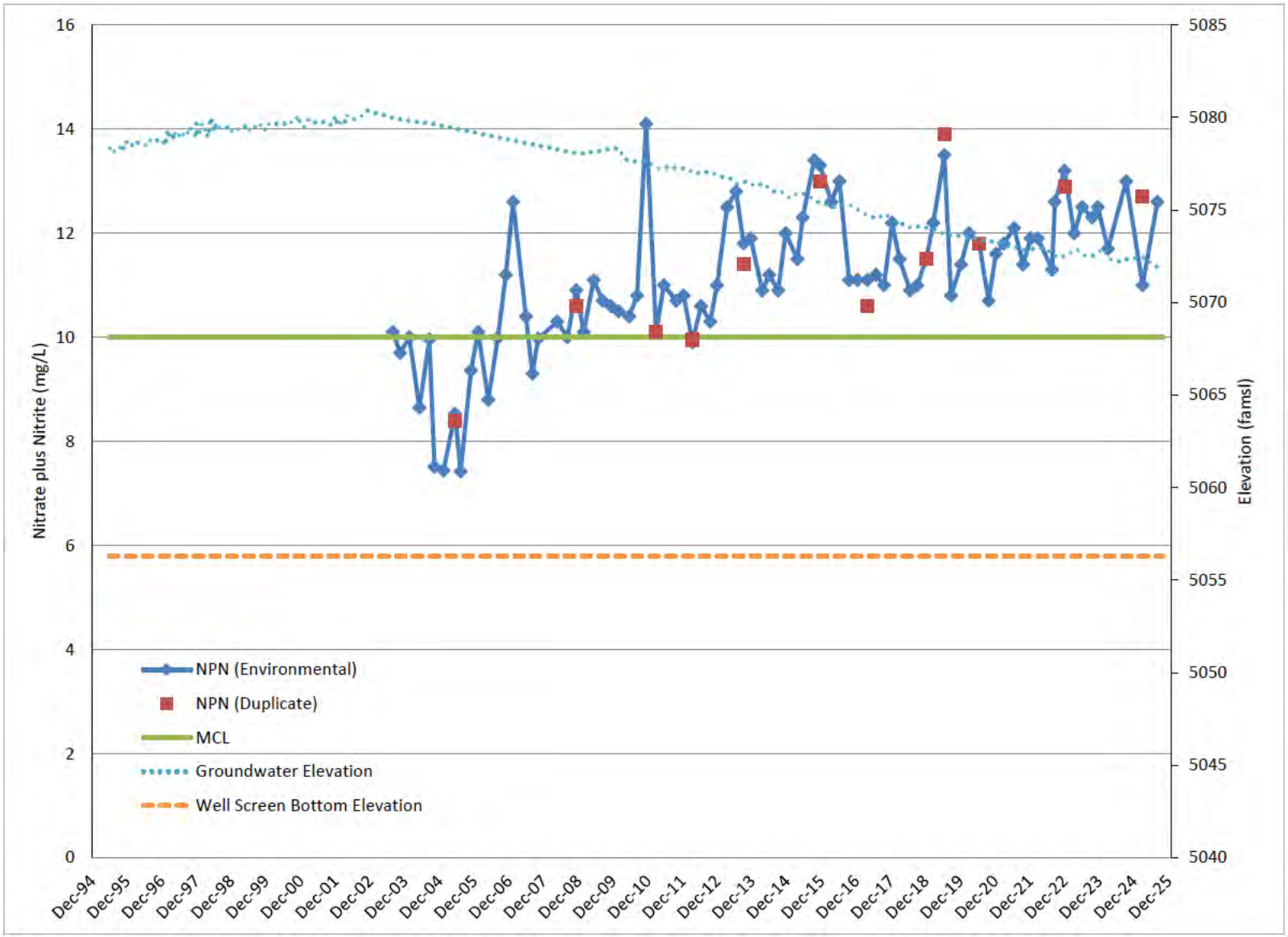


Figure 5C-3
Nitrate plus Nitrite Concentrations, PGWS Monitoring Well TJA-2

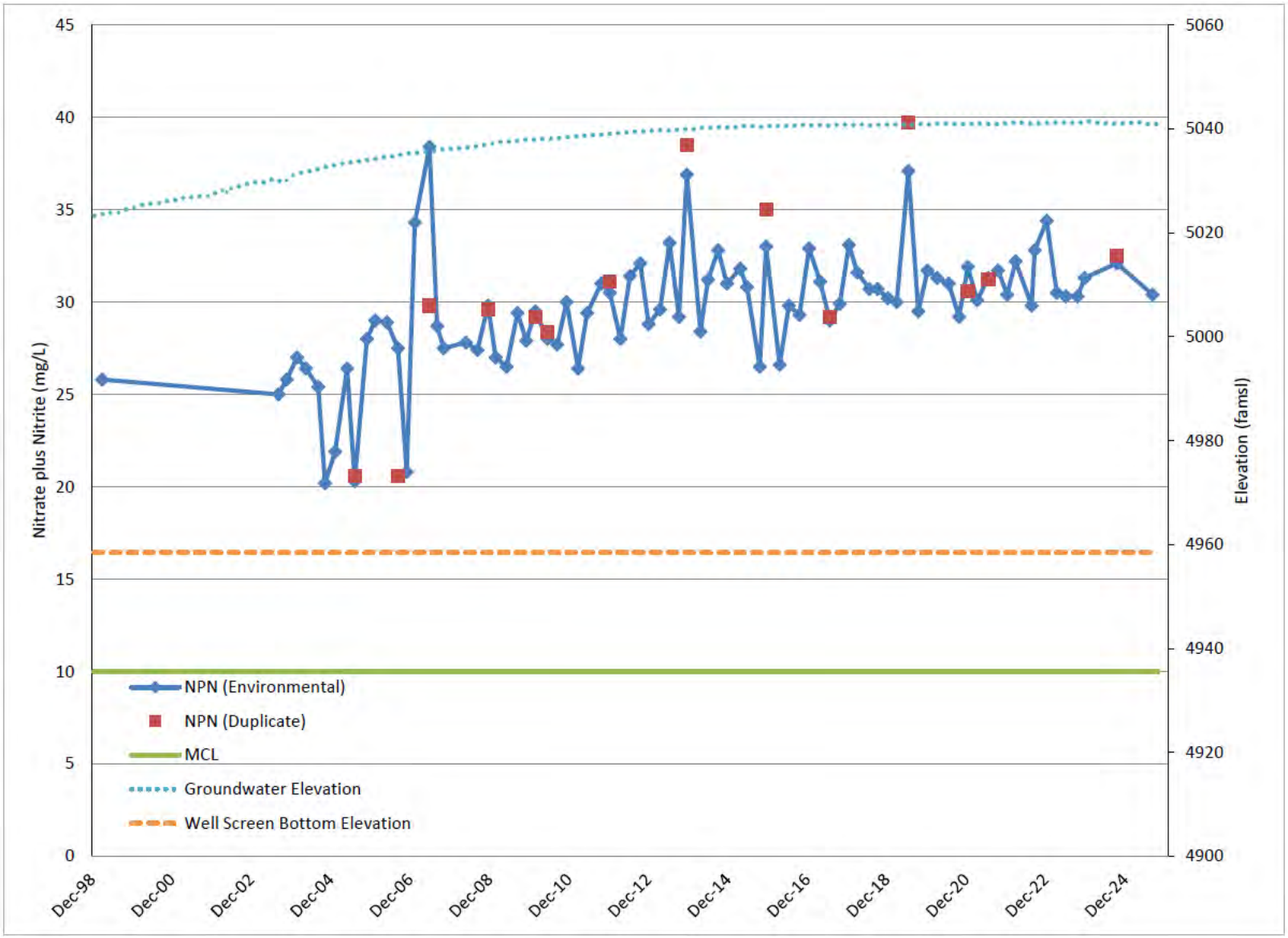


Figure 5C-4
Nitrate plus Nitrite Concentrations, Merging Zone Monitoring Well TJA-4



Figure 5C-5
Nitrate plus Nitrite Concentrations, PGWS Monitoring Well TJA-5

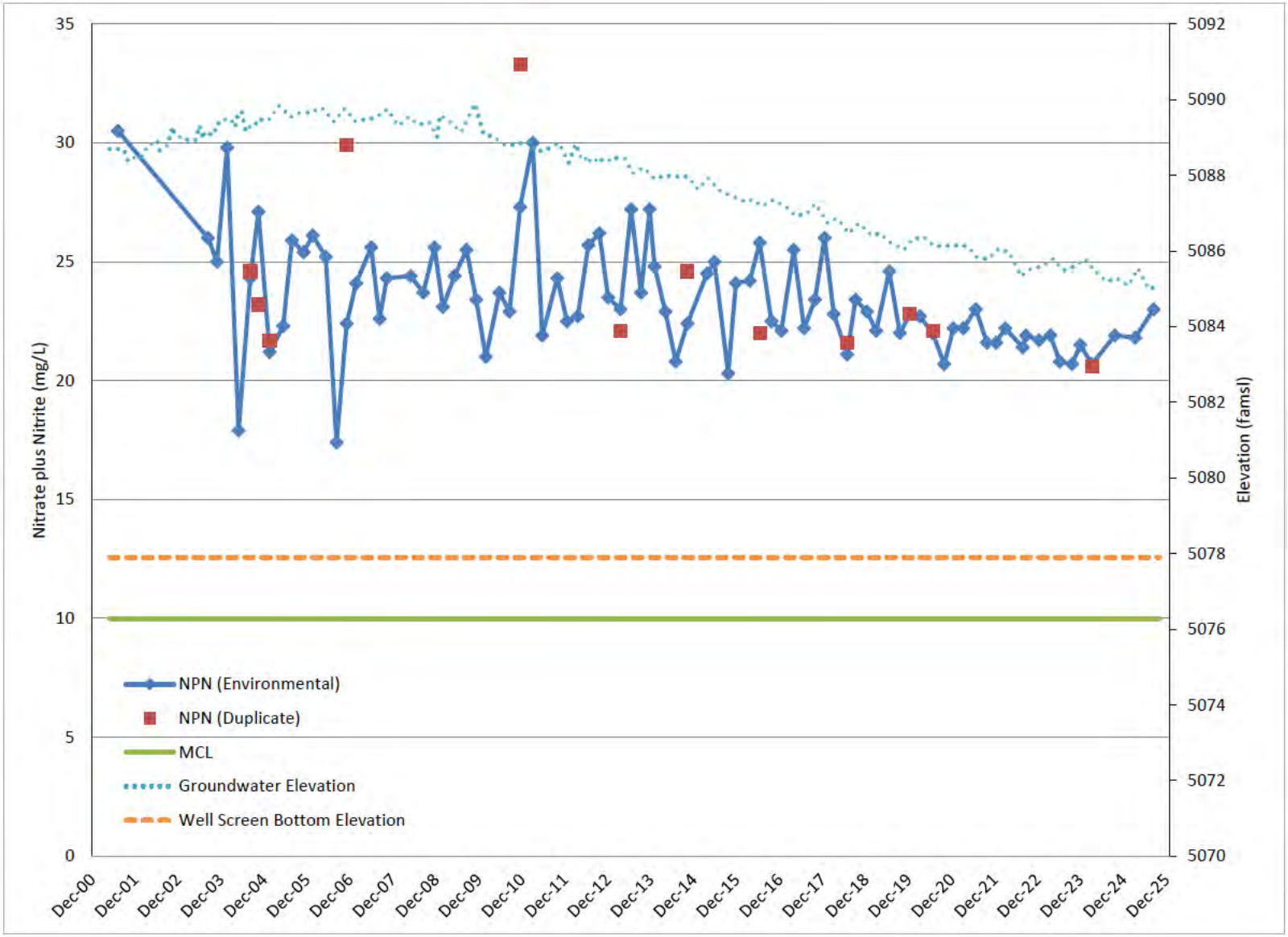


Figure 5C-6
Nitrate plus Nitrite Concentrations, PGWS Monitoring Well TJA-7

Table 1
Inventory of Active Groundwater Monitoring, Production, and Extraction Wells at Sandia National Laboratories, New Mexico[a], Kirtland Air Force Base, and Surrounding Areas

Well ID	Type	Measuring Point[b, c] (ft amsl, NAVD 88)	Ground Surface[c] (ft amsl, NAVD 88)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Top of Screen (ft amsl)	Bottom of Screen (ft amsl)	Casing Total Depth (ft bgs)	Casing, Inner Diameter (inches)	Casing Material	Lithology of Screened Interval	Installation Date
Chemical Waste Landfill and Vicinity												
CWL-BW5	MW	5434.79	5432.2	500.0	520.0	4932.2	4912.2	525.0	4.8	PVC	Regional Aquifer – SFG sediments	11-May-2010
CWL-MW9	MW	5426.12	5423.5	495.0	515.0	4928.5	4908.5	520.0	4.8	PVC	Regional Aquifer – SFG sediments	13-May-2010
CWL-MW10	MW	5424.58	5422.2	493.0	513.0	4929.2	4909.2	518.0	4.8	PVC	Regional Aquifer – SFG sediments	27-May-2010
CWL-MW11	MW	5423.24	5420.8	491.0	511.0	4929.8	4909.8	516.0	4.8	PVC	Regional Aquifer – SFG sediments	27-May-2010
MRN-2	MW	5308.18	5306.2	410.0	440.0	4896.2	4866.2	450.0	3.7	PVC	Regional Aquifer – SFG sediments	28-Jan-1995
MRN-3D	MW	5309.34	5306.8	660.3	680.3	4646.5	4626.5	685.3	4.8	PVC	Regional Aquifer – SFG sediments	20-Jul-2003
SWTA3-MW2	MW	5325.60	5323.2	455.0	475.0	4868.2	4848.2	480.0	4.8	PVC	Regional Aquifer – SFG sediments	07-May-2002
SWTA3-MW3	MW	5323.94	5321.4	619.0	639.0	4702.4	4682.4	659.4	4.8	PVC	Regional Aquifer – SFG sediments	20-Feb-2004
SWTA3-MW4	MW	5324.81	5322.3	430.0	450.0	4892.3	4872.3	460.0	4.7	PVC	Regional Aquifer – SFG sediments	26-Aug-2005
Lurance Canyon and Burn Site Vicinity												
CCBA-MW1	MW	5902.34	5899.9	60.0	80.0	5839.9	5819.9	85.0	4.7	PVC	Alluvium and bedrock (granite)	01-Sep-2011
CCBA-MW2	MW	5939.28	5937.0	98.0	118.0	5839.0	5819.0	123.0	4.7	PVC	Bedrock (granite)	31-Aug-2011
CYN-MW3	MW	6313.26	6311.9	120.0	130.0	6191.9	6181.9	135.0	5.0	PVC	Bedrock (metamorphics)	18-Jun-1999
CYN-MW4	MW	6455.48	6454.7	260.0	280.0	6194.7	6174.7	290.0	5.0	PVC	Bedrock (quartzite)	18-Jun-1999
CYN-MW5	MW	5984.23	5981.3	135.0	155.0	5846.3	5826.3	160.0	5.0	PVC	Bedrock (quartzite)	15-Aug-2001
CYN-MW6	MW	6343.37	6340.5	141.5	161.3	6199.0	6179.2	161.7	5.0	PVC	Bedrock (metamorphics)	09-Dec-2005
CYN-MW7	MW	6216.35	6213.7	315.0	334.2	5898.7	5879.5	339.9	5.0	PVC	Bedrock (granitic gneiss)	06-Dec-2005
CYN-MW8	MW	6230.11	6227.8	338.5	358.3	5889.3	5869.5	363.4	5.0	PVC	Bedrock (granitic gneiss)	12-Jan-2006
CYN-MW9	MW	6360.67	6358.5	175.8	195.8	6182.7	6162.7	200.8	4.8	PVC	Bedrock (metamorphics)	27-Jul-2010
CYN-MW10	MW	6345.45	6342.8	150.4	170.4	6192.4	6172.4	175.4	4.8	PVC	Bedrock (metamorphics)	28-Jul-2010
CYN-MW11	MW	6374.41	6371.9	229.8	249.8	6142.1	6122.1	254.8	4.8	PVC	Bedrock (metamorphics)	29-Jul-2010
CYN-MW12	MW	6345.16	6342.9	252.5	272.5	6090.4	6070.4	277.5	4.8	PVC	Bedrock (metamorphics)	29-Jul-2010
CYN-MW13	MW	6237.79	6236.0	376.8	396.8	5859.2	5839.2	402.2	4.8	PVC	Bedrock (granitic gneiss)	05-Dec-2012
CYN-MW14A	MW	6315.85	6313.5	263.6	293.6	6049.9	6019.9	298.6	4.8	PVC	Bedrock (metamorphics)	09-Dec-2014
CYN-MW15	MW	6344.44	6342.3	160.0	190.0	6182.3	6152.3	195.0	4.8	PVC	Bedrock (metamorphics)	08-Dec-2014
CYN-MW16	MW	6249.60	6247.4	375.6	405.6	5871.8	5841.8	410.6	4.8	PVC	Bedrock (granitic gneiss)	5-Nov-2019
CYN-MW17	MW	6268.95	6266.6	370.3	400.3	5896.3	5866.3	405.3	4.8	PVC	Bedrock (granitic gneiss)	6-Nov-2019
CYN-MW18	MW	6304.02	6301.5	270.4	300.4	6031.1	6001.1	305.4	4.8	PVC	Bedrock (metamorphics)	7-Nov-2019
CYN-MW19	MW	6410.43	6408.1	59.3	89.3	6348.8	6318.8	94.3	4.8	PVC	Bedrock (metamorphics)	8-Nov-2019
Greystone-MW2	MW	5814.20	5811.4	60.0	80.0	5751.4	5731.4	85.0	4.8	PVC	Alluvium in arroyo, recent	25-Apr-2002
Mixed Waste Landfill and Vicinity												
MWL-BW2	MW	5391.02	5388.7	467.0	497.0	4921.7	4891.7	502.0	4.8	PVC	Regional Aquifer – SFG sediments	22-Jan-2008
MWL-MW5	MW	5382.56	5380.4	496.5	516.5	4883.9	4863.9	521.5	4.8	PVC	Regional Aquifer – SFG sediments	19-Nov-2000
MWL-MW6	MW	5375.31	5372.7	505.5	525.5	4867.2	4847.2	530.5	4.8	PVC	Regional Aquifer – SFG sediments	19-Oct-2000
MWL-MW7	MW	5383.30	5380.9	464.7	494.0	4916.2	4886.9	498.8	4.8	PVC	Regional Aquifer – SFG sediments	24-Jun-2008
MWL-MW8	MW	5384.67	5382.4	465.0	495.0	4917.4	4887.4	500.0	4.8	PVC	Regional Aquifer – SFG sediments	26-Jun-2008
MWL-MW9	MW	5381.91	5379.3	465.0	495.0	4914.3	4884.3	500.0	4.8	PVC	Regional Aquifer – SFG sediments	30-Jun-2008

See notes at end of table.

Table 1 (continued)
Inventory of Active Groundwater Monitoring, Production, and Extraction Wells at Sandia National Laboratories, New Mexico[a], Kirtland Air Force Base, and Surrounding Areas

Well ID	Type	Measuring Point[b, c] (ft amsl, NAVD 88)	Ground Surface[c] (ft amsl, NAVD 88)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Top of Screen (ft amsl)	Bottom of Screen (ft amsl)	Casing Total Depth (ft bgs)	Casing, Inner Diameter (inches)	Casing Material	Lithology of Screened Interval	Installation Date
Mixed Waste Landfill and Vicinity (concluded)												
NWTA3-MW2[d]	MW	5337.49	5335.5	455.0	475.0	4880.5	4860.5	505.0	4.8	PVC	Regional Aquifer – SFG sediments	25-Aug-2000
NWTA3-MW3D	MW	5340.80	5335.7	654.4	674.4	4681.3	4661.3	679.4	4.8	PVC	Regional Aquifer – SFG sediments	09-Jul-2003
PL-2	MW	5336.01	5333.0	577.0	597.0	4756.0	4736.0	617.0	4.8	SS	Regional Aquifer – SFG sediments	18-Nov-1994
PL-4	MW	5334.98	5332.7	464.0	494.0	4868.7	4838.7	499.0	4.8	PVC	Regional Aquifer – SFG sediments	28-Sep-2009
Coyote Test Field and Vicinity												
CTF-MW1	MW	6082.63	6079.7	240.0	260.0	5839.7	5819.7	265.0	5.0	PVC	Bedrock (granite)	16-Aug-2001
CTF-MW2	MW	5578.60	5575.6	110.0	130.0	5465.6	5445.6	135.0	5.0	PVC	Bedrock (granite)	18-Aug-2001
CTF-MW3	MW	5522.82	5519.8	340.0	360.0	5179.8	5159.8	365.0	5.0	PVC	Bedrock (granite)	21-Aug-2001
OBS-MW1	MW	5871.42	5869.1	135.0	155.0	5734.1	5714.1	160.0	4.7	PVC	Bedrock (granite)	31-Aug-2011
OBS-MW2	MW	5863.16	5860.8	234.0	254.0	5626.8	5606.8	259.0	4.7	PVC	Bedrock (granite)	30-Aug-2011
OBS-MW3	MW	5865.50	5863.3	190.0	210.0	5673.3	5653.3	215.0	4.7	PVC	Bedrock (granite)	30-Aug-2011
SFR-1D[e]	MW	5399.13	5396.9	348.0	368.0	5048.9	5028.9	378.0	3.8	PVC	Regional Aquifer – SFG sediments	06-Aug-1992
SFR-1S[e]	MW	5399.16	5396.9	152.0	172.0	5244.9	5224.9	182.0	1.9	PVC	Regional Aquifer – SFG sediments	08-Aug-1992
SFR-2S	MW	5432.77	5430.3	97.0	117.0	5333.3	5313.3	122.0	3.8	PVC	Regional Aquifer – SFG sediments	20-Aug-1992
SFR-3D	MW	5497.94	5496.1	311.5	351.5	5184.6	5144.6	361.5	1.9	PVC	Regional Aquifer – SFG sediments	05-Nov-1992
SFR-3P	MW	5499.63	5497.2	175.0	195.0	5322.2	5302.2	205.0	3.8	PVC	Regional Aquifer – SFG sediments	12-Jul-1993
SFR-3S	MW	5498.24	5496.1	182.0	212.0	5314.1	5284.1	222.0	1.9	PVC	Regional Aquifer – SFG sediments	10-Nov-1992
SFR-3T	MW	5498.66	5496.9	713.0	733.0	4783.9	4763.9	753.0	5.4	SS	Bedrock (sandstone)	23-Sep-1993
SFR-4P	MW	5573.33	5571.3	344.0	354.0	5227.3	5217.3	364.0	1.9	PVC	Bedrock (sandstone)	29-Jul-1993
SFR-4T	MW	5573.95	5572.4	340.0	360.0	5232.4	5212.4	377.0	4.8	PVC/SS	Bedrock (sandstone)	30-Sep-1993
TRE-1[e]	MW	5497.25	5495.2	255.0	295.0	5240.2	5200.2	305.0	4.3	PVC	Regional Aquifer – SFG sediments	31-Jul-1995
TRE-2[e]	MW	5497.20	5495.2	150.0	170.0	5345.2	5325.2	190.0	2.0	PVC	Regional Aquifer – SFG sediments	31-Jul-1995
TRN-1	MW	5735.62	5733.6	320.0	340.0	5413.6	5393.6	350.0	3.8	PVC	Bedrock (sandstone)	12-Oct-1994
TRS-1D[e]	MW	5779.80	5777.5	266.4	306.4	5511.1	5471.1	316.4	1.9	PVC	Bedrock (limestone)	06-Sep-1995
TRS-1S[e]	MW	5780.07	5777.5	164.0	204.0	5613.5	5573.5	214.8	1.9	PVC	Bedrock (limestone)	06-Sep-1995
TRS-2	MW	5780.76	5778.3	165.0	205.0	5613.3	5573.3	210.0	4.5	S	Bedrock (limestone)	09-Sep-1995
Tijeras Arroyo Groundwater												
PGS-2[f]	MW	5406.93	5407.6	535.0[e]	565.0[e]	4872.6	4842.6	655.0	5.0	SS	Regional Aquifer – SFG sediments	22-Sep-1995
TA1-W-01	MW	5403.82	5401.8	575.0	595.0	4826.8	4806.8	600.0	4.8	PVC	Regional Aquifer – SFG sediments	22-Mar-1997
TA1-W-02	MW	5416.62	5416.9	540.0	560.0	4876.9	4856.9	565.6	5.0	PVC	Regional Aquifer – SFG sediments	27-Feb-1998
TA1-W-03	MW	5457.03	5454.9	337.0	357.0	5117.9	5097.9	362.6	5.0	PVC	PGWS – SFG sediments	27-Jan-1998
TA1-W-04	MW	5460.98	5458.3	576.0	596.0	4882.3	4862.3	601.7	5.0	PVC	Regional Aquifer – SFG sediments	06-Oct-1998
TA1-W-05	MW	5433.84	5434.2	597.5	617.5	4836.7	4816.7	623.2	5.0	PVC	Regional Aquifer – SFG sediments	16-Nov-1998
TA1-W-06	MW	5417.10	5417.4	300.0	320.0	5117.4	5097.4	325.6	5.0	PVC	PGWS – SFG sediments	27-Feb-1998
TA1-W-07	MW	5404.92	5402.8	268.6	288.6	5134.2	5114.2	289.1	5.0	PVC	PGWS – SFG sediments	03-Dec-1998
TA1-W-08	MW	5434.19	5434.7	302.0	322.0	5132.7	5112.7	327.0	4.5	PVC	PGWS – SFG sediments	10-Oct-2001
TA2-NW1-325	MW	5421.94	5420.0	295.0	325.0	5125.0	5095.0	330.3	4.8	PVC	PGWS – SFG sediments	01-Apr-1993

See notes at end of table.

Table 1 (continued)
Inventory of Active Groundwater Monitoring, Production, and Extraction Wells at Sandia National Laboratories, New Mexico[a], Kirtland Air Force Base, and Surrounding Areas

Well ID	Type	Measuring Point[b, c] (ft amsl, NAVD 88)	Ground Surface[c] (ft amsl, NAVD 88)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Top of Screen (ft amsl)	Bottom of Screen (ft amsl)	Casing Total Depth (ft bgs)	Casing, Inner Diameter (inches)	Casing Material	Lithology of Screened Interval	Installation Date
Tijeras Arroyo Groundwater (concluded)												
TA2-NW1-595[g]	MW	5421.26	5420.0	535.0[f]	555.0[f]	4885.0	4865.0	598.0	4.8	PVC	Regional Aquifer – SFG sediments	27-Jul-1993
TA2-W-01	MW	5419.99	5417.4	312.0	332.0	5105.4	5085.4	332.0	4.8	PVC	PGWS – SFG sediments	27-Jun-1994
TA2-W-19	MW	5351.21	5349.0	265.9	285.9	5083.1	5063.1	285.9	4.8	PVC	PGWS – SFG sediments	29-Nov-1995
TA2-W-24	MW	5363.66	5361.8	465.0	485.0	4896.8	4876.8	490.6	5.0	PVC	Regional Aquifer – SFG sediments	09-Feb-1998
TA2-W-25	MW	5374.86	5372.5	492.0	512.0	4880.5	4860.5	517.8	4.8	PVC	Regional Aquifer – SFG sediments	28-Apr-1997
TA2-W-26	MW	5375.77	5373.8	276.0	296.0	5097.8	5077.8	301.6	5.0	PVC	PGWS – SFG sediments	19-Jan-1998
TA2-W-27	MW	5362.85	5360.8	275.0	295.0	5085.8	5065.8	300.6	5.0	PVC	PGWS – SFG sediments	09-Feb-1998
TA2-W-28	MW	5412.41	5410.0	310.5	330.5	5099.5	5079.5	335.45	4.8	PVC	PGWS – SFG sediments	10-Dec-2014
TJA-2	MW	5353.20	5351.3	275.0	295.0	5076.3	5056.3	305.0	3.8	PVC	PGWS – SFG sediments	12-Jul-1994
TJA-3	MW	5390.56	5387.8	496.0	516.0	4891.8	4871.8	521.7	5.0	PVC	Regional Aquifer – SFG sediments	04-Dec-1998
TJA-4[h]	MW	5341.16	5338.5	360.0	380.0	4978.5	4958.5	385.7	5.0	PVC	Merging Zone – SFG sediments	01-Dec-1998
TJA-5	MW	5341.33	5338.5	267.0	287.0	5071.5	5051.5	292.7	5.0	PVC	PGWS – SFG sediments	02-Dec1998
TJA-6	MW	5343.16	5340.6	454.9	474.9	4885.7	4865.7	480.7	5.0	PVC	Regional Aquifer – SFG sediments	04-Feb-2001
TJA-7	MW	5391.27	5388.4	290.5	310.5	5097.9	5077.9	316.3	5.0	PVC	PGWS – SFG sediments	12-Mar-2001
WYO-3	MW	5392.09	5390.0	520.0	540.0	4870.0	4850.0	545.0	4.5	PVC	Regional Aquifer – SFG sediments	10-Oct-2001
WYO-4	MW	5392.57	5390.2	275.0	295.0	5115.2	5095.2	300.0	4.5	PVC	PGWS – SFG sediments	16-Oct-2001
Technical Area V												
LWDS-MW1	MW	5423.83	5424.5	495.0	515.0	4929.5	4909.5	520.3	3.9	PVC	Regional Aquifer – SFG sediments	03-May-1993
TAV-MW2	MW	5427.33	5424.3	497.0	513.5	4927.3	4910.8	513.5	5.0	PVC	Regional Aquifer – SFG sediments	30-Mar-1995
TAV-MW3	MW	5464.30	5461.7	532.0	552.0	4929.7	4909.7	557.7	4.8	PVC	Regional Aquifer – SFG sediments	11-Apr-1997
TAV-MW4	MW	5427.89	5425.4	495.0	515.0	4930.4	4910.4	520.7	4.8	PVC	Regional Aquifer – SFG sediments	18-Apr-1997
TAV-MW5	MW	5408.71	5406.6	487.0	507.0	4919.6	4899.6	512.7	4.8	PVC	Regional Aquifer – SFG sediments	26-Apr-1997
TAV-MW6	MW	5431.17	5431.5	507.0	527.0	4924.5	4904.5	532.0	5.0	PVC	Regional Aquifer – SFG sediments	24-Apr-2001
TAV-MW7	MW	5430.40	5430.9	597.0	617.0	4833.9	4813.9	622.0	5.0	PVC	Regional Aquifer – SFG sediments	06-Apr-2001
TAV-MW8	MW	5417.00	5417.4	491.0	511.0	4926.4	4906.4	516.0	5.0	PVC	Regional Aquifer – SFG sediments	11-Apr-2001
TAV-MW9	MW	5416.27	5416.9	582.0	602.0	4834.9	4814.9	607.0	5.0	PVC	Regional Aquifer – SFG sediments	17-Mar-2001
TAV-MW10	MW	5437.03	5434.7	508.0	528.0	4926.7	4906.7	533.0	4.8	PVC	Regional Aquifer – SFG sediments	06-Feb-2008
TAV-MW11	MW	5440.12	5440.4	512.0	532.0	4928.4	4908.4	537.0	4.8	PVC	Regional Aquifer – SFG sediments	19-Nov-2010
TAV-MW12	MW	5435.72	5432.9	507.0	527.0	4925.9	4905.9	532.0	4.8	PVC	Regional Aquifer – SFG sediments	16-Nov-2010
TAV-MW13	MW	5409.02	5406.0	525.0	545.0	4881.0	4861.0	550.0	4.8	PVC	Regional Aquifer – SFG sediments	12-Nov-2010
TAV-MW14	MW	5441.52	5438.6	512.0	532.0	4926.6	4906.6	537.0	4.8	PVC	Regional Aquifer – SFG sediments	09-Nov-2010
TAV-MW15	MW	5437.32	5435.1	515.8	540.8	4919.3	4894.3	545.8	4.8	PVC	Regional Aquifer – SFG sediments	18-Jan-2017
TAV-MW16	MW	5448.34	5446.1	526.9	551.9	4919.2	4894.2	556.9	4.8	PVC	Regional Aquifer – SFG sediments	12-Jan-2017
TAV-MW17	MW	5443.92	5441.3	523.0	543.0	4918.3	4898.3	548.0	4.8	PVC	Regional Aquifer – SFG sediments	5-Apr-2023

See notes at end of table.

Table 1 (continued)
Inventory of Active Groundwater Monitoring, Production, and Extraction Wells at Sandia National Laboratories, New Mexico[a], Kirtland Air Force Base, and Surrounding Areas

Well ID	Type	Measuring Point[b, c] (ft amsl, NAVD 88)	Ground Surface[c] (ft amsl, NAVD 88)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Top of Screen (ft amsl)	Bottom of Screen (ft amsl)	Casing Total Depth (ft bgs)	Casing, Inner Diameter (inches)	Casing Material	Lithology of Screened Interval	Installation Date
Albuquerque Bernalillo County Water Utility Authority, City of Albuquerque, and New Mexico Office of the State Engineer												
4HILLS-1	MW	5554.17	5552.7	24.5	64.5	5528.7	5488.7	69.5	4.0	PVC	Alluvial sands and gravels	1-Dec-1989
Eubank-1	MW	5460.02	5458.1	550.0	610.0	4908.1	4848.1	615.0	4.0	SS	Regional Aquifer – SFG sediments	16-Jul-1988
Eubank-2	MW	5474.39	5472.4	552.0	592.0	4920.4	4880.4	597.0	4.0	PVC	Regional Aquifer – SFG sediments	15-Nov-1996
Eubank-3	MW	5498.73	5496.7	590.0	650.0	4906.7	4846.7	655.0	4.0	PVC	Regional Aquifer – SFG sediments	15-Nov-1996
Eubank-5	MW	5507.40	5505.4	605.0	665.0	4900.4	4840.4	670.0	4.0	PVC	Regional Aquifer – SFG sediments	15-Nov-1996
Mesa del Sol-S	MW	5302.67	5302.7	420.0	520.0	4882.7	4782.7	525.0	2.2	PVC	Regional Aquifer – SFG sediments	14-May-1997
Montessa Park-S	MW	5102.67	5102.7	260.0	320.0	4842.7	4782.7	330.0	2.2	PVC	Regional Aquifer – SFG sediments	10-Sep-1997
YALE-MW1	MW	5308.45	5309.0?	400.0	464.0	4909.0?	4845.0?	464.0	4.0	PVC	Regional Aquifer – SFG sediments	1997?
YALE-MW9	MW	5271.06	5272.0?	382.0	422.0	4890.0?	4850.0?	427.0	4.0	PVC	Regional Aquifer – SFG sediments	19-May-1997
Kirtland Air Force Base/U.S. Air Force												
KAFB-0118	MW	5320.70	5321.2	458.0	488.0	4863.2	4833.2	499.6	5.0	PVC	Regional Aquifer – SFG sediments	29-Sep-2004
KAFB-0119	MW	5315.81	5315.6	452.3	482.3	4863.3	4833.3	482.0	4.0	PVC	Regional Aquifer – SFG sediments	01-Oct-2004
KAFB-0120	MW	5289.49	5288.7	429.0	459.0	4859.7	4829.7	461.5	4.0	PVC	Regional Aquifer – SFG sediments	12-Jun-2006
KAFB-0121	MW	5307.41	5305.0	445.8	475.8	4859.2	4829.2	480.8	4.0	PVC	Regional Aquifer – SFG sediments	24-Nov-2006
KAFB-0213	MW	5282.17	5280.3	378.0	428.0	4902.3	4852.3	438.0	5.0	PVC	Regional Aquifer – SFG sediments	10-Jan-1984
KAFB-0219	MW	5263.85	5262.7	396.0	426.0	4866.7	4836.7	428.5	4.0	PVC	Regional Aquifer – SFG sediments	08-Jun-2006
KAFB-0220	MW	5264.72	5262.5	424.0	454.0	4838.5	4808.5	456.0	4.0	PVC/SS	Regional Aquifer – SFG sediments	15-Jul-2006
KAFB-0221	MW	5274.21	5271.5	410.5	440.5	4861.0	4831.0	455.0	4.0	PVC	Regional Aquifer – SFG sediments	10-Jul-2006
KAFB-0222	MW	5244.49	5245.2	366.0	396.0	4879.2	4849.2	401.0	4.0	PVC	Regional Aquifer – SFG sediments	unk
KAFB-0223	MW	5251.38	5252.1	376.0	406.0	4876.1	4846.1	411.0	4.0	PVC	Regional Aquifer – SFG sediments	unk
KAFB-0307	MW	5363.85	5362.7	405.0	450.0	4957.7	4912.7	460.0	3.8	PVC	Regional Aquifer – SFG sediments	04-Aug-1991
KAFB-0308	MW	5381.08	5380.7	463.0	488.0	4917.7	4892.7	498.0	3.8	PVC	Regional Aquifer – SFG sediments	31-Jul-1991
KAFB-0309	MW	5411.29	5410.7	500.0	525.0	4910.7	4885.7	535.0	4.0	PVC/SS	Regional Aquifer – SFG sediments	6-Jul-1992
KAFB-0310	MW	5416.06	5413.2	400.0	445.0	5013.2	4968.2	455.0	3.8	PVC	PGWS – SFG sediments	27-Aug-1991
KAFB-0311	MW	5352.74	5351.7	433.0	458.0	4918.7	4893.7	468.0	3.8	PVC	Regional Aquifer – SFG sediments	24-Jul-1992
KAFB-0312	MW	5431.93	5430.2	503.0	528.0	4927.2	4902.2	533.0	4.5	PVC	Regional Aquifer – SFG sediments	26-Aug-1998
KAFB-0313	MW	5418.58	5416.9	348.0	368.0	5068.9	5048.9	373.0	4.5	PVC	PGWS – SFG sediments	13-Aug-1998
KAFB-0314	MW	5455.45	5453.9	428.0	448.0	5025.9	5005.9	453.0	4.5	PVC	Regional Aquifer – SFG sediments	30-Sep-1998
KAFB-0315	MW	5466.53	5464.1	447.0	472.0	5017.1	4992.1	477.0	4.5	PVC	Regional Aquifer – SFG sediments	08-Sep-2000
KAFB-0417	MW	5317.25	5310.0	430.0	455.0	4880.0	4855.0	465.0	3.8	PVC	Regional Aquifer – SFG sediments	06-Jun-1992
KAFB-0504	MW	5357.87	5356.9	470.0	490.0	4886.9	4866.9	500.0	4.0	PVC/SS	Regional Aquifer – SFG sediments	20-Jan-1990
KAFB-0505	MW	5363.65	5360.8	495.4	520.5	4865.4	4840.3	521.3	4.5	PVC	Regional Aquifer – SFG sediments	22-Jul-1999
KAFB-0506	MW	5363.62	5361.0	200.0	220.0	5161.0	5141.0	220.0	4.5	PVC	PGWS – SFG sediments	31-Aug-1998
KAFB-0507R	MW	5358.56	5355.7	492.0	512.0	4863.7	4843.7	520.0	4.0	PVC	Regional Aquifer – SFG sediments	3-Apr-2013
KAFB-0508	MW	5353.62	5349.7	481.0	506.0	4868.7	4843.7	507.0	3.5	PVC	Regional Aquifer – SFG sediments	02-May-2001
KAFB-0509	MW	5441.56	5349.9	195.0	220.0	5149.9	5129.9	221.0	3.5	PVC	above PGWS – SFG sediments	10-May-2001
KAFB-0510	MW	5372.30	5364.7	511.0	536.0	4853.7	4828.7	537.0	3.5	PVC	Regional Aquifer – SFG sediments	17-May-2001

See notes at end of table.

Table 1 (continued)
Inventory of Active Groundwater Monitoring, Production, and Extraction Wells at Sandia National Laboratories, New Mexico[a], Kirtland Air Force Base, and Surrounding Areas

Well ID	Type	Measuring Point[b, c] (ft amsl, NAVD 88)	Ground Surface[c] (ft amsl, NAVD 88)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Top of Screen (ft amsl)	Bottom of Screen (ft amsl)	Casing Total Depth (ft bgs)	Casing, Inner Diameter (inches)	Casing Material	Lithology of Screened Interval	Installation Date
Kirtland Air Force Base/U.S. Air Force (continued)												
KAFB-0512R	MW	5302.73	5300.2	430.0	450.0	4870.2	4850.2	455.0	4.0	PVC	Regional Aquifer – SFG sediments	4-Apr-2013
KAFB-0514	MW	5206.41	5204.7	340.0	365.0	4864.7	4839.7	366.0	3.5	PVC	Regional Aquifer – SFG sediments	17-May-2001
KAFB-0516	MW	5205.64	5203.4	322.0	357.0	4881.4	4846.4	358.0	4.0	PVC	Regional Aquifer – SFG sediments	29-Jan-2002
KAFB-0517	MW	5197.11	5194.6	325.0	350.0	4869.6	4844.6	352.0	4.0	PVC	Regional Aquifer – SFG sediments	08-Nov-2002
KAFB-0518	MW	5177.88	5175.5	305.0	335.0	4870.5	4840.5	337.0	4.0	PVC	Regional Aquifer – SFG sediments	22-Dec-2002
KAFB-0519	MW	5365.37	5362.7	700.0	725.0	4662.7	4637.7	727.0	5.0	PVC	Regional Aquifer – SFG sediments	12-May-2003
KAFB-0520	MW	5250.09	5246.2	379.5	404.5	4866.7	4841.7	410.0	4.0	PVC	Regional Aquifer – SFG sediments	15-Jun-2004
KAFB-0521[i]	MWF	FLUTe	5349.7	550.0[h]	655.0[h]	4799.7	4694.7	562.0	5.0	FLUTe	Regional Aquifer – SFG sediments	7-May-2004
KAFB-0522	MW	5270.06	5265.7	405.0	430.0	4860.7	4835.7	432.5	4.0	PVC	Regional Aquifer – SFG sediments	23-Jun-2004
KAFB-0523	MW	5352.62	5350.5	600.0	625.0	4750.5	4725.5	627.0	4.0	PVC	Regional Aquifer – SFG sediments	unk
KAFB-0524	MW	5345.83	5343.4	484.0	509.0	4859.4	4834.4	511.0	4.0	PVC	Regional Aquifer – SFG sediments	31-Oct-2006
KAFB-0525	MW	5229.75	5227.9	371.0	396.0	4856.9	4831.9	398.0	4.0	PVC	Regional Aquifer – SFG sediments	19-Nov-2006
KAFB-0611	MW	5386.08	5383.5	498.0	508.0	4885.5	4875.5	513.0	4.0	PVC	Regional Aquifer – SFG sediments	13-Nov-2002
KAFB-0612	MW	5385.45	5383.5	290.0	315.0	5093.5	5068.5	317.0	4.0	PVC	PGWS – SFG sediments	21-Nov-2002
KAFB-0613	MW	5390.78	5391.3	420.0	450.0	4971.3	4941.3	452.0	4.0	PVC	Regional Aquifer – SFG sediments	08-Dec-2002
KAFB-0614	MW	5391.22	5391.4	360.0	370.0	5031.4	5021.4	372.0	4.0	PVC	PGWS – SFG sediments	12-Dec-2002
KAFB-0615	MW	5638.43	5636.3	300.0	325.0	5336.3	5311.3	327.0	4.0	PVC	Bedrock (granite)	27-Nov-2002
KAFB-0616	MW	5481.04	5478.7	472.0	497.0	5006.7	4981.7	499.0	4.0	PVC	Regional Aquifer – SFG sediments	24-Nov-2002
KAFB-0617	MW	5506.07	5503.3	565.0	590.0	4938.3	4913.3	592.0	4.0	PVC	Regional Aquifer – SFG sediments	18-May-2004
KAFB-0618	MW	5411.63	5408.2	535.0	560.0	4873.2	4848.2	562.0	4.0	PVC	Regional Aquifer – SFG sediments	15-Jun-2004
KAFB-0619	MW	5412.37	5409.0	389.0	404.0	5020.0	5005.0	406.0	4.0	PVC	PGWS – SFG sediments	04-Jun-2004
KAFB-0620	MW	5334.34	5332.0	447.0	472.0	4885.0	4860.0	474.5	4.0	PVC	Regional Aquifer – SFG sediments	18-Jun-2004
KAFB-0621	MW	5568.89	5568.0	624.0	649.0	4944.0	4919.0	650.0	4.0	PVC	Regional Aquifer – SFG sediments	17-Jun-2004
KAFB-0622	MW	5488.64	5486.2	529.0	554.0	4957.2	4932.2	555.0	4.0	PVC	Regional Aquifer – SFG sediments	25-Jun-2004
KAFB-0623	MW	5328.94	5327.0	265.0	290.0	5062.0	5037.0	292.5	4.0	PVC	PGWS – SFG sediments	29-Jun-2004
KAFB-0624	MW	5674.15	5671.1	765.0	790.0	4906.1	4881.1	792.5	3.8	PVC	Regional Aquifer – SFG sediments	31-Oct-2008
KAFB-0625	MW	5390.23	5387.5?	470.0	495.0	4917.5?	4892.5?	497.5	4.0	unk	Regional Aquifer – SFG sediments	unk
KAFB-0626[i]	MWF	FLUTe	5328.8	425.0[h]	629.0[h]	4903.8	4699.8	638.4	5.0	FLUTe	Regional Aquifer – SFG sediments	20-Aug-2010
KAFB-0901	MW	5390.07	5389.8	465.0	527.0	4924.8	4862.8	537.0	4.0	PVC	Regional Aquifer – SFG sediments	15-Mar-1990
KAFB-0903	MW	5391.63	5389.4	225.0	250.0	5164.4	5139.4	251.0	4.0	PVC	above PGWS – SFG sediments	3-Apr-2002
KAFB-0904	MW	5291.75	5289.3?	343.0	368.0	4946.3?	4921.3?	368.0	4.0	PVC	Regional Aquifer – SFG sediments	2002
KAFB-1001	MW	5260.43	5255.7	342.0	367.0	4913.7	4888.7	377.0	4.0	PVC/SS	Regional Aquifer – SFG sediments	19-Apr-1992
KAFB-1002	MW	5254.75	5252.7	342.0	367.0	4910.7	4885.7	377.0	4.0	PVC/SS	Regional Aquifer – SFG sediments	30-Mar-1992
KAFB-1003	MW	5258.29	5257.7	345.0	370.0	4912.7	4887.7	380.0	4.0	PVC/SS	Regional Aquifer – SFG sediments	21-May-1992
KAFB-1004	MW	5258.81	5267.7	348.0	373.0	4919.7	4894.7	383.0	4.0	PVC/SS	Regional Aquifer – SFG sediments	24-Aug-1992
KAFB-1005	MW	5274.68	5287.7	363.0	388.0	4924.7	4899.7	398.0	4.0	PVC/SS	Regional Aquifer – SFG sediments	26-May-1992
KAFB-1006	MW	5257.01	5257.0	363.0	383.0	4894.0	4874.0	383.0	4.0	SS	Regional Aquifer – SFG sediments	10-Aug-1996

See notes at end of table.

Table 1 (continued)
Inventory of Active Groundwater Monitoring, Production, and Extraction Wells at Sandia National Laboratories, New Mexico[a], Kirtland Air Force Base, and Surrounding Areas

Well ID	Type	Measuring Point[b, c] (ft amsl, NAVD 88)	Ground Surface[c] (ft amsl, NAVD 88)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Top of Screen (ft amsl)	Bottom of Screen (ft amsl)	Casing Total Depth (ft bgs)	Casing, Inner Diameter (inches)	Casing Material	Lithology of Screened Interval	Installation Date
Kirtland Air Force Base/U.S. Air Force (continued)												
KAFB-1007R	MW	5260.80	5258.4	376.5	396.5	4881.9	4861.9	401.5	4.0	PVC	Regional Aquifer – SFG sediments	18-May-2013
KAFB-1008	MW	5260.77	5258.8	367.6	397.6	4891.2	4861.2	400.0	4.0	PVC	Regional Aquifer – SFG sediments	unk
KAFB-1009	MW	5272.16	5271.8	392.7	422.7	4879.1	4849.1	427.7	4.0	PVC	Regional Aquifer – SFG sediments	unk
KAFB-1021	MW	5348.02	5348.0	479.0	504.0	4869.0	4844.0	505.0	4.0	PVC	Regional Aquifer – SFG sediments	17-Mar-2002
KAFB-1901	MW	5751.58	5748.7	80.5	105.5	5668.2	5643.2	115.5	4.0	PVC/SS	Regional Aquifer – SFG sediments	30-Jun-1992
KAFB-1902	MW	5754.27	5752.7	80.7	105.7	5672.0	5647.0	115.7	4.0	PVC/SS	Regional Aquifer – SFG sediments	9-Jul-1992
KAFB-1904	MW	5752.29	5750.0?	84.3	104.3	5665.7?	5645.7?	104.3	4.0	SS	Regional Aquifer – SFG sediments	1992?
KAFB-2005	MW	5624.27	5624.6	126.0	156.0	5498.6	5468.6	158.5	4.0	PVC	Bedrock (granite)	10-May-2006
KAFB-2006	MW	5590.88	5591.0?	303.0	333.0	5288.0?	5258.0?	335.0	4.0	PVC	Bedrock (granite)	10-May-2006
KAFB-2007	MW	5564.48	5562.1	273.0	303.0	5289.1	5259.1	305.5	4.0	PVC	Bedrock (granite)	13-May-2006
KAFB-2008	MW	5541.62	5539.5	650.0	680.0	4889.5	4859.5	688.0	5.0	PVC	Regional Aquifer – SFG sediments	15-Oct-2010
KAFB-2009	MW	5655.63	5653.4	74.0	104.0	5579.4	5549.4	110.0	4.0	PVC	Bedrock (granite)	15-Oct-2010
KAFB-2622	MW	5360.16	5356.5	195.0	215.0	5161.5	5141.5	217.0	4.0	PVC	PGWS – SFG sediments	02-Dec-2004
KAFB-2623	MW	5369.28	5365.3	199.8	219.8	5165.5	5145.5	221.8	4.0	PVC	PGWS – SFG sediments	30-Dec-2004
KAFB-2624	MW	5364.20	5359.6	195.0	215.0	5164.6	5144.6	217.0	4.0	PVC	PGWS – SFG sediments	2013?
KAFB-2625	MW	5356.62	5357.4	185.0	205.0	5172.4	5152.4	207.0	4.0	PVC	PGWS – SFG sediments	2010?
KAFB-2626	MW	5357.55	5355.6	185.0	205.0	5170.6	5150.6	208.0	4.0	PVC	PGWS – SFG sediments	22-Feb-2009
KAFB-2627	MW	5367.51	5365.5	195.0	215.0	5170.5	5150.5	217.5	4.0	PVC	PGWS – SFG sediments	2-Mar-2009
KAFB-2628	MW	5369.44	5367.4	506.0	530.0	4861.4	4837.4	535.0	5.0	PVC	Regional Aquifer – SFG sediments	2-Aug-2011
KAFB-2629	MW	5361.65	5359.2	496.0	519.5	4863.2	4839.7	523.5	5.0	PVC	Regional Aquifer – SFG sediments	9-Aug-2011
KAFB-2630	MW	5361.78	5359.2	205.9	225.7	5153.3	5133.5	227.9	4.0	PVC	above PGWS – SFG sediments	20-Aug-2011
KAFB-2631	MW	5336.14	5335.5	154.3	174.1	5181.2	5161.4	176.3	4.0	PVC	above PGWS – SFG sediments	16-Aug-2011
KAFB-2632	MW	5329.57	5328.8	157.4	177.2	5171.4	5151.6	179.4	4.0	PVC	above PGWS – SFG sediments	11-Aug-2011
KAFB-2901	MW	5839.08	5836.7	121.0	141.0	5715.7	5695.7	146.0	4.0	PVC	Regional Aquifer – SFG sediments	31-May-2015
KAFB-2902	MW	5832.10	5829.7	160.0	180.0	5669.7	5649.7	185.0	4.0	PVC	Regional Aquifer – SFG sediments	9-May-2015
KAFB-2903	MW	5819.46	5817.0	165.0	185.0	5652.0	5632.0	190.0	4.0	PVC	Bedrock (Abo Formation) siltstone and shale	11-Jun-2015
KAFB-2904	MW	5842.72	5840.4	58.0	78.0	5782.4	5762.4	83.0	4.0	PVC	Bedrock (Madera Formation) limestone	14-Jun-2015
KAFB-3391	MW	5396.19	5394.1	262.3	282.3	5131.8	5111.8	284.3	4.0	PVC	PGWS – SFG sediments	1-Aug-1998
KAFB-3392	MW	5394.51	5393.4	536.0	561.0	4857.4	4832.4	562.0	4.0	PVC	Regional Aquifer – SFG sediments	08-Oct-1999
KAFB-3411	MW	5342.81	5340.5	477.0	502.0	4863.5	4838.5	503.0	4.0	PVC	Regional Aquifer – SFG sediments	11-Nov-1999
KAFB-6241	MW	5466.50	5463.2	528.0	553.0	4935.2	4910.2	555.0	4.0	PVC	Regional Aquifer – SFG sediments	16-Jan-2007
KAFB-6243	MW	5423.48	5421.0	488.0	513.0	4933.0	4908.0	516.0	4.0	unk	Regional Aquifer – SFG sediments	2009?
KAFB-6301	MW	5459.64	5457.3	535.0	560.0	4922.3	4897.3	561.0	4.0	PVC	Regional Aquifer – SFG sediments	7-Sep-1999
KAFB-7001	MW	5322.94	5323.0?	454.0	479.0	4869.0?	4844.0?	480.0	4.0	PVC	Regional Aquifer – SFG sediments	before 2011
KAFB-8281	MW	5401.03	5401.7	544.0	569.0	4857.7	4832.7	570.0	4.0	PVC	Regional Aquifer – SFG sediments	27-Oct-1999
KAFB-8282	MW	5402.92	5403.4	262.0	287.0	5141.4	5116.4	288.0	4.0	PVC	PGWS – SFG sediments	1999?
KAFB-8351	MW	5325.62	5323.3	474.0	499.0	4849.3	4824.3	505.0	4.0	PVC	Regional Aquifer – SFG sediments	23-Nov-1999

See notes at end of table.

Table 1 (continued)
Inventory of Active Groundwater Monitoring, Production, and Extraction Wells at Sandia National Laboratories, New Mexico[a], Kirtland Air Force Base, and Surrounding Areas

Well ID	Type	Measuring Point[b, c] (ft amsl, NAVD 88)	Ground Surface[c] (ft amsl, NAVD 88)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Top of Screen (ft amsl)	Bottom of Screen (ft amsl)	Casing Total Depth (ft bgs)	Casing, Inner Diameter (inches)	Casing Material	Lithology of Screened Interval	Installation Date
Kirtland Air Force Base/U.S. Air Force (concluded)												
KAFB-ST105-EX01	MW	5354.54	5348.5	505.0	575.0	4843.5	4773.5	575.0	10.0	PVC/SS	Regional Aquifer – SFG sediments	2008?
KAFB-WYO-5	MW	5393.36	5390.3	286.0	306.0	5104.3	5084.3	306.4	3.0	PVC	PGWS – SFG sediments	21-Aug-2024
KAFB-WYO-6	MW	5393.79	5390.9	273.0	293.0	5117.9	5097.9	293.4	3.0	PVC	PGWS – SFG sediments	21-Aug-2024
KAFB-WYO-7	MW	5391.73	5388.2	298.0	318.0	5090.2	5070.2	318.4	3.0	PVC	PGWS – SFG sediments	21-Aug-2024
Site 58 MW-1	MW	5720.57	5718.4?	46.8	71.8	5671.6?	5646.6?	71.8	2.0	PVC	Colluvium and Bedrock (granite)	2001?
Site 58 MW-2	MW	5715.86	5715.9	76.7	96.7	5639.2	5619.2	96.7	2.0	PVC	Bedrock (granite)	2001?
Site 58 MW-3	MW	5718.08	5717.9	52.0	72.0	5665.9	5645.9	72.0	2.0	PVC	Colluvium?	2001?
Site 58 MW-4	MW	5722.27	5719.8?	55.5	75.5	5664.3?	5644.3?	75.5	2.0	PVC	Bedrock (granite)	2001?
Site 58 MW-5	MW	5716.99	5716.8	25.0	65.0	5691.8	5651.8	80.0	4.0	PVC	Colluvium?	2001?
Site 58 MW-6	MW	5719.62	5717.8?	57.0	82.0	5660.8?	5635.8?	87.0	2.0	PVC	Colluvium and Bedrock (granite)?	2001?
Site 58 MW-7	MW	5717.70	5715.3?	50.0	75.0	5665.3?	5640.3?	80.0	2.0	PVC	Colluvium and Bedrock (granite)?	2001?
ST105-MW001	MW	5279.34	5276.6	408.0	428.0	4868.6	4848.6	433.4	4.0	PVC	Regional Aquifer – SFG sediments	11-Mar-2103
ST105-MW002	MW	5180.32	5177.8	308.4	328.4	4869.4	4849.4	333.4	4.0	PVC	Regional Aquifer – SFG sediments	25-Feb-2013
ST105-MW003	MW	5174.61	5171.9	301.0	321.0	4870.9	4850.9	326.0	4.0	PVC	Regional Aquifer – SFG sediments	28-Feb-2013
ST105-MW004	MW	5234.86	5232.2	365.0	385.0	4867.2	4847.2	390.4	4.0	PVC	Regional Aquifer – SFG sediments	11-Feb-2013
ST105-MW005	MW	5287.57	5284.9	273.0	293.0	5011.9	4991.9	298.0	4.0	PVC	Regional Aquifer – SFG sediments	24-May-2103
ST105-MW006	MW	5313.19	5310.7	228.0	248.0	5082.7	5062.7	253.0	4.0	PVC	PGWS – SFG sediments	25-Feb-2013
ST105-MW007	MW	5311.18	5308.5	290.0	310.0	5018.5	4998.5	315.0	4.0	PVC	Regional Aquifer – SFG sediments	24-Feb-2013
ST105-MW008	MW	5359.14	5356.5	456.0	476.0	4900.5	4880.5	481.0	4.0	PVC	Regional Aquifer – SFG sediments	23-Mar-2013
ST105-MW009	MW	5519.08	5517.5	480.0	500.0	5037.5	5017.5	505.0	4.0	PVC	Regional Aquifer – SFG sediments	16-Nov-2013
ST105-MW010	MW	5334.70	5332.1	436.5	456.5	4895.6	4875.6	461.5	4.0	PVC	Regional Aquifer – SFG sediments	1-Jun-2013
ST105-MW011	MW	5422.23	5420.0	456.8	476.8	4963.2	4943.2	482.3	4.0	PVC	Regional Aquifer – SFG sediments	10-Apr-2013
ST105-MW012	MW	5419.90	5417.1	375.0	395.0	5042.1	5022.1	401.0	4.0	PVC	PGWS – SFG sediments	17-Apr-2013
ST105-MW013	MW	5446.71	5444.5	433.6	453.6	5010.9	4990.9	458.6	4.0	PVC	Regional Aquifer – SFG sediments	17-Apr-2013
ST105-MW015	MW	5623.29	5621.2	687.0	707.0	4934.2	4914.2	712.0	4.0	PVC	Regional Aquifer – SFG sediments	8-May-2013
ST105-MW017	MW	5617.90	5619.6	702.0	722.0	4917.6	4897.6	727.0	4.0	PVC	Regional Aquifer – SFG sediments	15-Jun-2013
ST105-MW018	MW	5222.12	5218.8	349.2	369.2	4869.6	4849.6	374.6	4.0	PVC	Regional Aquifer – SFG sediments	10-Mar-2013
ST105-MW019	MW	5217.94	5215.2	345.0	365.0	4870.2	4850.2	370.4	4.0	PVC	Regional Aquifer – SFG sediments	5-Mar-2013
ST105-MW020	MW	5383.35	5381.0	281.0	301.0	5100.0	5080.0	306.0	4.0	PVC	PGWS – SFG sediments	25-Apr-2013
ST105-MW021	MW	5390.75	5388.4	290.0	310.0	5098.4	5078.4	315.0	4.0	PVC	PGWS – SFG sediments	6-Apr-2013
ST105-MW022	MW	5386.64	5383.9	472.0	492.0	4911.9	4891.9	502.3	4.0	PVC	Regional Aquifer – SFG sediments	10-Apr-2013
ST105-MW023	MW	5275.86	5273.3	406.0	426.0	4867.3	4847.3	431.0	4.0	PVC	Regional Aquifer – SFG sediments	4-Nov-2013
ST105-MW024	MW	5595.67	5593.3	442.0	462.0	5151.3	5131.3	467.0	4.0	PVC	Bedrock (granite)	21-Nov-2013

See notes at end of table.

Table 1 (continued)
Inventory of Active Groundwater Monitoring, Production, and Extraction Wells at Sandia National Laboratories, New Mexico[a], Kirtland Air Force Base, and Surrounding Areas

Well ID	Type	Measuring Point[b, c] (ft amsl, NAVD 88)	Ground Surface[c] (ft amsl, NAVD 88)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Top of Screen (ft amsl)	Bottom of Screen (ft amsl)	Casing Total Depth (ft bgs)	Casing, Inner Diameter (inches)	Casing Material	Lithology of Screened Interval	Installation Date
Production, Injection, and Extraction Wells[j]												
ASL-PD	P	6030.00	6030.0	337.0	401.6	5693.0	5628.4	401.6	4.0	PVC	Bedrock (granite)	11-Jan-1990
Burn Site Well	Px	6374.66	6372.9	231.0	341.0	6141.9	6031.9	341.0	4.0	PVC	Bedrock (schist and granite)	20-Feb-1986
Burton 1	P	unk	5317.7	676.0	1292.0	4641.7	4025.7	1312.0	18.0	S	Regional Aquifer – SFG sediments	1-Nov-1985
Burton 2	P	unk	5286.7	425.0	845.0	4861.7	4441.7	845.0	16.0	S	Regional Aquifer – SFG sediments	1-Jan-1962
Burton 3	P	unk	5217.7	358.0	994.0	4859.7	4223.7	996.0	16.0	S	Regional Aquifer – SFG sediments	1-Jan-1962
Burton 4	P	unk	5276.2	636.0	1286.0	4640.2	3990.2	1286.0	20.0	S	Regional Aquifer – SFG sediments	28-Jul-1987
Burton 5	P	unk	5352.7	550.0	1150.0	4802.7	4202.7	1170.0	unk	S	Regional Aquifer – SFG sediments	19-Aug-1991
KAFB-3	P	unk	5356.9	452.0	900.0	4904.9	4456.9	900.0	14.0	S	Regional Aquifer – SFG sediments	01-Oct-1949
KAFB-4	P	unk	5360.2	494.0	1000.0	4866.2	4360.2	1000.0	14.0	S	Regional Aquifer – SFG sediments	01-Dec-1949
KAFB-7	Inj	unk	5350.4	448.0	976.0	4902.4	4374.4	976.0	16.0	S	Regional Aquifer – SFG sediments	1-Feb-1955
KAFB-14	P	5324.67	5324.2	380.0	1000.0	4944.2	4324.2	1000.0	16.0	S	Regional Aquifer – SFG sediments	01-Jan-1969
KAFB-15	P	unk	5347.0	697.0	993.0	4650.0	4354.0	1600.0	30.0	S	Regional Aquifer – SFG sediments	1996
KAFB-16	P	unk	5370.0	697.0	993.0	4673.0	4377.0	1600.0	30.0	S	Regional Aquifer – SFG sediments	1996
KAFB-18 (SOR)[k]	Px	5965.70	5965.7	160.0	320.0	5805.7	5645.7	320.0	5.0	PVC	Bedrock (metarhyolite)	19-Aug-1987
KAFB-20	P	unk	5389.0	710.0	1180.0	4679.0	4209.0	1240.0	20.0	S	Regional Aquifer – SFG sediments	Jan-2008
KAFB-PG-1598[l]	Ext	5369.90	5368.4	290.0	440.0	5078.4	4928.4	455.0	12.0	SS	PGWS – SFG sediments	14-Oct-1998
KAFB-0602	Ext	5364.06	5364.2	437.0	457.0	4927.2	4907.2	467.0	4.0	PVC	PGWS – SFG sediments	20-Mar-1990
KAFB-0608	Ext	5359.80	5364.7	307.0	327.0	5052.9	5032.9	338.0	4.0	PVC	PGWS – SFG sediments	28-Mar-1990
KAFB-0610	Ext	5359.22	5357.3	333.0	353.0	5024.3	5004.3	363.0	4.0	PVC	PGWS – SFG sediments	4-Apr-1990
KAFB-106228	Ext	5319.62	5322.9	440.0	540.0	4882.9	4782.9	545.0	8.0	SS	Regional Aquifer – SFG sediments	2-June-2015
KAFB-106233	Ext	5312.20	5315.5	430.0	532.1	4885.5	4783.4	537.1	8.0	SS	Regional Aquifer – SFG sediments	30-Sep-2015
KAFB-106234	Ext	5323.07	5326.3	439.7	539.7	4886.6	4786.6	544.7	8.0	SS	Regional Aquifer – SFG sediments	9-Oct-2015
KAFB-106239	Ext	5330.09	5333.4	470.0	570.0	4863.4	4763.4	575.0	8.0	SS	Regional Aquifer – SFG sediments	3-May-2017
KAFB-106IN2	Inj	5370.84	5367.0	605.0	905.0	4762.0	4462.0	910.0	12.8	S	Regional Aquifer – SFG sediments	19-Oct-2020
Lomas 1	P	unk	5597.7	700.0	1300.0	4897.7	4297.7	1341.0	16.0	S	Regional Aquifer – SFG sediments	1962
Lomas 2	P	unk	5582.7	743.0	1539.0	4835.0	4039.0	1590.0	16.0	S	Regional Aquifer – SFG sediments	1973
Lomas 5	P	unk	5496.7	823.0	1651.0	4876.0	3848.0	1670.0	18.0	S	Regional Aquifer – SFG sediments	3-Nov-1978
Lomas 6	P	unk	5532.0	876.0	1688.0	4657.0	3845.0	1704.0	18.0	S	Regional Aquifer – SFG sediments	1978
Love 2	P	unk	5444.0	740.0	1536.0	4704.0	3908.0	1548.0	16.0	S	Regional Aquifer – SFG sediments	1958
Love 5	P	5392.67	5392.7	660.0	1248.0	4732.7	4144.7	1248.0	16.0	S	Regional Aquifer – SFG sediments	19-Jun-1958
Miles 1	P	unk	5148.7	404.5	1153.5	4744.2	3995.2	1165.5	16.0	S	Regional Aquifer – SFG sediments	6-Jun-1974
Ridgecrest 1	P	unk	5444.7	636.0	1260.0	4808.7	4184.7	1260.0	16.0	S	Regional Aquifer – SFG sediments	13-Jan-1964
Ridgecrest 2	P	unk	5418.7	730.0	1500.0	4688.7	3918.7	1543.0	16.0	S	Regional Aquifer – SFG sediments	1-Jan-1977
Ridgecrest 3	P	unk	5387.7	621.0	1436.0	4766.7	3951.7	1449.0	16.0	S	Regional Aquifer – SFG sediments	01-May-1974
Ridgecrest 4	P	unk	5346.7	573.0	1413.0	4773.7	3933.7	1450.0	unk	S	Regional Aquifer – SFG sediments	01-Mar-1974
Ridgecrest 5	P	unk	5356.7	650.0	1,450.0	4706.7	3906.7	1450.0	20.0	S	Regional Aquifer – SFG sediments	8-Dec-1990
RG-01091	Px	unk	5602.0?	650.0	1180.0	4952.0?	4422.0?	1200.0	18.0	S	Fractured limestone, metamorphics, igneous	1-Sep-1957

See notes at end of table.

Table 1 (continued)
Inventory of Active Groundwater Monitoring, Production, and Extraction Wells at Sandia National Laboratories, New Mexico[a], Kirtland Air Force Base, and Surrounding Areas

Well ID	Type	Measuring Point[b, c] (ft amsl, NAVD 88)	Ground Surface[c] (ft amsl, NAVD 88)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Top of Screen (ft amsl)	Bottom of Screen (ft amsl)	Casing Total Depth (ft bgs)	Casing, Inner Diameter (inches)	Casing Material	Lithology of Screened Interval	Installation Date
Production, Injection, and Extraction Wells (concluded)[i]												
RG-39652	P	unk	7070.0?	163.0	263.0	6907.0?	6807.0?	263.0	3.0	PVC	Bedrock (limestone)	6-Mar-2013
RG-40129	P	unk	7265.0?	240.0	340.0	7025.0?	6925.0?	340.0	5.0	unk	Bedrock (limestone)	18-Jul-1983
RG-58935-3	P	unk	6260.0?	160.0	480.0	6100.0?	5780.0?	480.0	4.0	PVC	Bedrock (metamorphics)	2017?
RG-61206	P	unk	6320.0?	100.0	500.0	6220.0?	5820.0?	500.0	4.0	PVC	Bedrock (metamorphics)	18-Dec-1994
RG-61207	P	unk	6370.0?	100.0	480.0	6270.0?	5890.0?	500.0	4.0	PVC	Bedrock (metamorphics)	17-Dec-1994
RG-76274	P	unk	6280.0?	180.0	540.0	6100.0?	5740.0?	540.0	4.5	PVC	Bedrock (granite and metamorphics?)	3-Sep-2001
School House Well	P	5796.33	5799.0	83.0	103.0	5716.0	5696.0	103.0	6.0	S/OH	Bedrock (Sandia Formation) sandstone?	1930s?
VA-2	P	unk	5346.2?	590.0	990.0	4756.2?	4356.2?	1010.0	13.4	SS	Regional Aquifer – SFG sediments	18-Apr-1997
Yale 1	P	unk	5161.7	336.0	960.0	4825.7	4201.7	960.0	16.0	S	Regional Aquifer – SFG sediments	30-Nov-1963
Yale 2	P	unk	5138.7	357.0	1185.0	4781.7	3953.7	1185.0	16.0	S	Regional Aquifer – SFG sediments	1-Jan-1972

See notes at end of table.

Table 1 (concluded)
Inventory of Active Groundwater Monitoring, Production, and Extraction Wells at Sandia National Laboratories, New Mexico[a], Kirtland Air Force Base, and Surrounding Areas

Notes:

[a] The status of all active SNL/NM-installed groundwater wells is maintained in this table. However, not all of the groundwater wells for KAFB are listed.

[b] Measuring point is the elevation for the top of well casing, typically the top of PVC casing, that is used for measuring and calculating groundwater elevations.

[c] Elevations are relative to the NAVD 88, New Mexico State Plane Coordinate System, Central Zone. Elevation data from other government agencies that were based on the National Geodetic Vertical Datum of 1929 were converted (re-projected) by +2.671 ft.

[d] NWTA3-MW2 has two screens: 455 to 475 ft bgs, and 480 to 500 ft bgs. This well is not sampled.

[e] The following wells are dual-completion wells installed within a single borehole (i.e., two well casings installed within the same borehole): SFR-1D and SFR-1S; TRE-1 and TRE-2; and TRS-1D and TRS-1S.

[f] PGS-2 has three screens: 535 to 565 ft bgs, 585 to 595 ft bgs, and 625 to 645 ft bgs. Groundwater samples were collected from the upper screen.

[g] TA2-NW1-595 has two screens: 535 to 555 ft bgs, and 585 to 595 ft bgs. Groundwater samples were collected from the upper screen.

[h] TJA-4 is screened in the Merging Zone. The Merging Zone refers to layers of saturation near Tijeras Arroyo, typically between the PGWS and the Regional Aquifer.

[i] KAFB-0521 and KAFB-0626 were constructed with a FLUTe monitoring system with multiple sampling ports. Groundwater elevations cannot be measured. Sample tubing (0.25-inch diameter) for the ports was installed in 5-inch diameter PVC casings. KAFB-0521 has ports set at 550 to 555, 600 to 605, and 650 to 655 ft bgs. KAFB-0626 has ports set at 425, 471, 515, and 629 ft bgs.

[j] The location of active production, injection, and extraction wells are shown on Plate 1 and well construction details are provided in this table. Groundwater elevations are not measured at these wells and therefore are not included in Table 2 (except KAFB-0602, KAFB-0608, and KAFB-0610).

[k] Production well KAFB-18 (non-potable) is also known as the Optical Range Well or the Starfire Optical Range Well.

[l] The production-non-potable well (water supply well) KAFB-PG-1598 is also known as the Golf Course Main Pond Well. Some KAFB documents also use the identifier RG-1598-S-4 or RG-1589-S-4. Pumped water is used for irrigating the KAFB Tijeras Arroyo Golf Course.

amsl	= above mean sea level
ASL-PD	= Albuquerque Seismological Laboratory Production
bgs	= below ground surface
BW	= Background Well
CCBA	= Coyote Canyon Blast Area
CTF	= Coyote Test Field
CWL	= Chemical Waste Landfill
CYN	= Canyons (Lurance Canyon area)
D	= deep
EX	= Well proposed for extraction purposes but used for monitoring purposes only. This applies to the well number for KAFB-ST105-EX01.
Ext	= Extraction well used for remediating groundwater at the KAFB Bulk Fuels Facility and the KAFB Tijeras Arroyo Golf Course.
ft	= feet or foot
FLUTe	= Flexible Liner Underground Technologies, LLC
ID	= identifier
Inj	= Injection
KAFB	= Kirtland Air Force Base
LWDS	= Liquid Waste Disposal System
MRN	= Magazine Road North
MW	= Monitoring Well
MWF	= Monitoring Well FLUTe
MWL	= Mixed Waste Landfill
NAVD 88	= North American Vertical Datum of 1988
NWTA3	= Northwest Technical Area-III
OBS	= Old Burn Site (in Coyote Test Area)
P	= Production well (water supply well) used for potable purposes.
Px	= Production well (water supply well) used for non-potable purposes, such as irrigating the golf course.
PGS	= Parade Ground South
PGWS	= Perched Groundwater System (more details are presented in Table 2)
PL	= Power Line Road (northwest of Technical Area-III). The better-known Power Line Road (also known as Pole Line Road) is near the Tijeras Arroyo Golf Course.
PVC	= polyvinyl chloride
PVC/SS	= Composition of blank well casing is PVC and composition of well screen is stainless steel.
R	= Replacement well (term used by KAFB)
RG	= Rio Grande
S	= shallow
S	= steel (carbon steel)
S/OH	= Open hole completion (no well screen) with blank casing above.
SFG	= Santa Fe Group
SFR	= South Fence Road
SNL/NM	= Sandia National Laboratories, New Mexico
SOR	= Starfire Optical Range
SS	= stainless steel
ST105	= Series of KAFB/USAF wells for nitrate abatement study.
SWTA3	= Southwest Technical Area-III
TA1-W	= Technical Area-I (Well)
TA2-NW	= Technical Area-II (Northwest)
TA2-W	= Technical Area-II (Well)
TAV	= Technical Area-V (monitoring well designation)
TJA	= Tijeras Arroyo
TRE	= Thunder Road East
TRN	= Target Road North
TRS	= Target Road South
unk	= Unknown information, not available.
USAF	= U.S. Air Force
VA	= Veterans Administration (previously Veterans Affairs)
WYO	= Wyoming Boulevard
YALE	= Yale Landfill area
?	= Accuracy of information or interpretation is questionable.

Table 2
Groundwater Elevations for Active Monitoring Wells at Sandia National Laboratories, New Mexico and Kirtland Air Force Base Vicinity, Calendar Year 2025

Well ID	Measuring Point [a, b, c] (ft amsl, NAVD 88)	Date Measured (2025) [d]	Depth to Water (ft btoc, 2025)	Groundwater Elevation (ft amsl, 2025)	Groundwater Elevation, rounded (ft amsl, 2025)	Screened Unit	Comment, as needed	Data Source	Well Owner
DOE Wells									
Burn Site Well	6374.66	1-Oct-2025	109.28	6265.38	6265	Bedrock (schist and granite)		SNL/NM	DOE
CCBA-MW1	5902.34	8-Oct-2025	48.26	5854.08	5854	Alluvium and bedrock (granite)		SNL/NM	DOE
CCBA-MW2	5939.28	8-Oct-2025	73.17	5866.11	5866	Bedrock (granite)		SNL/NM	DOE
CTF-MW1	6082.63	1-Oct-2025	242.48	5840.15	5840	Bedrock (granite)		SNL/NM	DOE
CTF-MW2	5578.60	10-Oct-2025	44.42	5534.18	5534	Bedrock (granite)		SNL/NM	DOE
CTF-MW3	5522.82	10-Oct-2025	312.50	5210.32	5210	Bedrock (granite)		SNL/NM	DOE
CWL-BW5	5434.79	1-Oct-2025	517.02	4917.77	4918	Regional Aquifer – SFG sediments		SNL/NM	DOE
CWL-MW9	5426.12	1-Oct-2025	507.74	4918.38	4918	Regional Aquifer – SFG sediments		SNL/NM	DOE
CWL-MW10	5424.58	1-Oct-2025	504.87	4919.71	4920	Regional Aquifer – SFG sediments		SNL/NM	DOE
CWL-MW11	5423.24	1-Oct-2025	502.96	4920.28	4920	Regional Aquifer – SFG sediments		SNL/NM	DOE
CYN-MW3	6313.26	1-Oct-2025	dry	dry	dry	Bedrock (metamorphics)		SNL/NM	DOE
CYN-MW4	6455.48	1-Oct-2025	248.91	6206.57	6207	Bedrock (quartzite)		SNL/NM	DOE
CYN-MW5	5984.23	8-Oct-2025	109.91	5874.32	5874	Bedrock (quartzite)		SNL/NM	DOE
CYN-MW6	6343.37	1-Oct-2025	162.07	6181.30	6181	Bedrock (metamorphics)		SNL/NM	DOE
CYN-MW7	6216.35	1-Oct-2025	310.65	5905.70	5906	Bedrock (granitic gneiss)		SNL/NM	DOE
CYN-MW8	6230.11	1-Oct-2025	326.44	5903.67	5904	Bedrock (granitic gneiss)		SNL/NM	DOE
CYN-MW9	6360.67	1-Oct-2025	196.17	6164.50	6165	Bedrock (metamorphics)		SNL/NM	DOE
CYN-MW10	6345.45	1-Oct-2025	151.46	6193.99	6194	Bedrock (metamorphics)		SNL/NM	DOE
CYN-MW11	6374.41	1-Oct-2025	109.20	6265.21	6265	Bedrock (metamorphics)		SNL/NM	DOE
CYN-MW12	6345.16	1-Oct-2025	241.73	6103.43	6103	Bedrock (metamorphics)		SNL/NM	DOE
CYN-MW13	6237.79	8-Oct-2025	332.81	5904.98	5905	Bedrock (granitic gneiss)		SNL/NM	DOE
CYN-MW14A	6315.85	1-Oct-2025	210.38	6105.47	6105	Bedrock (metamorphics)	NC - deeper fracture	SNL/NM	DOE
CYN-MW15	6344.44	1-Oct-2025	184.59	6159.85	6160	Bedrock (metamorphics)		SNL/NM	DOE
CYN-MW16	6249.60	1-Oct-2025	344.52	5905.08	5905	Bedrock (granitic gneiss)		SNL/NM	DOE
CYN-MW17	6268.95	1-Oct-2025	363.82	5905.13	5905	Bedrock (granitic gneiss)		SNL/NM	DOE
CYN-MW18	6304.02	1-Oct-2025	259.67	6044.35	6044	Bedrock (metamorphics)		SNL/NM	DOE
CYN-MW19	6410.43	1-Oct-2025	45.64	6364.79	6365	Bedrock (metamorphics)		SNL/NM	DOE
Greystone-MW2	5814.20	8-Oct-2025	55.70	5758.50	5759	Alluvium in arroyo, recent	NC - alluvium	SNL/NM	DOE
LWDS-MW1	5423.83	1-Oct-2025	508.10	4915.73	4916	Regional Aquifer – SFG sediments		SNL/NM	DOE
MRN-2	5308.18	7-Nov-2025	428.36	4879.82	4880	Regional Aquifer – SFG sediments		SNL/NM	DOE
MRN-3D	5309.34	7-Nov-2025	428.93	4880.41	4880	Regional Aquifer – SFG sediments		SNL/NM	DOE
MWL-BW2	5391.02	3-Oct-2025	483.36	4907.66	4908	Regional Aquifer – SFG sediments		SNL/NM	DOE
MWL-MW5	5382.56	7-Nov-2025	493.26	4889.30	4889	Regional Aquifer – SFG sediments		SNL/NM	DOE
MWL-MW6	5375.31	7-Nov-2025	486.67	4888.64	4889	Regional Aquifer – SFG sediments		SNL/NM	DOE
MWL-MW7	5383.30	3-Oct-2025	490.88	4892.42	4892	Regional Aquifer – SFG sediments		SNL/NM	DOE
MWL-MW8	5384.67	3-Oct-2025	492.40	4892.27	4892	Regional Aquifer – SFG sediments		SNL/NM	DOE
MWL-MW9	5381.91	3-Oct-2025	491.73	4890.18	4890	Regional Aquifer – SFG sediments		SNL/NM	DOE
NWTA3-MW2	5337.49	7-Nov-2025	458.17	4879.32	4879	Regional Aquifer – SFG sediments		SNL/NM	DOE
NWTA3-MW3D	5340.80	7-Nov-2025	457.26	4883.54	4884	Regional Aquifer – SFG sediments		SNL/NM	DOE
OBS-MW1	5871.42	8-Oct-2025	72.71	5798.71	5799	Bedrock (granite)		SNL/NM	DOE
OBS-MW2	5863.16	1-Oct-2025	170.69	5692.47	5692	Bedrock (granite)		SNL/NM	DOE
OBS-MW3	5865.50	1-Oct-2025	70.24	5795.26	5795	Bedrock (granite)		SNL/NM	DOE

See notes at end of table.

Table 2 (continued)
Groundwater Elevations for Active Monitoring Wells at Sandia National Laboratories, New Mexico and Kirtland Air Force Base Vicinity, Calendar Year 2025

Well ID	Measuring Point [a, b, c] (ft amsl, NAVD 88)	Date Measured (2025) [d]	Depth to Water (ft btoc, 2025)	Groundwater Elevation (ft amsl, 2025)	Groundwater Elevation, rounded (ft amsl, 2025)	Screened Unit	Comment, as needed	Data Source	Well Owner
DOE Wells (continued)									
PGS-2	5406.93	2-Oct-2025	534.98	4871.95	4872	Regional Aquifer – SFG sediments		SNL/NM	DOE
PL-2	5336.01	7-Nov-2025	457.43	4878.58	4879	Regional Aquifer – SFG sediments		SNL/NM	DOE
PL-4	5334.98	7-Nov-2025	456.41	4878.57	4879	Regional Aquifer – SFG sediments		SNL/NM	DOE
SFR-1D	5399.13	8-Oct-2025	140.68	5258.45	5258	Regional Aquifer – SFG sediments	NC - deeper fracture	SNL/NM	DOE
SFR-1S	5399.16	8-Oct-2025	90.89	5308.27	5308	Regional Aquifer – SFG sediments		SNL/NM	DOE
SFR-2S	5432.77	8-Oct-2025	102.43	5330.34	5330	Regional Aquifer – SFG sediments		SNL/NM	DOE
SFR-3D	5497.94	8-Oct-2025	163.91	5334.03	5334	Regional Aquifer – SFG sediments		SNL/NM	DOE
SFR-3P	5499.63	8-Oct-2025	164.21	5335.42	5335	Regional Aquifer – SFG sediments		SNL/NM	DOE
SFR-3S	5498.24	8-Oct-2025	163.18	5335.06	5335	Regional Aquifer – SFG sediments		SNL/NM	DOE
SFR-3T	5498.66	1-Oct-2025	68.02	5430.64	5431	Bedrock (sandstone)	NC – deeper fracture	SNL/NM	DOE
SFR-4P	5573.33	8-Oct-2025	153.15	5420.18	5420	Bedrock (sandstone)		SNL/NM	DOE
SFR-4T	5573.95	8-Oct-2025	153.08	5420.87	5421	Bedrock (sandstone)		SNL/NM	DOE
SWTA3-MW2	5325.60	7-Nov-2025	444.69	4880.91	4881	Regional Aquifer – SFG sediments		SNL/NM	DOE
SWTA3-MW3	5323.94	7-Nov-2025	442.70	4881.24	4881	Regional Aquifer – SFG sediments		SNL/NM	DOE
SWTA3-MW4	5324.81	7-Nov-2025	443.42	4881.39	4881	Regional Aquifer – SFG sediments		SNL/NM	DOE
TA1-W-01	5403.82	NM	NM	NM	NM	Regional Aquifer – SFG sediments	well is damaged	SNL/NM	DOE
TA1-W-02	5416.62	9-Oct-2025	520.75	4895.87	4896	Regional Aquifer – SFG sediments		SNL/NM	DOE
TA1-W-03	5457.03	2-Oct-2025	dry	dry	dry	PGWS - SFG sediments		SNL/NM	DOE
TA1-W-04	5460.98	2-Oct-2025	564.61	4896.37	4896	Regional Aquifer – SFG sediments		SNL/NM	DOE
TA1-W-05	5433.84	9-Oct-2025	561.55	4872.29	4872	Regional Aquifer – SFG sediments		SNL/NM	DOE
TA1-W-06	5417.10	2-Oct-2025	311.25	5105.85	5106	PGWS - SFG sediments	value not plotted	SNL/NM	DOE
TA1-W-07	5404.92	2-Oct-2025	287.55	5117.37	5117	PGWS - SFG sediments	value not plotted	SNL/NM	DOE
TA1-W-08	5434.19	9-Oct-2025	312.96	5121.23	5121	PGWS - SFG sediments	value not plotted	SNL/NM	DOE
TA2-NW1-325	5421.94	2-Oct-2025	322.70	5099.24	5099	PGWS - SFG sediments	value not plotted	SNL/NM	DOE
TA2-NW1-595	5421.26	2-Oct-2025	516.52	4904.74	4905	Regional Aquifer – SFG sediments		SNL/NM	DOE
TA2-W-01	5419.99	2-Oct-2025	333.18	5086.81	5087	PGWS - SFG sediments	value not plotted	SNL/NM	DOE
TA2-W-19	5351.21	2-Oct-2025	276.74	5074.47	5074	PGWS - SFG sediments	value not plotted	SNL/NM	DOE
TA2-W-24	5363.66	2-Oct-2025	438.41	4925.25	4925	Regional Aquifer – SFG sediments		SNL/NM	DOE
TA2-W-25	5374.86	2-Oct-2025	462.20	4912.66	4913	Regional Aquifer – SFG sediments		SNL/NM	DOE
TA2-W-26	5375.77	2-Oct-2025	291.72	5084.05	5084	PGWS - SFG sediments	value not plotted	SNL/NM	DOE
TA2-W-27	5362.85	2-Oct-2025	284.96	5077.89	5078	PGWS - SFG sediments	value not plotted	SNL/NM	DOE
TA2-W-28	5412.41	2-Oct-2025	323.62	5088.79	5089	PGWS - SFG sediments	value not plotted	SNL/NM	DOE
TAV-MW2	5427.33	9-Oct-2025	512.51	4914.82	4915	Regional Aquifer – SFG sediments		SNL/NM	DOE
TAV-MW3	5464.30	9-Oct-2025	550.66	4913.64	4914	Regional Aquifer – SFG sediments		SNL/NM	DOE
TAV-MW4	5427.89	1-Oct-2025	512.48	4915.41	4915	Regional Aquifer – SFG sediments		SNL/NM	DOE
TAV-MW5	5408.71	9-Oct-2025	498.05	4910.66	4911	Regional Aquifer – SFG sediments		SNL/NM	DOE
TAV-MW6	5431.17	1-Oct-2025	515.83	4915.34	4915	Regional Aquifer – SFG sediments		SNL/NM	DOE
TAV-MW7	5430.40	1-Oct-2025	517.73	4912.67	4913	Regional Aquifer – SFG sediments		SNL/NM	DOE
TAV-MW8	5417.00	1-Oct-2025	501.09	4915.91	4916	Regional Aquifer – SFG sediments		SNL/NM	DOE
TAV-MW9	5416.27	1-Oct-2025	503.69	4912.58	4913	Regional Aquifer – SFG sediments		SNL/NM	DOE
TAV-MW10	5437.03	1-Oct-2025	522.17	4914.86	4915	Regional Aquifer – SFG sediments		SNL/NM	DOE
TAV-MW11	5440.12	1-Oct-2025	524.79	4915.33	4915	Regional Aquifer – SFG sediments		SNL/NM	DOE

See notes at end of table.

Table 2 (continued)
Groundwater Elevations for Active Monitoring Wells at Sandia National Laboratories, New Mexico and Kirtland Air Force Base Vicinity, Calendar Year 2025

Well ID	Measuring Point [a, b, c] (ft amsl, NAVD 88)	Date Measured (2025) [d]	Depth to Water (ft btoc, 2025)	Groundwater Elevation (ft amsl, 2025)	Groundwater Elevation, rounded (ft amsl, 2025)	Screened Unit	Comment, as needed	Data Source	Well Owner
DOE Wells (concluded)									
TAV-MW12	5435.72	1-Oct-2025	521.50	4914.22	4914	Regional Aquifer – SFG sediments		SNL/NM	DOE
TAV-MW13	5409.02	9-Oct-2025	499.94	4909.08	4909	Regional Aquifer – SFG sediments		SNL/NM	DOE
TAV-MW14	5441.52	1-Oct-2025	528.49	4913.03	4913	Regional Aquifer – SFG sediments		SNL/NM	DOE
TAV-MW15	5437.32	9-Oct-2025	523.34	4913.98	4914	Regional Aquifer – SFG sediments		SNL/NM	DOE
TAV-MW16	5448.34	9-Oct-2025	534.92	4913.42	4913	Regional Aquifer – SFG sediments		SNL/NM	DOE
TAV-MW17	5443.92	1-Oct-2025	529.99	4913.93	4914	Regional Aquifer – SFG sediments		SNL/NM	DOE
TJA-2	5353.20	2-Oct-2025	281.27	5071.93	5072	PGWS - SFG sediments	value not plotted	SNL/NM	DOE
TJA-3	5390.56	2-Oct-2025	498.58	4891.98	4892	Regional Aquifer – SFG sediments		SNL/NM	DOE
TJA-4	5341.16	2-Oct-2025	300.22	5040.94	5041	Merging Zone – SFG sediments	NC - Merging Zone	SNL/NM	DOE
TJA-5	5341.33	2-Oct-2025	271.88	5069.45	5069	PGWS - SFG sediments	value not plotted	SNL/NM	DOE
TJA-6	5343.16	9-Oct-2025	450.82	4892.34	4892	Regional Aquifer – SFG sediments		SNL/NM	DOE
TJA-7	5391.27	2-Oct-2025	306.18	5085.09	5085	PGWS - SFG sediments	value not plotted	SNL/NM	DOE
TRE-1	5497.25	8-Oct-2025	179.52	5317.73	5318	Regional Aquifer – SFG sediments		SNL/NM	DOE
TRE-2	5497.20	NM	NM	NM	NM	Regional Aquifer – SFG sediments		SNL/NM	DOE
TRN-1	5735.62	8-Oct-2025	93.52	5642.10	5642	Bedrock (sandstone)		SNL/NM	DOE
TRS-1D	5779.80	8-Oct-2025	128.35	5651.45	5651	Bedrock (limestone)		SNL/NM	DOE
TRS-1S	5780.07	8-Oct-2025	136.29	5643.78	5644	Bedrock (limestone)		SNL/NM	DOE
TRS-2	5780.76	1-Oct-2025	136.83	5643.93	5644	Bedrock (limestone)		SNL/NM	DOE
WYO-3	5392.09	2-Oct-2025	515.94	4876.15	4876	Regional Aquifer – SFG sediments		SNL/NM	DOE
WYO-4	5392.57	NM	dry	dry	dry	PGWS - SFG sediments		KAFB	DOE
Wells Owned by Other Agencies									
Eubank-1	5460.02	2-Oct-2025	542.81	4917.21	4917	Regional Aquifer – SFG sediments		SNL/NM	COA EHD
Eubank-2	5474.39	3-Apr-2025	570.09	4904.30	4904	Regional Aquifer – SFG sediments		COA EHD	COA EHD
Eubank-3	5498.73	3-Apr-2025	599.08	4899.65	4900	Regional Aquifer – SFG sediments		COA EHD	COA EHD
Eubank-5	5507.40	3-Apr-2025	608.25	4899.15	4899	Regional Aquifer – SFG sediments		COA EHD	COA EHD
KAFB-0118	5320.70	11-Mar-2025	442.07	4878.63	4879	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0119	5315.81	12-Mar-2025	437.64	4878.17	4878	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0120	5289.49	10-Mar-2025	410.30	4879.19	4879	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0121	5307.41	7-Mar-2025	428.93	4878.48	4878	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0213	5282.17	26-Feb-2025	404.50	4877.67	4878	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0219	5263.85	17-Feb-2025	386.02	4877.83	4878	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0220	5264.72	13-Feb-2025	387.70	4877.02	4877	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0221	5274.21	18-Feb-2025	396.74	4877.47	4877	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0222	5244.49	14-Feb-2025	367.03	4877.46	4877	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0223	5251.38	13-Feb-2025	374.18	4877.20	4877	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0307	5363.85	12-Feb-2025	407.25	4956.60	4957	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0308	5381.08	17-Feb-2025	441.99	4939.09	4939	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0309	5411.29	12-Feb-2025	471.11	4940.18	4940	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0310	5416.06	6-Feb-2025	355.84	5060.22	5060	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-0311	5352.74	7-Feb-2025	415.78	4936.96	4937	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0312	5431.93	11-Feb-2025	416.41	5015.52	5016	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0313	5418.58	12-Feb-2025	350.76	5067.82	5068	PGWS - SFG sediments	value not plotted	KAFB	KAFB

See notes at end of table.

Table 2 (continued)
Groundwater Elevations for Active Monitoring Wells at Sandia National Laboratories, New Mexico and Kirtland Air Force Base Vicinity, Calendar Year 2025

Well ID	Measuring Point [a, b, c] (ft amsl, NAVD 88)	Date Measured (2025) [d]	Depth to Water (ft btoc, 2025)	Groundwater Elevation (ft amsl, 2025)	Groundwater Elevation, rounded (ft amsl, 2025)	Screened Unit	Comment, as needed	Data Source	Well Owner
Wells Owned by Other Agencies (continued)									
KAFB-0314	5455.45	10-Feb-2025	418.53	5036.92	5037	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0315	5466.53	7-Feb-2025	437.97	5028.56	5029	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0417	5317.25	20-Feb-2025	437.36	4879.89	4880	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0504	5357.87	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0505	5363.65	21-Apr-2025	487.05	4876.60	4877	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0506	5363.62	21-Apr-2025	213.10	5150.52	5151	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-0507R	5358.56	20-Feb-2025	481.33	4877.23	4877	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0508	5353.62	20-Feb-2025	475.87	4877.75	4878	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0509	5441.56	NM	NM	NM	NM	above PGWS – SFG sediments		KAFB	KAFB
KAFB-0510	5372.30	20-Feb-2025	492.27	4880.03	4880	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0512R	5302.73	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0514	5206.41	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0516	5205.64	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0517	5197.11	20-Feb-2025	318.26	4878.85	4879	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0518	5177.88	20-Feb-2025	298.49	4879.39	4879	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0519	5365.37	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0520	5250.09	20-Feb-2025	371.66	4878.43	4878	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0521	FLUTe	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0522	5270.06	21-Apr-2025	392.29	4877.77	4878	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0523	5352.62	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0524	5345.83	20-Feb-2025	467.85	4877.98	4878	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0525	5229.75	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0602 [e]	5364.06	NM	NM	NM	NM	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-0608 [e]	5359.80	21-Apr-2025	292.35	5067.45	5067	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-0610 [e]	5359.22	NM	NM	NM	NM	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-0611	5386.08	20-Feb-2025	463.22	4922.86	4923	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0612	5385.45	NM	NM	NM	NM	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-0613	5390.78	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0614	5391.22	20-Feb-2025	330.81	5060.41	5060	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-0615	5638.43	NM	NM	NM	NM	Bedrock (granite)		KAFB	KAFB
KAFB-0616	5481.04	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0617	5506.07	NM	NM	NM	NM	Regional Aquifer – SFG sediments	NC - nearby fault	KAFB	KAFB
KAFB-0618	5411.63	20-Feb-2025	484.45	4927.18	4927	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0619	5412.37	20-Feb-2025	384.17	5028.20	5028	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-0620	5334.34	20-Feb-2025	441.98	4892.36	4892	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0621	5568.89	NM	NM	NM	NM	Regional Aquifer – SFG sediments	NC - nearby fault	KAFB	KAFB
KAFB-0622	5488.64	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0623	5328.94	NM	NM	NM	NM	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-0624	5674.15	20-Feb-2025	768.48	4905.67	4906	Regional Aquifer – SFG sediments	NC - nearby fault	KAFB	KAFB
KAFB-0625	5390.23	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0626	FLUTe	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-0901	5390.07	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB

See notes at end of table.

Table 2 (continued)
Groundwater Elevations for Active Monitoring Wells at Sandia National Laboratories, New Mexico and Kirtland Air Force Base Vicinity, Calendar Year 2025

Well ID	Measuring Point [a, b, c] (ft amsl, NAVD 88)	Date Measured (2025) [d]	Depth to Water (ft btoc, 2025)	Groundwater Elevation (ft amsl, 2025)	Groundwater Elevation, rounded (ft amsl, 2025)	Screened Unit	Comment, as needed	Data Source	Well Owner
Wells Owned by Other Agencies (continued)									
KAFB-0903	5391.63	NM	NM	NM	NM	above PGWS – SFG sediments	semiconfined?	KAFB	KAFB
KAFB-0904	5291.75	NM	NM	NM	NM	Regional Aquifer – SFG sediments	NC - semiconfined?	KAFB	KAFB
KAFB-1001	5260.43	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-1002	5254.75	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-1003	5258.29	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-1004	5258.81	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-1005	5274.68	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-1006	5257.01	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-1007R	5260.80	7-Mar-2025	380.22	4880.58	4881	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-1008	5260.77	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-1009	5272.16	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-1021	5348.02	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-1901	5751.58	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-1902	5754.27	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-1904	5752.29	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-2005	5624.27	NM	NM	NM	NM	Bedrock (granite)		KAFB	KAFB
KAFB-2006	5590.88	NM	NM	NM	NM	Bedrock (granite)		KAFB	KAFB
KAFB-2007	5564.48	NM	NM	NM	NM	Bedrock (granite)		KAFB	KAFB
KAFB-2008	5541.62	20-Feb-2025	602.58	4939.04	4939	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-2009	5655.63	NM	NM	NM	NM	Bedrock (granite)		KAFB	KAFB
KAFB-2622	5360.16	21-Apr-2025	dry	dry	dry	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-2623	5369.28	NM	dry	dry	dry	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-2624	5364.20	NM	dry	dry	dry	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-2625	5356.62	21-Apr-2025	200.86	5155.76	5156	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-2626	5357.55	21-Apr-2025	dry	dry	dry	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-2627	5367.51	NM	dry	dry	dry	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-2628	5369.44	21-Apr-2025	492.92	4876.52	4877	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-2629	5361.65	21-Apr-2025	485.92	4875.73	4876	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-2630	5361.78	21-Apr-2025	214.70	5147.08	5147	above PGWS – SFG sediments	value not plotted	KAFB	KAFB
KAFB-2631	5336.14	21-Apr-2025	dry	dry	dry	above PGWS – SFG sediments	value not plotted	KAFB	KAFB
KAFB-2632	5329.57	21-Apr-2025	174.03	5155.54	5156	above PGWS – SFG sediments	value not plotted	KAFB	KAFB
KAFB-2901	5839.08	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-2902	5832.10	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-2903	5819.46	NM	NM	NM	NM	Bedrock (Abo Formation) siltstone/shale		KAFB	KAFB
KAFB-2904	5842.72	NM	NM	NM	NM	Bedrock (Madera Formation) limestone		KAFB	KAFB
KAFB-3391	5396.19	NM	NM	NM	NM	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-3392	5394.51	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-3411	5342.81	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-6241	5466.50	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-6243	5423.48	20-Feb-2025	504.23	4919.25	4919	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-6301	5459.64	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-7001	5322.94	6-Aug-2025	455.30	4867.64	4868	Regional Aquifer – SFG sediments	field error, not plotted	KAFB	KAFB

See notes at end of table.

Table 2 (continued)
Groundwater Elevations for Active Monitoring Wells at Sandia National Laboratories, New Mexico and Kirtland Air Force Base Vicinity, Calendar Year 2025

Well ID	Measuring Point [a, b, c] (ft amsl, NAVD 88)	Date Measured (2025) [d]	Depth to Water (ft btoc, 2025)	Groundwater Elevation (ft amsl, 2025)	Groundwater Elevation, rounded (ft amsl, 2025)	Screened Unit	Comment, as needed	Data Source	Well Owner
Wells Owned by Other Agencies (concluded)									
KAFB-8281	5401.03	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-8282	5402.92	NM	NM	NM	NM	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-8351	5325.62	6-Aug-2025	445.33	4880.29	4880	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-ST105-EX01	5354.54	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
KAFB-WYO-5	5393.36	27-Feb-2025	302.16	5091.20	5091	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-WYO-6	5393.79	27-Feb-2025	284.74	5109.05	5109	PGWS - SFG sediments	value not plotted	KAFB	KAFB
KAFB-WYO-7	5391.73	27-Feb-2025	305.64	5086.09	5086	PGWS - SFG sediments	value not plotted	KAFB	KAFB
Mesa del Sol-S	5302.67	2-Oct-2025	415.34	4887.33	4887	Regional Aquifer – SFG sediments		USGS	NMOSE
Montessa Park-S	5102.67	2-Oct-2025	207.93	4894.74	4895	Regional Aquifer – SFG sediments		USGS	ABCWUA
Site 58 MW-1	5720.57	1-Jul-2025	66.74	5653.83	5654	Colluvium and Bedrock (granite)	value not plotted	KAFB	KAFB
Site 58 MW-2	5715.86	1-Jul-2025	62.85	5653.01	5653	Bedrock (granite)	value not plotted	KAFB	KAFB
Site 58 MW-3	5718.08	1-Jul-2025	64.49	5653.59	5654	Colluvium?	value not plotted	KAFB	KAFB
Site 58 MW-4	5722.27	1-Jul-2025	67.26	5655.01	5655	Bedrock (granite)	value not plotted	KAFB	KAFB
Site 58 MW-5	5716.99	1-Jul-2025	63.73	5653.26	5653	Colluvium?	value not plotted	KAFB	KAFB
Site 58 MW-6	5719.62	1-Jul-2025	66.67	5652.95	5653	Colluvium and Bedrock (granite)?	value not plotted	KAFB	KAFB
Site 58 MW-7	5717.70	1-Jul-2025	65.22	5652.48	5652	Colluvium and Bedrock (granite)?	value not plotted	KAFB	KAFB
ST105-MW001	5279.34	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
ST105-MW002	5180.32	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
ST105-MW003	5174.61	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
ST105-MW004	5234.86	20-Feb-2025	357.06	4877.80	4878	Regional Aquifer – SFG sediments		KAFB	KAFB
ST105-MW005	5287.57	NM	NM	NM	NM	Regional Aquifer – SFG sediments	semiconfined?	KAFB	KAFB
ST105-MW006	5313.19	20-Feb-2025	236.03	5077.16	5077	PGWS - SFG sediments	value not plotted	KAFB	KAFB
ST105-MW007	5311.18	NM	NM	NM	NM	Regional Aquifer – SFG sediments	semiconfined?	KAFB	KAFB
ST105-MW008	5359.14	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
ST105-MW009	5519.08	20-Feb-2025	486.51	5032.57	5033	Regional Aquifer – SFG sediments		KAFB	KAFB
ST105-MW010	5334.70	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
ST105-MW011	5422.23	20-Feb-2025	483.77	4938.46	4938	Regional Aquifer – SFG sediments		KAFB	KAFB
ST105-MW012	5419.90	NM	NM	NM	NM	PGWS - SFG sediments	value not plotted	KAFB	KAFB
ST105-MW013	5446.71	20-Feb-2025	436.25	5010.46	5010	Regional Aquifer – SFG sediments		KAFB	KAFB
ST105-MW015	5623.29	20-Feb-2025	685.37	4937.92	4938	Regional Aquifer – SFG sediments	NC - nearby fault	KAFB	KAFB
ST105-MW017	5617.90	20-Feb-2025	704.72	4913.18	4913	Regional Aquifer – SFG sediments	NC - nearby fault	KAFB	KAFB
ST105-MW018	5222.12	20-Feb-2025	343.72	4878.40	4878	Regional Aquifer – SFG sediments		KAFB	KAFB
ST105-MW019	5217.94	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
ST105-MW020	5383.35	20-Feb-2025	301.23	5082.12	5082	PGWS - SFG sediments	value not plotted	KAFB	KAFB
ST105-MW021	5390.75	NM	NM	NM	NM	PGWS - SFG sediments	value not plotted	KAFB	KAFB
ST105-MW022	5386.64	4-Mar-2025	470.93	4915.71	4916	Regional Aquifer – SFG sediments		KAFB	KAFB
ST105-MW023	5275.86	NM	NM	NM	NM	Regional Aquifer – SFG sediments		KAFB	KAFB
ST105-MW024	5595.67	NM	NM	NM	NM	Bedrock (granite)		KAFB	KAFB
YALE-MW1	5308.45	2-Apr-2025	412.42	4896.03	4896	Regional Aquifer – SFG sediments		COA EHD	COA EHD
YALE-MW9	5271.06	2-Apr-2025	368.80	4902.26	4902	Regional Aquifer – SFG sediments		COA EHD	COA EHD
4-HILLS-1	5554.17	NM	NM	NM	NM	Alluvial sands and gravels		COA EHD	COA EHD

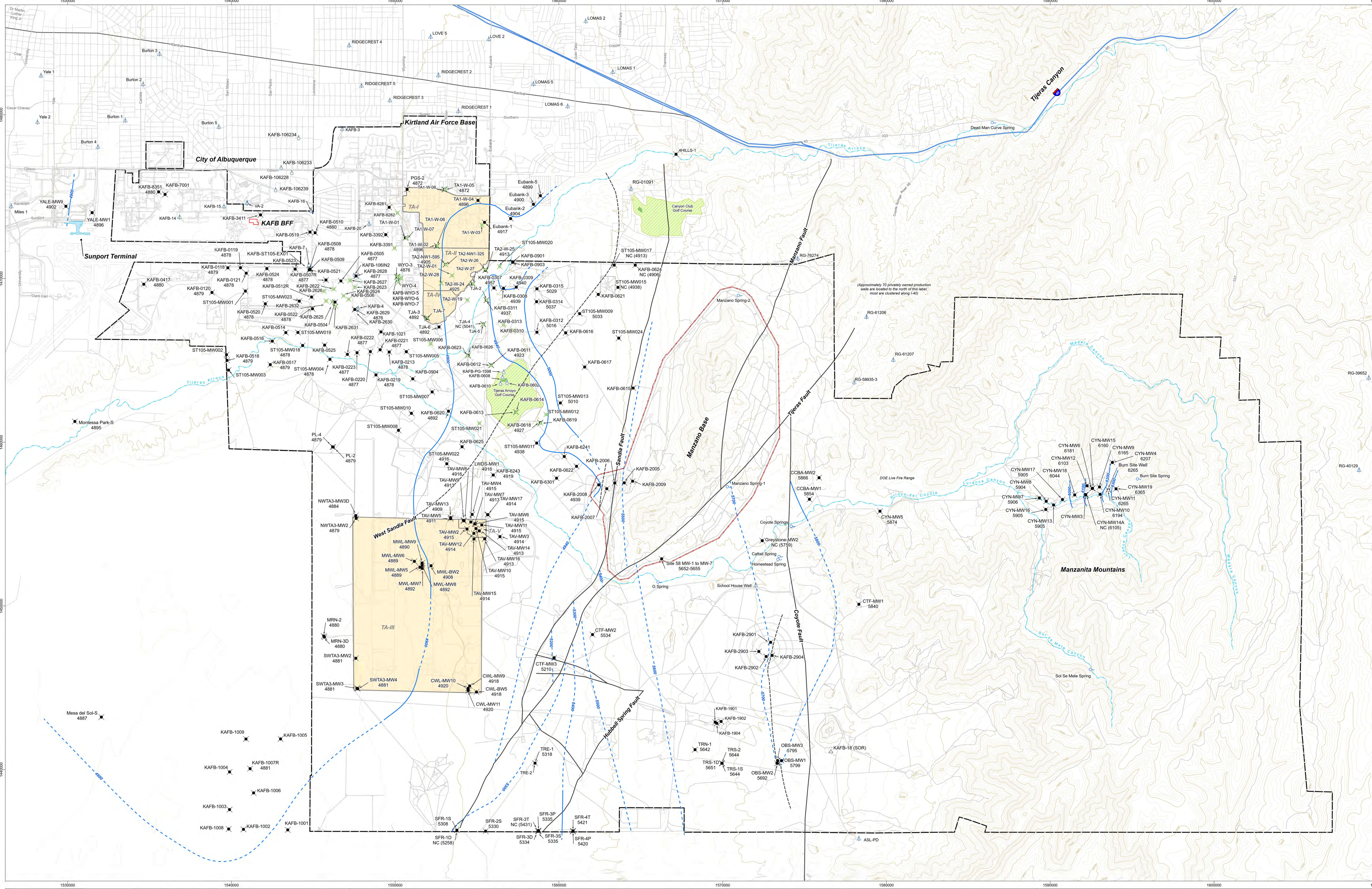
See notes at end of table.

Table 2 (concluded)
Groundwater Elevations for Active Monitoring Wells at Sandia National Laboratories, New Mexico and Kirtland Air Force Base Vicinity, Calendar Year 2025

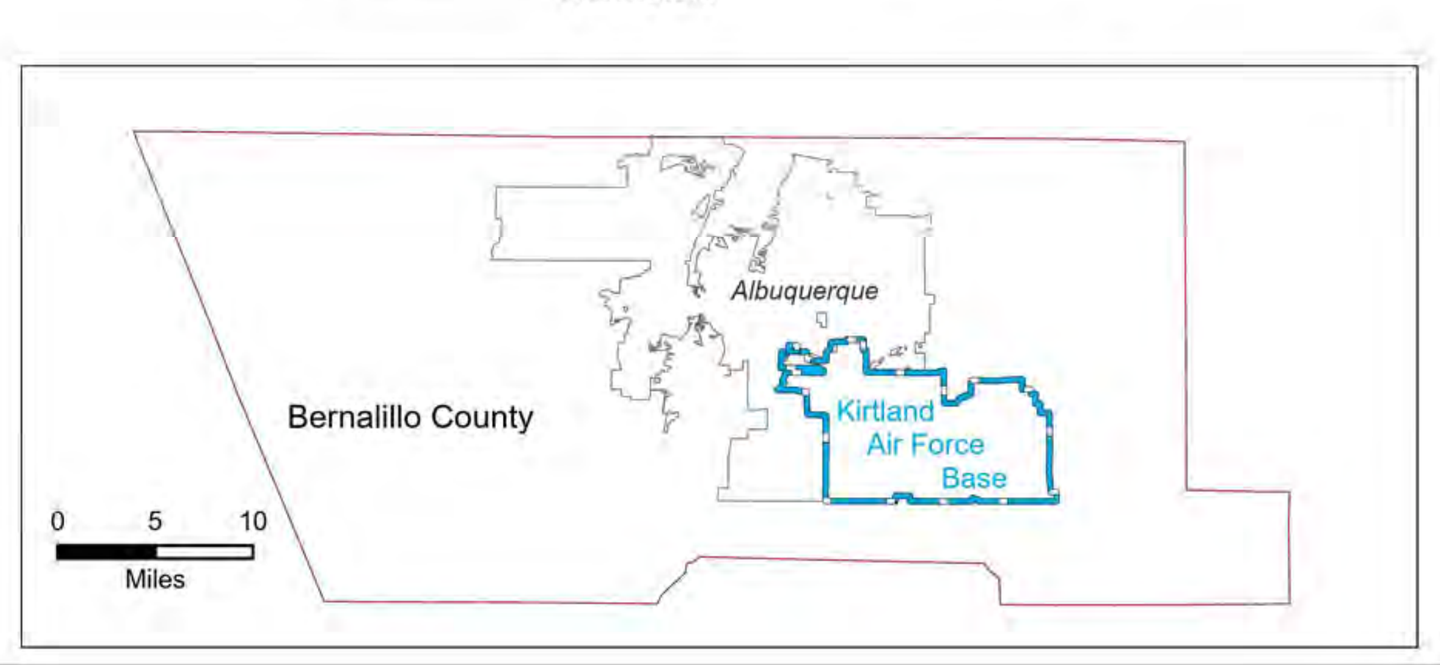
Notes:
[a] Measuring point is the elevation for the top of casing, typically the top of PVC casing, that is used for measuring and calculating groundwater elevations.
[b] Elevations are relative to the NAVD 88, New Mexico State Plane Coordinate System, Central Zone. Elevation data from other government agencies that were based on the National Geodetic Vertical Datum 1929 were converted (re-projected) by +2.671 ft.
[c] Well construction details are listed in Table 1.
[d] If a date is provided, then an attempt was made to measure the groundwater elevation at the well. In some cases, dry wells are checked for recovery.
[e] Wells KAFB-0602, KAFB-0608, and KAFB-0610 are small diameter extraction wells at the Tijeras Arroyo Golf Course. Pumps were present in wells KAFB-0602 and KAFB-0610; therefore, depth to water was not measured.
Green shading denotes monitoring wells screened in the Perched Groundwater System. Blue shading denotes that the well is screened in the Merging Zone. No shading denotes wells screened in the Regional Aquifer.
The comment "value not plotted" refers to Plate 1. Groundwater elevations for PGWS wells are not plotted.

ABCWUA	= Albuquerque Bernalillo County Water Utility Authority
amsl	= above mean sea level
btoc	= below top of casing (below the measuring point)
BW	= Background Well
CCBA	= Coyote Canyon Blast Area
COA EHD	= City of Albuquerque Environmental Health Department
CTF	= Coyote Test Field
CWL	= Chemical Waste Landfill
CYN	= Canyons (in Lurance Canyon area)
D	= deeper well completion
DOE	= U.S. Department of Energy
dry	= Water was not present in the well screen.
EX	= Well proposed for extraction purposes but used for monitoring purposes only.
FLUTe	= Flexible Liner Underground Technologies, LLC. There is no access for water level.
ft	= foot (feet)
ID	= identifier
KAFB	= Kirtland Air Force Base
LWDS	= Liquid Waste Disposal System
MRN	= Magazine Road North
MW	= Monitoring Well
MWL	= Mixed Waste Landfill
NAVD 88	= North American Vertical Datum of 1988
NC	= not contoured (see explanations below)
NC – alluvium	= Well is screened in alluvium along the arroyo channel.
NC – deeper fracture	= Well is screened in a deeper bedrock fracture.
NC – Merging Zone	= Well is screened in the Merging Zone that hydraulically connects the PGWS and the Regional Aquifer.
NC – nearby fault	= A buried (unmapped) fault appears to have a localized effect on groundwater.
NM	= not measured
NMOSE	= New Mexico Office of the State Engineer
NWTA3	= Northwest Technical Area III
OBS	= Old Burn Site (in Coyote Test Field)
PGS	= Parade Ground South
PGWS	= Perched Groundwater System
PL	= Power Line Road (northwest of Technical Area III)
PVC	= polyvinyl chloride
R	= Replacement well (term used by KAFB)
S	= Shallow (shallower bedrock well completion) at SFR and TRS wells.
SFG	= Santa Fe Group
SFR	= South Fence Road
SNL/NM	= Sandia National Laboratories, New Mexico
ST105	= Series of KAFB/USAF monitoring wells for nitrate abatement study.
SWTA3	= Southwest Technical Area III
TA1-W	= Technical Area-I well
TA2-NW	= Technical Area-II Northwest well
TA2-W	= Technical Area-II well
TAV	= Technical Area V (monitoring well designation)
TJA	= Tijeras Arroyo (monitoring well designation)
TRE	= Thunder Road East
TRN	= Target Road North
TRS	= Target Road South
USGS	= U.S. Geological Survey
W	= Well
WYO	= Wyoming Boulevard well
YALE	= Yale Landfill well
?	= Accuracy of information or interpretation is questionable.

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0 2,000 4,000
Feet
0 750 1,500
Meters
0 0.5 1
Miles
0 0.75 1.5
Kilometers



Legend

- Monitoring Well, Regional Aquifer / Fractured Bedrock System
- Monitoring Well, Perched Groundwater System
- Production Well, potable
- Production Well, non-potable
- Extraction Well
- Injection Well
- Spring, current or historical flow
- NC Not Contoured
- Potentiometric surface contour (feet above mean sea level [feet amsl])
- dashed where uncertain
- Fault, exposed and concealed
- Fault, fully concealed
- Surface drainage, arroyo
- Ground surface contour (40 ft interval)
- Road, paved and unpaved
- Golf Course
- Golf Course Main Pond
- SNL/NM Technical Area (TA) boundary
- Manzano Base boundary
- Kirtland Air Force Base (KAFB) boundary

NOTES:

1. Groundwater elevations for the Regional Aquifer and the Fractured Bedrock System are shown for monitoring wells located near Sandia National Laboratories, New Mexico (SNL/NM) facilities. The wells with no available recent groundwater elevation have no value plotted.
2. Monitoring wells with anomalous groundwater elevations in the Regional Aquifer or Fractured Bedrock System are shown with an NC (not contoured) label next to the value. Table 2 states the rationale.
3. Groundwater elevations are rounded to the nearest foot. Water levels were measured at Department of Energy/National Nuclear Security Administration owned monitoring wells between 1 October and 7 November, 2025. Groundwater elevations and measurement dates are listed in Table 2. Monitoring wells and wells owned by other government entities were measured during February to October 2025.
4. Groundwater elevations from production, injection, and extraction wells are not used.
5. Groundwater elevations for monitoring wells screened in the Perched Groundwater System are not plotted. A potentiometric surface figure for Department of Energy National Nuclear Security Administration-owned Perched Groundwater System wells is presented in Chapter 5.
6. Potentiometric surface contours for the Regional Aquifer are primarily shown using two intervals: below 5000 ft amsl the contour intervals are 40 and 60 feet; above 5000 ft amsl the contour interval is 100 feet.
7. Most of the monitoring wells located near the KAFB Bulk Fuels Facility and at KAFB Site 58 are not plotted.
8. Decommissioned (plugged and abandoned) monitoring wells are not shown.
9. Faults are derived from multiple sources. The major faults (Coyote, Hubbell Spring, Manzano, Sandia, and Tijeras) were identified from GRAM and Lettis (December 1995). The West Sandia Fault is described in Van Hart (June 2003). Numerous faults located in the mountainous terrain east of the Coyote Fault and the Tijeras Fault are not shown. The dashed faults located near wells KAFB-2007 and OBS-MW1 are inferred from historical groundwater elevations.
10. West of the Sandia Fault, the Regional Aquifer is present within the unconsolidated Santa Fe Group sediments. Groundwater within and east of the Tijeras Fault Zone (bounded by the Sandia and Tijeras Faults) is primarily present in the Paleozoic and Precambrian bedrock.
11. The West Sandia Fault does not affect the alluvial-fan sediments at the water table.

Sandia National Laboratories, New Mexico
Environmental Geographic Information System

Plate 1
Potentiometric Surface for the Regional Aquifer and the Fractured Bedrock System at Sandia National Laboratories, New Mexico and Kirtland Air Force Base for Calendar Year 2025

Transverse Mercator Projection
New Mexico State Plane Coordinate System, Central Zone
1983 North American Horizontal Datum
1988 North American Vertical Datum

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Sandia National Laboratories

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Data Packages
(Provided on Compact Disc Only)

1 **Groundwater Monitoring Program Data Packages, Calendar Year 2025**

2 **Technical Area-V Groundwater Area of Concern Data Packages, Calendar Year 2025**

3 **Burn Site Groundwater Area of Concern Data Packages, Calendar Year 2025**

4 **Tijeras Arroyo Groundwater Area of Concern Data Packages, Calendar Year 2025**

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