

2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN REVISION 1

**Fort Wingate Depot Activity
McKinley County, New Mexico**

August 2022

Contract No. W912PP-15-D-0001
Task Order No. W912PP19F0001

Prepared for:



**US Army Corps
of Engineers®**

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FINAL APPROVAL LETTER PLACEHOLDER

Upon approval by the New Mexico Environment Department – Hazardous Waste Bureau of this 2023 Interim Northern Area Groundwater Monitoring Plan, a copy of the signed approval letter will be placed here.

DOCUMENT CERTIFICATION

2023 Interim Northern Area Groundwater Monitoring Plan, Revision 1 Fort Wingate Depot Activity, McKinley County, NM

40 CFR 270.11

August 2022

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Mr. George H. Cushman IV
Base Realignment and Closure Division (BRAC), Environmental Coordinator
Fort Wingate Depot Activity, BRAC Operations Branch
DCS G-9, Environmental Division

PREFACE

This 2023 Interim Northern Area Groundwater Monitoring Plan proposes the activities for periodic groundwater monitoring at Fort Wingate Depot Activity (FWDA), New Mexico. This plan is a revision to the previous 2022 Groundwater Monitoring Plan and addresses groundwater monitoring in the Northern Area of the installation. The primary data quality objective is to monitor existing groundwater contaminant plumes. This plan presents field sampling methods, a revised monitoring schedule, laboratory analytical methods, and quality control procedures and fulfills requirements of the performance work statement effective December 19, 2018, under contract number W912PP-15-D-0001.

This Interim Northern Area Groundwater Monitoring Plan was prepared by Eco & Associates, Inc., in August 2022. Mr. George H Cushman IV served as the FWDA Department of Defense Base Realignment and Closure Environmental Coordinator, Mr. Alan Soicher served as the U.S. Army Corps of Engineers Program Manager, and Mr. Saqib Khan served as the U.S. Army Corps of Engineers Project Manager.



Mohammad Estiri
Program Director

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Groundwater Monitoring Plan, Revision 1**

**Fort Wingate Depot Activity
McKinley County, New Mexico**

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ABBREVIATIONS & ACRONYMS

BEC	= Base Environmental Coordinator
BIA	= Bureau of Indian Affairs
BIA-NRO	= Bureau of Indian Affairs – Navajo Regional Office
BRACD	= U.S. Army Base Realignment and Closure Division
COR	= Contracting Officer's Representative
Dol-BIA	= Department of the Interior – Bureau of Indian Affairs
EPA 6	= U.S. Environmental Protection Agency Region 6
FWDA	= Fort Wingate Depot Activity
FWDA BEC	= Fort Wingate Depot Activity Base Realignment and Closure Environmental Coordinator
NM	= New Mexico
NMED HWB	= New Mexico Environment Department, Hazardous Waste Bureau
NN	= Navajo Nation
OH	= Ohio
POZ	= Pueblo of Zuni
USACE	= U.S. Army Corps of Engineers

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LIST OF ABBREVIATIONS AND ACRONYMS

1	°	degree (measurement of an angle)
2	°F	degrees Fahrenheit
3	µg/L	microgram per liter
4	ADR	automated data review
5	amsl	above mean sea level
6	AOC	area of concern
7	Army	U.S. Department of the Army
8	bgs	below ground surface
9	BIA	Bureau of Indian Affairs
10	BRAC	Base Realignment and Closure
11	CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
12		of 1980
13	CFR	Code of Federal Regulations
14	COPC	contaminant of potential concern
15	COR	Contracting Officer's Representative
16	CSM	conceptual site model
17	DL	detection limit
18	DOD	U.S. Department of Defense
19	DOE	U.S. Department of Energy
20	DOI	U.S. Department of the Interior
21	DQE	data quality evaluation
22	DQO	data quality objective
23	DRO	diesel range organics
24	DTW	depth to water
25	Eco	Eco & Associates, Inc.
26	EDMS	Electronic Data Management System
27	ELAP	Environmental Laboratory Accreditation Program
28	EMAX	EMAX Laboratories, Inc.
29	EPA	U.S. Environmental Protection Agency
30	FTR	Functional Test Range
31	FWDA	Fort Wingate Depot Activity
32	GMP	Groundwater Monitoring Program
33	GWMP	Groundwater Monitoring Plan
34	gpm	gallons per minute
35	GRO	gasoline range organics
36	HWB	Hazardous Waste Bureau
37	HWMU	hazardous waste management unit
38	IDW	investigation-derived waste
39	LOD	limit of detection
40	LOQ	limit of quantitation
41	lpm	liters per minute
42	MCL	maximum contaminant level
43	mg/L	milligram per liter
44	MI	multi-incremental

1	mph	miles per hour
2	MS	matrix spike
3	MSD	matrix spike duplicate
4	NAD 83	North American Datum of 1983
5	NMAC	New Mexico Administrative Code
6	NMED	New Mexico Environment Department
7	NM WQCC	New Mexico Water Quality Control Commission
8	ORP	oxidation reduction potential
9	OSE	Office of the State Engineer
10	PAH	polycyclic aromatic hydrocarbon
11	PARCCS	precision, accuracy, representativeness, completeness, comparability, and
12		sensitivity
13	Pb	lead
14	PCB	polychlorinated biphenyl
15	pH	scale used to measure the concentration of hydrogen atoms (acidity) of a sample
16	PMR	Groundwater Periodic Monitoring Report
17	QA	quality assurance
18	QC	quality control
19	QSM	Quality Systems Manual
20	RCRA	Resource Conservation and Recovery Act
21	RDX	hexahydro-1,3,5-trinitro-1,3,5-triazine
22	RFI	Resource Conservation and Recovery Act Facility Investigation
23	RSL	regional screening level
24	SIM	Selective Ion Monitoring
25	SSL	soil screening level
26	SVOC	semivolatile organic compound
27	SWMU	solid waste management unit
28	TAL	target analyte list
29	TNT	2,4,6-trinitrotoluene
30	TPH	total petroleum hydrocarbons
31	USACE	U.S. Army Corps of Engineers
32	USGS	U.S. Geological Survey
33	UST	underground storage tank
34	VOC	volatile organic compound
35	ZIST	zone isolation sampling technology

EXECUTIVE SUMMARY

Fort Wingate Depot Activity (FWDA) currently occupies approximately 24 square miles (15,277 acres) of land in western New Mexico in McKinley County. FWDA is located approximately 7 miles east of Gallup and 130 miles west of Albuquerque. The main entrance to FWDA is on U.S. Highway 66, west from Exit 33 off Interstate 40. FWDA includes 732 earth-covered igloos located throughout the installation, a Workshop Area, and various mission-support service structures located in the Administration Area.

Historical activities at FWDA that may have contributed to soil and groundwater contamination include munitions storage, maintenance, and disposal; the use and storage of petroleum fuels; and equipment maintenance (TPMC, 2008). As part of the planned property transfer to the U.S. Department of the Interior, FWDA has been divided into parcels, areas of concern (AOCs), and solid waste management units (SWMUs), as specified by the Resource Conservation and Recovery Act (RCRA) permit number NM 6213820974 originally issued in 2005 (New Mexico Environment Department [NMED], 2005) and revised in 2015 (NMED, 2015a).

This Interim Northern Area Groundwater Monitoring Plan (GWMP) for FWDA describes the proposed groundwater monitoring of active alluvial and bedrock wells to be sampled as part of the Environmental Restoration Program at FWDA. This document has been prepared for submission to the NMED Hazardous Waste Bureau (HWB), as required by the RCRA permit.

The objectives for performing interim groundwater monitoring include:

- Compliance with the RCRA permit groundwater cleanup levels,
- Monitor groundwater flow and water quality parameters that affect contaminant fate and transport,
- Monitor groundwater for the presence of contaminants of potential concern (COPCs) from known contaminant releases, and
- Monitor the migration and changes to groundwater contaminant plumes.

The groundwater monitoring program is designed to evaluate each COPC from the point of release to the existing groundwater contaminant plume boundary based on known or suspected releases to groundwater. Depth to groundwater is measured quarterly, and groundwater samples are collected on a semiannual monitoring frequency determined by seasonal variations in water levels and the current regulatory-approved monitoring program.

Low-flow purging and sampling is the preferred sampling method at FWDA. Other non-traditional sampling techniques for RCRA compliant groundwater monitoring (i.e., borehole purging) will be submitted to NMED for review prior to deployment if necessary.

Groundwater samples will be analyzed for one or more of the following COPCs:

- Explosives by U.S. Environmental Protection Agency (EPA) Method 8330B
- Herbicides by EPA Method 8151A

- Major anions by EPA Method 9056
- Perchlorate by EPA Method 6860
- Total and dissolved metals including mercury by EPA Method 6020A/7470A
- Polychlorinated biphenyls (PCBs) by EPA Method 8082A
- Pesticides by EPA Method 8081B
- Volatile organic compounds (VOCs) by EPA Method 8260D
- Semi-volatile organic compounds (SVOCs) by EPA Method 8270D
- 1,4-Dioxane by EPA Method 8270-Selective Ion Monitoring (SIM)
- Total petroleum hydrocarbons (TPH) as gasoline range and diesel range organics (GRO and DRO) by EPA Method 8015C

This monitoring plan evaluates the COPCs in the Northern Area of FWDA. The known and suspected points of release to groundwater are as follows:

- Leaching Beds (Solid Waste Management Unit [SWMU] 1, Parcel 21) had releases of 2,4,6-trinitrotoluene (TNT) due to historical munitions activities.
- Building 528 Complex (SWMU 27, Parcel 22) had releases of nitrate, explosives, metals, and perchlorate due to historical munitions activities and propellant use.
- Building 6 Gas Station (SWMU 45, Parcel 11) had releases of GRO, DRO, VOCs, SVOCs, and lead (Pb) due to fueling and mechanical operations.
- Building 45 (SWMU 50, Parcel 11) had releases of GRO, DRO, VOCs, and Pb due to historical leaks from former underground storage tank (UST) 7.
- Fire Training Ground (SWMU 7, Parcel 21) had suspected releases of DRO due to historical firefighting operations. The Army has no knowledge of the firefighting chemicals used at the facility as part of the installation activities.

Groundwater elevations will be measured quarterly, and groundwater sampling will be conducted on a semiannual basis. Under this GWMP, groundwater elevations will be measured in 102 monitoring wells and 10 piezometers in January and July, followed by the groundwater sampling events in April and October for the 102 monitoring wells. Semiannual groundwater sampling will be performed from the designated monitoring wells to track plume migration and general range in COPC concentrations.

Results of each semiannual monitoring event will be submitted in a semiannual report prepared in accordance with NMED guidance titled *General Reporting Requirements for Routine Groundwater Monitoring at RCRA Sites* (NMED, 2003).

The Interim Measures Groundwater Periodic Monitoring Report (PMR) will include tabulated field and laboratory analytical data. Analytical data will be screened against the FWDA cleanup levels established in the RCRA permit and U.S. EPA regional screening levels (RSLs) for chemicals where cleanup levels are not established. A discussion of the results, any sampling deviations, and proposed recommendations for future monitoring will be included in the PMR.

1.0 INTRODUCTION

This Interim Northern Area Groundwater Monitoring Plan (GWMP) provides guidance for the groundwater monitoring activities to be conducted during calendar year 2023 at Fort Wingate Depot Activity (FWDA) in McKinley County, New Mexico. This GWMP has been prepared in accordance with the performance work statement under contract number W912PP-15-D-0001.

This 2023 Interim Northern Area GWMP was prepared in accordance with the Resource Conservation and Recovery Act (RCRA) permit NM 6213820974, first issued in December 2005 (New Mexico Environment Department [NMED], 2005) and revised in February 2015 (NMED, 2015a). This 2023 Interim Northern Area GWMP is a revision to the previous GWMP, Final 2022 Interim Northern Area Groundwater Monitoring Plan, Revision 2, dated March 8, 2021 (Eco, 2021b), which was approved with modifications on August 3, 2021 (NMED, 2021). This 2023 Interim Northern Area GWMP provides guidance for the groundwater monitoring activities to be conducted in the Northern Area of the installation. The Open Burn/Open Detonation (OB/OD) areas in the southern portion of the installation within Parcel 3 are not included in this version of the Northern Area GWMP and will be covered under a separate Southern Area GWMP.

1.1 PROJECT ORGANIZATION AND MANAGEMENT

The groundwater monitoring program (GMP) at FWDA is managed by the U.S. Army Corps of Engineers (USACE) for the U.S. Department of the Army (Army), Base Realignment and Closure (BRAC) Division. Stakeholders for the GMP are as follows:

- Army, BRAC Division
- NMED-Hazardous Waste Bureau (NMED-HWB)
- Navajo Nation
- Pueblo of Zuni

USACE manages the program and subcontracts periodic groundwater monitoring with coordination and review by stakeholders on behalf of the Army. Eco & Associates, Inc. (Eco) is the USACE subcontractor responsible for planning and implementing the 2023 GWMP. Project plans and reports are submitted to stakeholders for review. NMED-HWB is the regulating authority for FWDA and has final approval of primary project documents.

1.2 REGULATORY BACKGROUND

Environmental restoration activities at FWDA began in 1989 under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 guidelines, as part of the Installation Restoration Program. Since that time, NMED has become the lead environmental regulatory agency for FWDA.

In 2002, NMED determined that the remediation pathway would be solely through a RCRA permit for post-closure care of the current OB/OD area with a RCRA corrective action module attached to address requirements for other solid waste management units (SWMUs) and areas of concern

(AOCs). The RCRA permit became effective December 1, 2005 (NMED, 2005). Since the original permit issuance, the RCRA permit has been revised through NMED-issued modifications in 2011, 2014, and 2015. NMED-HWB identified one hazardous waste management unit (HWMU) within the current OB/OD area (Parcel 3) and a total of 93 SWMUs and AOCs in the RCRA permit. Environmental activities at FWDA will be conducted in accordance with the requirements of the 2015 revision of the RCRA permit, which includes the original permit and all subsequent modifications (NMED, 2015a). The Army developed a groundwater monitoring program as required by Section V.A (Interim Plan) of the RCRA permit. Groundwater monitoring, sampling, and reporting activities are conducted in compliance with the RCRA permit, applicable RCRA permit attachments, and the most recently approved version of the GWMP. NMED approved the initial GWMP in March 2008, with subsequent annual revisions to the plan.

Attachment 7 of the RCRA permit (NMED, 2015a) provides a hierarchy for the selection of cleanup level criteria applicable to the FWDA. Groundwater analytical results are evaluated and compared to the Project Screening Value Flow Chart (Figure 1-1). The following documents and regulations are used to determine whether the concentration of a particular chemical constituent exceeds the RCRA permit cleanup level (NMED, 2015a), as summarized below:

1. New Mexico Water Quality Control Commission (NM WQCC) standards for the analytes listed in the New Mexico Administrative Code (NMAC) 20.6.2.7.VV having the values listed in NMAC 20.6.2.4103.A and B.
2. U.S. Environmental Protection Agency (EPA) drinking water maximum contaminant levels (MCLs) provided under 40 Code of Federal Regulations (CFR) 141 and 40 CFR 143.
3. If both a NM WQCC standard and an EPA MCL have been established for a contaminant of potential concern (COPC), the lowest value of 1. and 2. above will be selected.
4. If no NM WQCC standard or EPA MCL has been established for a carcinogenic hazardous constituent, values will be selected from the most recent version of the EPA regional screening levels (RSLs) for tap water, adjusted to a target excess cancer risk level of 1×10^{-5} .
5. If no NM WQCC standard or EPA MCL has been established for a non-carcinogenic hazardous constituent, values will be selected from the most recent version of the EPA RSLs for tap water with a target hazard index of 1.0.
6. No current NM WQCC standard is published for perchlorate. An EPA RSL standard of 14 micrograms per liter ($\mu\text{g/L}$) was published in November 2021, so this standard will be followed in accordance with Attachment 7 of the RCRA permit for FWDA (NMED, 2015a).
7. Although not in the RCRA permit, NMED has set a screening level of $16.7 \mu\text{g/L}$ for total petroleum hydrocarbons (TPH) as diesel range organics (DRO) and a screening level of $10.1 \mu\text{g/L}$ for TPH as gasoline range organics (GRO) in *Risk Assessment Guidance for Investigations and Remediation Volume 1* (NMED, 2019a).

For some analytes, screening values are selected for a compound with RSLs listed for both carcinogenic risks and non-carcinogenic hazards. In accordance with the RCRA permit, the RSLs for carcinogens are adjusted to a cancer risk of 1×10^{-5} and the lower of the adjusted carcinogenic and the non-carcinogenic RSLs will be selected.

Reporting requirements in this GWMP are in accordance with the RCRA permit and consistent with *General Reporting Requirements for Routine Groundwater Monitoring at RCRA Sites* (NMED, 2003).

1.3 PURPOSE

The objectives of performing interim groundwater monitoring at FWDA are as follows:

- Monitor compliance with the RCRA permit groundwater cleanup levels, as identified in Section 7.1 of Attachment 7 to the RCRA permit (NMED, 2015a).
- Monitor groundwater flow and field water quality parameters that affect contaminant fate and transport.
- Monitor groundwater for the presence of COPCs from known contaminant releases.
- Monitor the migration and changes to known groundwater contaminant plumes.

Groundwater monitoring data also provide information to support site characterization and future corrective measure evaluations.

1.4 DATA QUALITY OBJECTIVES

Data quality objectives (DQOs) are qualitative and quantitative statements that clarify the project objectives, specify the most appropriate types of data for project decisions, determine appropriate conditions from which to collect data, and specify tolerable limits on decision errors. DQOs are developed to satisfy specific project objectives in accordance with applicable USACE specifications and NMED and EPA guidance. The DQOs are based on the end uses of data determined through a seven-step process as described in *Guidance on Systematic Planning Using the Data Quality Objectives Process, EPA QA/G-4* (EPA, 2006).

The DQOs defined for this GWMP along with the conceptual site model (CSM) information are used to determine the decision logic and provide an effective sampling design. The DQOs assist in identifying the required type, quality, and quantity of data needed for interim groundwater monitoring to meet investigation goals and regulatory requirements. The project DQOs are defined according to the logic presented sequentially in the sections below.

Step 1 - State the Problem

Groundwater contaminants need to be monitored in accordance with the RCRA permit and in support of site characterization and evaluation of potential corrective measures.

Step 2 - Identify the Goals of the Study

Project data will be used to monitor the nature and extent of COPCs in groundwater and evaluate temporal trends. Data will also support site characterization and corrective measures.

The questions the project is intended to answer are the following:

- Are site-related COPCs present in FWDA groundwater at concentrations exceeding cleanup levels?
- What is the lateral and vertical extent of site-related COPCs, at concentrations exceeding cleanup levels in FWDA groundwater?
- What are the sources of these groundwater contaminants?
- How are contaminants in the groundwater migrating?
- How are COPC concentrations in groundwater changing over time?

Step 3 - Identify Information Inputs

Inputs considered during development of this GWMP include the following:

- The RCRA facility investigations (RFIs) for each FWDA parcel are used to determine the points of contaminant release or suspected points of contaminant release to groundwater.
- Lithologic information from previous boreholes and water elevations from existing groundwater monitoring wells provide data on hydrogeologic structural controls and groundwater flow.
- Historical analytical data from the previous investigations provide information on site conditions.
- Laboratory analytical results, field parameters, and groundwater elevations from ongoing interim monitoring are used to determine current site and groundwater contaminant conditions.
- Project cleanup levels are used to evaluate groundwater analytical data.

This information is used to determine the decision rules in Step 5.

Step 4 - Define Boundaries of the Study

Spatial. The FWDA boundary (Figure 1-2) is the study boundary for facility-wide monitoring. The current well network will be used to monitor groundwater contamination under the interim monitoring program. This GWMP covers the Northern Area of FWDA. The Southern Area of FWDA, which is inaccessible at this time due to ordinance disposal activities, will be reported under a separate GWMP. Final characterization as defined by RFIs for each parcel will be used to determine whether the monitoring network is sufficient to assess the extent of groundwater contamination.

Temporal. The temporal boundaries of the investigation are long-term monitoring of groundwater contamination and groundwater flow patterns observable over 6-month intervals. Based on previous groundwater monitoring data from 2008 to 2022, the groundwater elevations are relatively stable and are not subject to wide seasonal fluctuations. Potential temporal contaminant concentration trends will be assessed by semiannual groundwater sample collection and quarterly measurement of groundwater elevations.

Step 5 - Develop the Analytical Approach

This step integrates the output from previous steps of the DQO process to design the interim measures groundwater monitoring program. Groundwater laboratory analytical results will be compared to the FWDA cleanup levels to monitor the extent and migration of COPCs. Monitoring results will be submitted in Periodic Groundwater Monitoring Reports (PMRs). Corrective actions will be proposed if groundwater contaminant plumes migrate outside of the FWDA boundaries.

Step 6 - Specify Limits on Decision Errors

Analytical data quality will be compared to Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.3 (QSM; U.S. Department of Defense [DoD]/U.S. Department of Energy [DOE], 2019) specifications for precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS). The analytical methods will provide the lowest available analytical reporting limits using standard USACE approved methods that allow the data to be screened against the FWDA cleanup levels.

Site visits, refining the CSM, and evaluating current and historical analytical data will minimize erroneous conclusions and maintain estimates within acceptable levels. Field measurements will be compared to quality criteria established by field standard operating procedures and by evaluation against previous measurements for representativeness.

Step 7 - Develop the Sampling Plan for Obtaining the Data

Groundwater monitoring will evaluate each groundwater contaminant from the point of release to the existing groundwater plume boundary along the property boundary. Each impacted groundwater zone (Northern Area alluvial and Northern Area bedrock) will be assessed for the presence of COPCs. The groundwater elevation data will be used to evaluate potential downgradient migration of contaminants in groundwater. Historical analytical data will be used when designating monitoring wells for release areas.

Background wells are outside the influence of the release/plume. Some monitoring points will be monitored for multiple COPCs when they are designated for multiple points of release, or when a single point of release is associated with multiple COPCs. Section 5 details point of release assessments for COPCs.

Groundwater monitoring will continue semiannually to be consistent with the monitoring frequency performed since 2008, and with previously approved GWMPs. Groundwater elevations

will be measured quarterly to maintain a similar consistency. This will provide consistency of the data when being compared and evaluated with historical data.

The most recently published versions of the NMED-requested analytical methods with FWDA project-specific reporting limits will be used to provide quantitative analytical data to meet the FWDA RCRA permit requirements. Laboratories performing sample analyses will follow the current version of the U.S. Department of Defense (DOD) Environmental Field Sampling Handbook, Revision 1.0 (DoD, 2013) and the current version of the QSM (DOD/DOE, 2019). All laboratory analysis will be performed by independent analytical laboratories with DOD Environmental Laboratory Accreditation Program (ELAP) accreditation. In addition to DOD ELAP accreditation, the laboratory must hold the current accreditation for all appropriate fields of testing in New Mexico, which is accomplished by the laboratory holding a current national ELAP accreditation for appropriate fields of testing. The independent analytical laboratory must have documentation of current accreditation/certification prior to sample acceptance. The analytical results will be validated in accordance with the current version of the QSM.

Optimization of Sampling Plan

Recommendations for optimization will be made through interim measures. Recommendations may include:

- Installation or abandonment of monitoring locations;
- Changes to field sampling or analytical methods; *and*
- Changes to monitoring frequency and location.

1.5 DOCUMENT ORGANIZATION

This Interim Northern Area GWMP is organized as follows:

Section 2 — presents the available site history and general description of FWDA and summarizes previous groundwater investigations.

Section 3 — presents the CSM with information about current site conditions and environmental setting of FWDA.

Section 4 — describes the methods and procedures for groundwater gauging, groundwater sample collection, decontamination, quality assurance (QA), and investigation-derived waste (IDW) characterization and disposal.

Section 5 — presents the groundwater monitoring program, and discusses data validation, data management, and reporting.

Section 6 — provides the projected monitoring schedule for calendar year 2023.

Section 7 — presents sampling changes from the previous Interim Northern Area GWMP.

Section 8 — presents a list of the works cited in this Interim Northern Area GWMP.

2.0 SITE HISTORY AND BACKGROUND

2.1 GENERAL FACILITY DESCRIPTION

FWDA currently occupies approximately 24 square miles (15,277 acres) of land in western New Mexico in McKinley County. FWDA is located approximately 7 miles east of Gallup and about 130 miles west of Albuquerque (Figure 1-2). The main entrance to FWDA is on U.S. Highway 66, west from Exit 33 off Interstate 40. FWDA is surrounded by tribal and federally-owned lands, including national forests, Zuni tribal lands, and Navajo tribal lands. North and west of FWDA are Navajo trust and Native American lands, to the east are lands administered by the Bureau of Indian Affairs (BIA), and to the south and southeast is the undeveloped Cibola National Forest.

Originally founded in 1860 as a cavalry post, the Army established Fort Wingate as a munition's storage depot in 1918. FWDA has had several missions from 1918 until 1993, including ordnance storage, testing, and demilitarization, as well as missile defense testing. The installation was closed in 1993 under the Defense Authorization Amendments and BRAC Act of 1988. In 2002, the Army reassigned many functions at FWDA to the BRAC Division, including property disposal, caretaker duties, managing caretaker staff, and performing environmental-restoration and compliance activities.

Approximately half of FWDA is currently leased to the Missile Defense Agency and is used for operations related to missile testing. Missile testing activities occur in northeastern and central portions of FWDA, in Parcel 16 and Parcel 19. The remaining FWDA operations are focused on assessing and remediating contamination before property transfer/reuse.

Historical activities at FWDA that may have contributed to soil and groundwater contamination include munitions storage, maintenance, and disposal; the use and storage of petroleum fuels; and equipment maintenance (TPMC, 2008). Efforts to remediate affected areas have concentrated on removing exploded and unexploded ordnance, in addition to characterizing soil across the installation and conducting semiannual groundwater monitoring. As part of the planned property transfer to the U.S. Department of the Interior (DOI), the installation has been divided into reuse parcels (Figure 2-1) with each site being addressed on a parcel-by-parcel basis, as specified by the RCRA permit (NMED, 2015a). Currently, Parcel 1, Parcel 4B, Parcel 5A, Parcel 5B, Parcel 8, Parcel 10A, Parcel 10B, Parcel 12, Parcel 14, Parcel 15, Parcel 17, Parcel 18, and Parcel 25 have been transferred to the DOI; these parcels are located near the northern, eastern, and southern boundaries of FWDA.

Facilities at FWDA include 732 earth-covered igloos located throughout the installation, two former OB/OD areas (Closed OB/OD area and Current OB/OD area), a Workshop Area, and various mission-support service structures located in the Administration Area. The installation can be divided into several areas based upon location and historical land use. Figure 2-2 shows the locations of various buildings and SWMUs and AOCs throughout the Northern Area of the installation. Major land use areas include the following:

The Administration Area is located in the northern portion of FWDA. This area consists of former office facilities, housing, equipment maintenance facilities, warehouse buildings, and

utility support facilities. Munitions storage and shipping, fuel storage and dispensary, and mechanical maintenance activities were performed in this area.

The Workshop Area is located south of the Administration Area. It is a former industrial area that contained ammunition maintenance and renovation facilities, the TNT washout facility, and the TNT Leaching Beds Area (Solid Waste Management Unit [SWMU] 1). The buildings and other structures were demolished in 2010.

The Magazine (Igloo) Area is located in the central portion of FWDA. This area includes 10 igloo blocks (Igloo A through Igloo H, Igloo J, and Igloo K) that contain 732 earth-covered igloos and 241 earthen revetments previously used for munitions storage.

The OB/OD Area is located in the southwest and western portions of FWDA and separated into two sub-areas based on period of operation.

The closed OB/OD area includes inactive OB/OD SWMUs that were used to treat military munitions and explosive-contaminated waste from 1948 to 1955. The Closed OB/OD area includes the Old Burning Ground and Demolition Landfill Area and the Old Demolition Area (Program Management Company [PMC], 1999).

The current OB/OD area consists of an inactive OB/OD HWMU where burning and detonation operations were performed after 1955 until FWDA closure in 1993 (PMC, 1999). The Current OB/OD area contains the active OB/OD corrective action management unit identified in the recent RCRA permit updates.

Protection and Buffer Areas are located adjacent to the eastern, northern, and western boundaries of the installation. These areas consist of buffer zones surrounding the former magazine and demolition areas.

2.2 PREVIOUS INVESTIGATIONS

From 1980 through issuance of the RCRA permit in December 2005 (and revised February 2015), various environmental investigations were conducted by the Army and other parties (including EPA and DOI) under CERCLA and RCRA guidance (BRAC, 2010). These investigations have been conducted with multiple phases to characterize groundwater over time.

The 2005 RCRA permit identified one HWMU within the OB/OD area (Parcel 3) and 93 SWMUs and AOCs. As of January 2021, 153 groundwater monitoring wells and 10 piezometers have been installed to characterize the nature and extent of contamination across FWDA (Northern Area and OB/OD Area). As of September 2021, there are 102 active monitoring wells and 10 piezometers in the Northern Area and 27 active monitoring wells in the OB/OD area. FWDA well locations are presented in Figure 2-3 and site wells associated with the Northern Area are presented in Figure 2-4.

Groundwater investigation and characterization efforts have primarily focused on five areas:

1. TNT Leaching Beds Area (SWMU 1 located in Parcel 21);

2. Administration Area (multiple SWMUs and AOCs located in Parcel 6, Parcel 7, and Parcel 11);
3. Eastern Landfill (SWMU 13 located in Parcel 18);
4. Building 542 and Building 600 (SWMU 11 and SWMU 4 located in Parcel 6); *and*
5. OB/OD area (located in Parcel 3).

Well construction information for the Northern Area wells is included in Table 2-1. A summary of historical detections from 1992 through 2021 are included as Appendix B on disk, and laboratory data for groundwater analytical results from 2018 through 2019 are included as tables in Appendix B.

Results from previous investigations are briefly discussed for each report in the following subsections, and COPCs by site and point of release are summarized in Table 2-2. A summary of groundwater detections and project screening value exceedances (historical through 2019) per analyte group are provided in Table 2-3. The monitoring wells in Table 2-3 are organized by point of release from Table 2-2. The information in Table 2-2 and Table 2-3 has been used to develop the CSM in Section 3.0 and the sampling plan in Section 5.0. The monitoring network by site and point of release is provided in Table 2-4.

2.2.1 ENVIRONMENTAL SURVEY OF FWDA – 1981

In 1981, an environmental survey of FWDA (Environmental Science and Engineering, Inc., 1981) was conducted to determine the potential presence and extent of contamination caused by activities related to munitions storage, munitions recycling, and treatment.

Most of the wells completed during the 1981 environmental survey have historically lacked sufficient water for interim semiannual sampling as directed by the RCRA permit. The “FW” monitoring wells have either been abandoned or removed except for wells FW24, FW31, and FW35.

2.2.2 GROUNDWATER INVESTIGATIONS AT BUILDING 6 UST AREA – 1993–1995

In January 1993, six underground storage tanks (USTs) were removed from Building 6 within the Administration Area (USACE, 1995a) (Parcel 11). During UST removal, a fuel release was suspected, presumably from holes or cracks in the bottoms of several of the tanks or associated piping. USACE Albuquerque District conducted a site investigation for the Building 6 USTs, including soil borings and monitoring wells. Groundwater analytical data from south and west of the UST removal area indicated benzene concentrations exceeding the FWDA cleanup level of 5 µg/L, with maximum results of 110 µg/L. The monitoring wells were resampled in 1995, and results indicated that the benzene concentrations had decreased to below the FWDA cleanup level, with a maximum detection of 4.4 µg/L (USACE, 1995b).

2.2.3 REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT AND RCRA CORRECTIVE ACTION PROGRAM DOCUMENT – 1997

Environmental investigation activities across FWDA were implemented as part of FWDA closure in the fall of 1992 to determine the environmental impact (if any) from previously identified SWMUs and AOCs, and to identify areas requiring environmental restoration before property transfer to DOI. Findings were generated in a 1997 Remedial Investigation/Feasibility Study and RCRA Corrective Action Program Document (ERM Program Management Company, 1997). Explosives and nitrate were detected in monitoring wells completed near the TNT Leaching Beds. Nitrate, pesticides, and metals were detected in the samples collected from SMW01 near the FWDA Sewage Treatment Plant. Explosives, nitrate/nitrite, and metals were detected in groundwater samples collected from FW38.

2.2.4 MINIMUM SITE ASSESSMENT REPORT – 1998

A Minimum Site Assessment Report (USACE, 1998) summarized the actions taken by USACE Albuquerque District to identify the horizontal and vertical extent of soil contamination and to determine whether groundwater was impacted by potential fuel releases at the UST site adjacent to Building 45. Analytical data from this assessment indicated that hydrocarbon contamination in the soil was limited to a small area. The area affected was restricted to a single soil boring at less than 40 feet bgs, with a single detection of benzene at a concentration below the FWDA cleanup level from well MW01.

2.2.5 RCRA INTERIM STATUS CLOSURE PLAN – OB/OD AREA PHASE 1B REPORT – 1999

Environmental characterization efforts to support closing the OB/OD area (Parcel 3) were conducted during 1996, 1997, 1998, and 1999. These efforts consisted of a seismic profile survey, monitoring well installation and sampling, groundwater elevation measurements, a well network survey, geologic mapping, surface water sampling, and sediment sampling (PMC, 1999).

2.2.6 OB/OD GROUNDWATER MONITORING – 1999-2005

Several quarterly sampling events have been completed in the OB/OD area (Parcel 3) since the RCRA Interim Status Closure Plan Phase 1B Report was issued (PMC, 1999). Quarterly groundwater monitoring events were conducted during 2000 (PMC, 2001a), 2001 (PMC, 2002a), and 2002 (PMC, 2003); an additional sampling event was completed in August 2005 (TPMC, 2005). These events were documented in quarterly letter reports and an annual inclusive report for each year.

2.2.7 RCRA FACILITY INVESTIGATION REPORT OF THE TNT LEACHING BEDS AREA – 2001

From 1998 to 2001, additional groundwater investigations were completed in the TNT Leaching Beds Area (Parcel 21, SWMU 1) and the Administration Area (Parcel 11, various SWMUs and AOCs) (PMC, 2001b). During these investigations, groundwater was found to be impacted by explosives, metals, nitrate, and nitrite. In addition, groundwater was found to be impacted by volatile organic compounds (VOCs) within the Administration Area.

2.2.8 PHASE 1 RCRA FACILITY INVESTIGATION REPORT FOR BUILDINGS 600 AND 542 – 2002

In 2001, soil and groundwater were investigated to determine whether previous detections of explosives in TMW11 were the result of activities at Building 600 (Parcel 6, SWMU 4) and Building 542 (Parcel 6, SWMU 11) in the Workshop Area (PMC, 2002b). For Building 600 (SWMU 4), all soil and sediment sample result concentrations were below applicable cleanup criteria/project screening levels. For Building 542 (SWMU 11) two polycyclic aromatic hydrocarbons (PAHs) were detected in surface soils at levels exceeding NMED soil screening levels (SSLs).

One explosives constituent, hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX), was detected at concentrations close to the laboratory reporting limit during five of six sampling events conducted between October 1998 and January 2000.

Six monitoring wells (TMW14A through TMW19) were completed near Building 600 and Building 542 (SWMU 4 and SWMU 11) to determine the source of the contamination at TMW11. Fluoride was detected at concentrations exceeding cleanup criteria/project screening levels. In addition, one VOC, explosives, perchlorate, nitrate, nitrite, and a variety of metals were also detected.

2.2.9 GROUNDWATER INVESTIGATION REPORT OF THE EASTERN LANDFILL – 2005

The Eastern Landfill (Parcel 18, SWMU 13) is located approximately one-half mile east of the Administration Area and is reported to have been used to dispose of municipal waste and construction debris from the Administration Area. During the remedial investigation phase, the Eastern Landfill was located using a geophysical survey, and soil sampling and a soil gas survey were conducted. The soil analytical results indicated that lead, mercury, and barium were present at levels slightly above background levels. Pesticides, VOCs, and SVOCs were not detected.

During a groundwater investigation conducted in 2005, concentrations of explosives, metals, pesticides, VOCs, SVOCs, nitrate, and nitrite were detected, with RDX, pesticides, and dissolved metals detected above cleanup criteria/project screening levels.

The Eastern Landfill waste material was subsequently excavated and removed in 2013, followed by backfilling with soil from an on-site borrow source. Upon review and approval of confirmation results, a final round of sampling of the four groundwater monitoring wells (EMW01 through EMW04) was performed. The groundwater laboratory results were submitted to NMED with a request for permission to abandon the wells. NMED granted the well abandonment request and the wells were abandoned in 2014.

2.2.10 ADMINISTRATION AND TNT LEACHING BEDS AREAS SUPPLEMENTAL GROUNDWATER CHARACTERIZATION REPORT – 2006

The purpose of the investigation described in this report (TPMC, 2006) was to gather additional information during 2002 and 2003 to address comments and discussions by members of the FWDA

BRAC Cleanup Team regarding information presented in the Final RFI Report for the TNT Leaching Beds Area (Parcel 21, SWMU 1) (PMC, 2001b).

Nine monitoring wells (TMW21 through TMW29) were installed in the alluvial aquifer of Parcel 11. A groundwater sampling event of all wells in the Northern Area of FWDA was conducted during October 2002 and April 2003. The results of this event were similar to those in the Final RFI Report for the TNT Leaching Beds Area and provided further information about the leading edges of impacted groundwater.

2.2.11 PARCEL 11 RFI REPORT – 2011

In November and December of 2009, the U.S. Geological Survey (USGS) conducted an RFI within Parcel 11, which contains most of the buildings and structures that made up the Administration Area. The RCRA permit lists 10 SWMUs and 9 AOCs in Parcel 11. The Army elected to include the SWMU 40 buildings and structures (which overlap the Parcel 7 and Parcel 11 boundaries) in this RFI.

The RFI and sampling results for each SWMU and AOC are summarized below:

Fenced Storage Yard (SWMU 3). Based on the results of the soil investigation, PAHs, diesel range organics (DRO), and metals exceeded cleanup criteria/project screening levels in surface soils at SWMU 3. The Army attributed metals detections to naturally occurring conditions (USGS, 2011b).

Building 5, Regimental Garage (SWMU 5). Based on the results of the soil investigation, the Army concluded that no further action was needed for soil and sediment in storm sewers at SWMU 5 (USGS, 2011b). Analysis of laboratory data from groundwater samples indicated that nitrate and metals were present above cleanup criteria/project screening levels.

Building 11, Former Locomotive Shop (SWMU 6). Based on the soil sampling results, metals and DRO exceeded cleanup criteria/project screening levels. The Army concluded that the metals are naturally occurring. The depth of DRO contamination was not defined. Analysis of laboratory data from groundwater samples indicated that nitrate and metals were present above cleanup criteria/project screening levels.

Sewage Treatment Plant (SWMU 10). Based on the results of this soil sampling effort, the Army concluded that no further action is needed to address soil contamination at SWMU 10 (USGS, 2011b).

Building 8, Paint Shop or Carpenter Shop and Building 7, Paint Shop and Paint Storage Warehouse (SWMU 23). Based on the results of the soil investigation, the Army concluded that PAHs, DRO, arsenic, and lead exceeded cleanup criteria/project screening levels in surface soils (USGS, 2011b).

Building 15, Garage and Storage Building (SWMU 24). Based on the results of the soil investigation, the Army concluded that DRO, PAHs, and metals exceeded cleanup criteria/project screening levels in shallow soils (USGS, 2011b). The PCB Aroclor 1262 was detected in two surface samples, and the PCB Aroclor 1268 was detected in two surface samples, however, there

were no corresponding cleanup criteria/project screening levels. The pesticide dieldrin was detected above the NMED Soil Screening Level (SSL) in one surface sample.

Building 9, Machine Shop and Signal Shop (SWMU 37). Based on the soil sampling results, the Army concluded that PAHs and metals exceeded cleanup criteria/project screening levels in drain sediments.

South Administration Area (SWMU 40). Based on soil sampling results, the Army concluded the following:

- SVOC and PCB concentrations exceed NMED SSLs in surface soils around Building 12 and Building 13.
- DRO, SVOC, and metal concentrations exceed NMED SSLs in surface soils around Building 14.
- Metal concentrations exceed NMED SSLs in surface soils around Building 29.
- SVOC concentrations exceed NMED SSLs in surface soils around Building 36, Building T-33, and Building T-50.
- SVOC, DRO, and metal concentrations exceed NMED SSL in surface soils around AOC 87 (structure 57) and the former Coal Tar Storage Tanks (structures 58-60).

Building 6, Gas Station (SWMU 45) and Structure 35, Former UST 7 (SWMU 50).

Based on RFI soil sampling results, VOCs and DRO exceeded cleanup criteria/project screening levels in subsurface soils. GRO was detected in six of 21 samples from the area around Building 6; however, there were no cleanup criteria/project screening levels for GRO. In the groundwater sample collected from well TMW33, VOCs, SVOCs, and metals exceeded cleanup criteria/project screening levels (USGS, 2011b).

Building 34, Fire Station (AOC 48). Based on the sampling results, the PCB Aroclor 1254 was detected. The Army concluded that the detected PCB was from an exceedingly small quantity of sediment at the bottom of a utility access hole and poses minimal risk to human health and the environment. Based on this conclusion and the lack of PCB detections at the outfall, the Army recommended no further action for AOC 48 (USGS, 2011b).

Structures 38 and 39, Loading Docks (AOC 49). Based on the sampling results, the Army recommended no further action for AOC 49 (USGS, 2011b).

Buildings 79 and 80, Storage Vaults (AOC 52). Based on the sampling results, there were no significant exceedances of NMED SSLs (USGS, 2011b).

Electrical Transformers (AOC 75). Based on the sampling results, the PCB Aroclor 1260 was detected in the sediment samples from the drains collected from Vault A, Vault B, and Vault C, at concentrations exceeding the cleanup criteria/project screening level. The Army concluded that the extent of Aroclor 1260 contamination is confined to the small quantity of sediment in the floor drains. The floor drains are not connected to the storm sewer or sanitary sewer; therefore, the migration potential is considered minimal. The Army proposed no additional investigation at AOC 75 in Parcel 11 (USGS, 2011b).

2.2.12 PARCEL 22 RFI REPORT – 2011

The RCRA permit lists three SWMUs in Parcel 22. Additionally, the Parcel 22 RFI Report (USGS, 2011c) contains information for four AOCs located in Parcel 22. Investigation activities for these locations are described below.

Building 535 and Building 536, Inspectors Workshop and Ammunition Renovation Depot (SWMU 12). Building 535 and Building 536, along with their foundations, were demolished in 2010. Soil and sediment samples were collected and analyzed for VOCs, SVOCs, explosives, PCBs, and metals. The soil samples analyzed did not have COPC concentrations exceeding NMED SSLs. The sediment samples from the sanitary sewer had concentrations of SVOCs and PCBs exceeding NMED SSLs. The Army recommended no further action for SWMU 12 (USGS, 2011c).

Building 528 Complex (SWMU 27, AOC 121, AOC 122, AOC 125, and AOC 126). All buildings, along with their foundations, were demolished in 2010. Soil and sediment samples were collected. Based on the soil sampling results, benzo(a)pyrene, arsenic, and lead concentrations exceeded NMED SSLs in shallow soil (USGS, 2011c).

In November and December 2009, to investigate possible releases of perchlorate originating from TPL operations within SWMU 27, six groundwater monitoring wells were installed.

Based on the groundwater laboratory results from the newly installed wells, concentrations of nitrate, perchlorate, and bis(2-ethylhexyl)phthalate exceeded project screening values in the alluvium. However, due to the widespread use of bis(2-ethylhexyl)phthalate as a plasticizer, this compound is regarded as a common laboratory and sampling contaminant. Groundwater samples collected from the newly installed bedrock wells had nitrate (in TMW30 and TMW31D) and perchlorate (in TMW30, TMW31D, and TMW32) concentrations exceeding the project screening values (USGS, 2011c).

Disassembly Plant and TPL QA Test Area (SWMU 70). All buildings along with their foundations were demolished in 2010. Soil samples were collected near the concrete blast shield (Building 520) and near the former fuel tank location (near Building 519) to evaluate potential releases. Based on the sampling results, the concentrations did not exceed applicable cleanup criteria/project screening levels, and the Army recommended no further action at SWMU 70 (USGS, 2011c).

Igloo Block D (AOC 30). All igloos remain and were sampled using the MI sampling approach. In addition, MI sampling was performed from the Open Storage Areas and the TPL Burn Sites. Based on the sampling results, mercury, lead, arsenic, and 2,4-dinitrotoluene concentrations exceeded cleanup criteria/project screening levels in surface soils. The Army recommended no further action at the Open Storage Area and TPL Burn Sites (USGS, 2011c).

Standard Magazine Buildings 301, 302, and 312, and Building 316, Field Lunch Room (AOC 69). All buildings remain. Thirty surface soil samples were collected along the railroad tracks located south of Building 301, Building 302, and Building 312. Twenty-four surface soil samples were collected around the exteriors of Building 301, Building 302, Building 312, and Building 316. Based on the sampling results, DRO and PAHs exceeded NMED SSLs in soil to a

depth of 3 feet bgs. Arsenic concentrations in four soil samples exceeded cleanup criteria/project screening levels; however, the Army concluded that arsenic values in this range are not indicative of contamination but rather are naturally occurring concentrations for the area (USGS, 2011c).

Electrical Transformers (AOC 75). FWDA records show 65 transformers in 29 locations throughout FWDA. All electrical transformers were removed in 2010. Two soil samples were collected under the former location of transformers at Building 528. No PCBs were detected. Based on the results of the soil investigation, the Army recommends no further action at AOC 75 in Parcel 22 (USGS, 2011c).

Former Buildings or Structures and Disposal Areas (AOC 88). MI surface samples were collected over one-quarter-acre exposure units at AOC 88A and one-quarter-acre exposure units at AOC 88B. Also, discrete soil samples were collected from the MI areas in AOC 88A and AOC 88B. Based on the laboratory results, COPC concentrations did not exceed cleanup criteria/project screening levels, and the Army recommended no further action at AOC 88 (USGS, 2011c).

Building 536, Inspectors Workshop and Ammunition Renovation Depot (SWMU 12). Soil and sediment samples were collected for this investigation. Based on the laboratory results, explosives, PAHs, and one PCB (Aroclor 1254) were detected at concentrations exceeding the NMED SSLs from sediment samples in the Building 536 septic system (USGS, 2011c).

2.2.13 MONITORING WELL INSTALLATION AND ABANDONMENT REPORT – 2011-2012

During the fall and spring of 2011/2012, USACE installed 18 monitoring wells and abandoned 10 monitoring/temporary wells. The purpose of the well installation was to assess contaminant plumes and gather data to define background concentrations for metals in groundwater.

These new monitoring wells were added to the facility-wide groundwater monitoring program.

2.2.14 FINAL RCRA FACILITY INVESTIGATION REPORT PARCEL 10B – 2012

This report summarizes investigations at AOC 44 and SWMU 26 that were done in accordance with the approved RFI Work Plan for Parcel 10B that was approved by NMED on September 9, 2010.

At AOC 44 and SWMU 26, it was concluded that there were no COPC detections greater than the screening limits, although there were some issues with the data quality. The Army recommended no further action for SVOCs, pesticides, or antimony (USACE, 2012a). The Army also recommended that arsenic values be reassessed when background levels are developed.

2.2.15 APPROVED FINAL RCRA FACILITY INVESTIGATION PARCEL 21 – 2012

This RFI Report for Parcel 21 summarized the investigation and restoration activities conducted in accordance with the RFI Work Plan approved by NMED with modifications. The RFI addressed five SWMUs and nine AOCs. The report did not address AOC 71 or AOC 87 because NMED approved no further action for these locations. Additionally, AOC 60 was not addressed in the RFI because sample collection will be completed with scheduled demolition at a future date.

2.2.16 FINAL RCRA FACILITY INVESTIGATION PARCEL 6 – 2012

This RFI Report for Parcel 6 summarized the investigation and restoration activities conducted in accordance with the RFI Work Plan for Parcel 6 approved by NMED with modifications. The RFI addressed four SWMUs and 10 AOCs.

Building 600 (SWMU 4). The Army proposed no further action and removal from the RCRA permit (USACE, 2012b).

Building 537 (SWMU 8). The Army recommended no additional characterization. The Final Permittee-Initiated Interim Measures Work Plan, Parcel 6, Revision 1.0 was submitted to address NMED SSL exceedances for PAHs and PCBs, and indicated no depth was defined for soil contamination (USACE, 2012b; Amec Foster Wheeler Environment & Infrastructure, Inc. [Amec Foster Wheeler], 2015).

Building 541 and Building 542 (SWMU 11). The Army proposed no further action and removal from the RCRA permit (USACE, 2012b).

Western Landfill (SWMU 20). The Army recommended no further characterization due to lack of contamination exceeding NMED SSLs (USACE, 2012b). The Final Permittee-Initiated Interim Measures Work Plan, Parcel 6, Revision 1.0 was submitted to NMED to address debris removal (Amec Foster Wheeler, 2015).

Igloo Block B (AOC 28). Lead was detected exceeding NMED SSLs in surface soils directly adjacent to drainpipes and was determined to result from the historical application of lead-based paint to drainpipes (USACE, 2012b). The Final Permittee-Initiated Interim Measures Work Plan, Parcel 6, Revision 1.0 was submitted to NMED to address surface soil contamination (Amec Foster Wheeler, 2015).

Building 507 (AOC 61) and Building 516 (AOC 42). The Army proposed no further action and removal from the RCRA permit (USACE, 2012b).

Electrical Transformers (AOC 75). The Army proposed no further action and removal from the RCRA permit (USACE, 2012b).

Feature 2 (AOC 79). NMED provided approval to the Class 3 Permit Modification for AOC 79, as stated in a letter dated February 25, 2015 (NMED, 2015b). In the letter NMED granted corrective action without controls status to SWMU 26, and AOC 79.

Feature 9 (AOC 80), Feature 11 (AOC 81), Feature 12 (AOC 84), Feature 18 (AOC 78 and AOC 82), and Feature 22 (AOC 83). The Army proposed no further action and removal from the RCRA permit (USACE, 2012b). In the Disapproval to the Final RCRA Facility Investigation Report Parcel 6, dated October 28, 2016, NMED states that the groundwater contamination at each SWMU and AOC is not addressed in 12 of the 14 sections related to specific sites, and the subject of potential groundwater contamination must be discussed for each site (NMED, 2018b). NMED further states that if the Army can demonstrate the SWMU or AOC did not contribute to groundwater contamination, the Army may request a Corrective Action Complete with Control

status, with the controls being long-term monitoring of contaminated groundwater and restrictions on use of the groundwater.

2.2.17 FINAL RCRA FACILITY INVESTIGATION PARCEL 23 – 2012

At Parcel 23, soil investigations were conducted at SWMU 21 (Central Landfill) and AOC 73 (former buildings and structures along Road C3). Results of the RFI at SWMU 21 indicated that PAHs and arsenic were detected above cleanup criteria/project screening levels in subsurface soils. The Army proposed additional borings near SB08 to delineate SVOC concentrations in the soil at SWMU 21. Results of the RFI at AOC 73 did not indicate contamination was present (USGS, 2015a). The Army concluded the arsenic concentrations detected at SWMU 21 and AOC 73 were within a naturally occurring range.

2.2.18 FINAL RELEASE ASSESSMENT REPORT PARCEL 4A REVISION 2.0 – 2012

The Army conducted surface soil investigations for Igloo Block C and electrical transformers as part of the Parcel 4A release assessment. Results indicate metals and PCBs are present in surface soils at concentrations exceeding screening criteria.

2.2.19 FINAL PHASE 2 SOIL BACKGROUND REPORT – 2013

The purpose of this report was to conduct an additional background study to the 2010 initial background study conducted at FWDA. Samples were collected in 2012. This background study focused on arsenic and antimony because the Army believes that many arsenic exceedances across FWDA are due to naturally occurring concentrations.

2.2.20 FINAL RELEASE ASSESSMENT REPORT PARCEL 24 – 2014

The Final Release Assessment Report for Parcel 24 (USACE, 2014a) included AOC 18 and former World War I-era magazines. The results of the release assessment indicated that metals were present at AOC 18 at concentrations exceeding cleanup criteria/project screening levels.

2.2.21 FINAL REVISION 1 RCRA FACILITY INVESTIGATION REPORT PARCEL 16 – 2014

This RFI Report for Parcel 16 summarizes soil sampling activities at SWMU 16, AOC 41, and World War I-era magazines. These results are summarized below:

Functional Test Range (FTR) 2 and FTR 3 (SWMU 16). Based on the sampling results, no exceedances were found, and the Army recommended no further action (Toeroek and pH7, 2014).

X and Z Open Storage Areas (SWMU 16). The explosive TNT was detected above the screening level in one quadrant of open storage pad Z135. The Army recommended more sampling for explosives and a clearance/removal action if necessary (Toeroek and pH7, 2014).

Area K Igloo Block (AOC 41). Metals were detected at concentrations exceeding the SSLs in surface soils. The Army recommended pipe and soil removal and more sampling at drain outfalls but no further action for igloo drainages and revetment areas (Toeroek and pH7, 2014).

World War I Magazine Sites. No exceedances were found for explosives at any of the World War I sample locations, and the Army recommended no further action (Toeroek and pH7, 2014).

**2.2.22 APPROVED FINAL INVESTIGATION AND REMEDIATION COMPLETION REPORT –
PARCEL 18, SWMU 13 – 2014**

The report summarized the results of the investigation and remediation conducted at SWMU 13, the Eastern Landfill (AMEC Environment & Infrastructure, Inc., 2014). The data indicated that no additional corrective action was required for the Eastern Landfill. The report was approved in February 2015 in letter HWB-FWDA-14-009 giving permission to request change of status to corrective action complete without controls.

2.2.23 FINAL REVISION 2.0 RCRA FACILITY INVESTIGATION REPORT PARCEL 22 – 2015

The RCRA permit lists three SWMUs in Parcel 22. This report summarized the investigation activities at SWMU 12, SWMU 70, SWMU 27, AOC 30, AOC 69, AOC 75, and AOC 88.

Building 536 (Inspectors Workshop and Ammunition Renovation Depot) (SWMU 12). Based on the results of the investigation, SVOCs and PCBs were detected exceeding NMED SSLs in sediment samples from the Building 536 septic system (USGS, 2015b).

Building 528 Complex (SWMU 27, AOC 121, AOC 122, AOC 125, and AOC 126). Based on the laboratory results, benzo(a)pyrene, arsenic, and lead concentrations exceeded NMED SSLs in shallow soil (USGS, 2015b).

Buildings 517 to 521 and Structure 547, Disassembly Plant and TPL QA Test Area (SWMU 70). Based on the sampling results, the Army concluded that no constituents were detected above the cleanup criteria/project screening levels (USGS, 2015b).

Igloo Block D (AOC 30). Based on the laboratory results, metals concentrations exceeded NMED SSLs in surface soils (USGS, 2015b). The explosive 2,4-dinitrotoluene exceeded the cleanup criteria/project screening level in one sample (USGS, 2015b).

Standard Magazine Building 301, Building 302, and Building 312, and Building 316, Field Lunch Room (AOC 69). Based on the sampling results, DRO and PAHs exceeded NMED SSLs in soil to 3 feet bgs. Arsenic concentrations in four soil samples exceeded cleanup criteria/project screening levels; however, the Army concluded that arsenic values in this range are not indicative of contamination but rather are naturally occurring concentrations for the area (USGS, 2015b).

Electrical Transformers in Parcel 22 (AOC 75). Based on the laboratory results, soil samples collected in AOC 75 did not have detectable concentrations of PCBs and the Army recommended no further action (USGS, 2015b).

Former Buildings or Structures and Disposal Areas (AOC 88). Based on the sampling results, no soil samples collected in AOC 88 had detectable concentrations that exceeded cleanup criteria/project screening levels (USGS, 2015b).

2.2.24 GROUNDWATER SUPPLEMENTAL RCRA FACILITY INVESTIGATION – 2019 AND 2020

This RFI investigation included the installation of 32 additional groundwater monitoring wells in 2019 and three additional groundwater monitoring wells in 2020 to further assess contaminant plumes and subsurface conditions in the alluvial and bedrock aquifers.

**2.3 SEMIANNUAL RCRA GROUNDWATER MONITORING REPORTS AND UPDATED
GROUNDWATER MONITORING PLANS – ONGOING**

Since 2008, groundwater sampling has been conducted semiannually (April and October), and each event documented in semiannual PMRs. The Interim Facility-wide GWMP is updated annually and will be submitted as two separate documents per NMED request dated October 22, 2018 (NMED, 2018a), in which NMED stated “two separate Plans (one for the OB/OD Area and the other for the Northern Area) are required in the upcoming Interim Facility-wide GWMP.”

A database of the groundwater analytical results generated from the monitoring program for 1992 through 2020 is available upon request and provided on disk. Appendix B contains a summary of laboratory data from 2012 – 2020. Based on previous groundwater sampling results, the following COPCs were detected in groundwater samples at concentrations that exceeded cleanup levels in one or more samples:

- Anions (chloride, fluoride, nitrate, nitrite, sulfate, and phosphate).
- Perchlorate.
- Explosives (1,3-dinitrobenzene; 2-nitrotoluene; 3-nitrotoluene; nitrobenzene; nitroglycerin; and RDX).
- VOCs (1,2-dichloroethane; carbon disulfide; 1,4-dioxane; benzene; toluene; and vinyl chloride).
- SVOCs (1,2-diphenylhydrazine; 2,4-dinitrophenol; 2,6-dinitrotoluene; benzo(a)-pyrene; bis(2-ethylhexyl)phthalate; p-chloroaniline; n-nitrosodimethylamine; n-nitroso-di-n-propylamine; and phenol).
- TPH-DRO and TPH-GRO.
- Metals (aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, potassium, selenium, silica, silver, sodium, thallium, tin, vanadium, and zinc).

Cyanide, pesticides, and dioxins/furans were detected in samples from multiple locations but detected concentrations did not exceed project screening values. Herbicides and PCBs were not detected in any groundwater samples.

An alluvial aquifer groundwater nitrate plume is present in the Northern Area. Exceedances of nitrate also occur in select wells in the Northern Area bedrock groundwater zone. Nitrite is also detected at concentrations exceeding cleanup levels, but these detections are primarily associated with the existing nitrate plume.

Perchlorate has detections above the cleanup levels in numerous alluvial and bedrock monitoring wells located near and north of the TNT Leaching Beds area (SWMU 1) and the Building 528 Complex (SWMU 27).

The explosive, RDX was detected above the cleanup level in several alluvial wells located north of the TNT Leaching Beds Area (SWMU 1). The explosives 1,3-dinitrobenzene; 2-nitrotoluene; and 3-nitrotoluene had cleanup level exceedances in several alluvial monitoring wells north of the TNT Leaching Beds area. Nitrobenzene had exceedances in several alluvial wells located north of the TNT Leaching Beds (SWMU 1) and one bedrock well downgradient of the TNT Leaching Beds (SWMU 1) and the Building 528 Complex (SWMU 27).

The VOC 1,2-dichloroethane has cleanup level exceedances in alluvial wells located in the Administration Area and downgradient of Building 11, former Locomotive Shop (SWMU 6), and Building 6, Gas Station (SWMU 45). Toluene had two cleanup level exceedances and benzene has had one exceedance. Toluene and benzene may have been associated with previous fuel releases and are now detected at concentrations less than cleanup levels. Other VOCs including carbon disulfide, 1,4-dioxane, and vinyl chloride, each had only one cleanup level exceedance. The other VOC detections are not persistent and/or widespread enough to indicate a significant groundwater impact and/or represent a groundwater contaminant plume that can be mapped.

In a letter dated August 15, 2019, NMED requested the inclusion of 1,4-dioxane to the analytical program for two consecutive monitoring events, due to chlorinated solvents having been detected in groundwater samples at the facility. In the letter, NMED stated that the Permittee must analyze groundwater samples collected from all monitoring wells where chlorinated solvents have been detected within the past 10 years for 1,4-dioxane using EPA Method 8270 selective ion monitoring (SIM). All wells were sampled for 1,4 dioxane in 2020 or 2021 and any well that had a detection would continue to be sampled for 1,4 dioxane.

The SVOC 2,4-dinitrophenol had cleanup level exceedances from samples collected at the Workshop Area. SVOCs 1,2-diphenylhydrazine; 2,6-dinitrotoluene; benzo(a)pyrene; p-chloroaniline; n-nitrosodimethylamine; and n-nitroso-di-n-propylamine each had one cleanup level exceedance at one or two locations. The SVOC phenol had one cleanup level exceedance in three scattered monitoring wells and up to three exceedances in bedrock monitoring wells in the Workshop Area. Bis(2-ethylhexyl)phthalate had cleanup level exceedances at multiple locations. However, bis(2-ethylhexyl)phthalate is a common sampling and laboratory contaminant and should not be considered as a groundwater contaminant unless there is a plausible source.

Metals cleanup level exceedances are numerous and widespread; however, background groundwater concentrations have not been accepted for FWDA, thus it cannot be demonstrated whether the detected concentrations are a result of natural conditions or anthropogenic sources of contamination.

3.0 CONCEPTUAL SITE MODEL

This section summarizes the site conditions at FWDA, including historical land use, natural and manmade features, ecological setting, fate and transport information, and detailed surface and subsurface characterization. Site conditions are summarized from site-specific documents including RFI work plans, RFI reports, release assessment reports prepared for the individual parcels as specified in the RCRA permit, periodic groundwater monitoring reports, and groundwater monitoring plans.

3.1 CLIMATE

Northwestern New Mexico is characterized as a semiarid, continental climate with most precipitation occurring from June through September as localized, heavy, and brief monsoon storms. The climate for the FWDA area varies with elevation but is generally mild during the summer with temperatures ranging between 65 degrees Fahrenheit (°F) and 95°F, and cold during the winter with average daily temperatures ranging between 30°F and 35°F. The warmest month is July, with an average maximum temperature of 89°F, while the coldest month is December, with an average minimum temperature of 11°F. Daily temperature variations can be considerable during the summer, with an average temperature difference of approximately 35°F.

Mean annual rainfall for the area ranges between 10 and 16 inches, while the recorded average annual precipitation for FWDA is approximately 11 inches. The wettest month is August, with an average rainfall of approximately 2 inches. Most precipitation occurs as rain or hail during violent summer thunderstorms. The remainder of annual precipitation occurs as winter snowfall. Accumulated snow at higher elevations produces a slow release of snowmelt in the spring, which provides higher infiltration compared to the intense monsoon thunderstorms (Anderson et al., 2003).

The area has generally sunny weather with average relative humidity varying from 15% to 50% during dry seasons and the wet summer monsoon season, respectively. During spring, the area experiences extraordinarily strong winds originating from the west and southwest with an average wind speed of approximately 12 miles per hour (mph) and maximum gust speeds approaching 65 mph. These strong winds, high temperatures, and low relative humidity contribute to high evapotranspiration rates at FWDA.

3.2 SURFACE CONDITIONS

3.2.1 TOPOGRAPHY

FWDA can be divided into three topographic areas: 1) the rugged north-south trending Nutria Monocline (commonly referred to as the Hogback) along the western and the southwestern boundaries, 2) the hill slopes of the Zuni Mountain Range in the southern portion, and 3) the alluvial plains marked by bedrock mesas in the northern portion. The elevation of FWDA ranges from approximately 8,200 feet above mean sea level (amsl) in the south to 6,660 feet amsl in the north.

3.2.2 *VEGETATION*

Ground cover ranges from exposed bedrock and lithic soils to montane forest. Forest is present at higher elevations where more precipitation occurs. Mixed ponderosa pine and fir forest are present at elevations above 7,500 feet amsl. Piñon and juniper vegetation is present at elevations from 6,800 feet to 7,500 feet. Shrubs and grasses are present at elevations below 6,800 feet. Some areas with steep slopes and rocky ground lack vegetation.

3.2.3 *SOIL*

FWDA soil types range from a mixture of sand, silt, and clay. Alluvium most commonly found in arroyos consists of permeable sand and sandy loam clay mixtures that contain varying amounts of silt, gravel, and rock fragments, and low-permeability sandy clay. Soil types at FWDA are primarily alluvial materials except for the Hogback along the western border and the northern hill slopes of the Zuni Mountain Range in the southern portion. The alluvial materials do not typically have distinct soil horizons because they are relatively shallow and undeveloped. Organic soils have developed in some streambank deposits along major arroyos. The parent bedrock is either at or near the surface within more than a quarter of the installation.

High winds and water cause extensive soil erosion, especially where vegetation cover is absent. The more permeable, sandy soil typically found in arroyos accounts for the majority of local surface water infiltration. The thickness of the soil varies across FWDA. In the OB/OD area and at the eastern and southern perimeter of the Northern Area, the soil thickness is a thin veneer with parent bedrock at or near the surface. In most of the Northern Area, flat alluvial plains are dominant with thick soil overlying deeper, steeply dipping bedrock. In the Administration Area, alluvium can be up to 70 feet thick and is even thicker near the Rio Puerco.

3.3 *GEOLOGY*

3.3.1 *REGIONAL GEOLOGY TECTONIC SETTING AND SITE-SPECIFIC STRUCTURE*

FWDA is in an erosional basin within the Navajo section of the Colorado Plateau Physiographic Province and lies on the northwest apex of the Zuni Uplift. This basin is regionally bounded by the Gallup sag to the west, the Acoma sag and McCarty's syncline to the east, and the Chaco Slope to the north. The Zuni Uplift is an elongated north-northwest trending structural uplift that is primarily a result of vertical upward displacement followed by deformation resulting from horizontal compressive stress associated with the Laramide orogeny of Cretaceous age. The uplift has exposed tilted Mesozoic sedimentary strata within the southwestern portion of the installation, a majority of which are Triassic mudstones and sandstones.

The dominant topographic structural feature located on the southwest margin of the Zuni Uplift is the Nutria Monocline or Hogback. This steep structural feature is a monoclinal belt with dips ranging from 30 degrees (°) to 45° near FWDA. Dips commonly exceed 60° in the southern extension of the monocline, south of FWDA. The northern segment of the Nutria Monocline is exposed in the western portion of FWDA, where westerly dipping Mesozoic strata are exposed to

form a long, sharp-crested, north-to-south trending ridge. In areas east of the Hogback, the bedrock generally dips to the northwest.

3.3.2 STRATIGRAPHY

The geologic units exposed at FWDA were largely deposited in the Mesozoic Era and have been significantly modified by more recent erosion and redeposition. The lithified stratigraphic units are Triassic to Cretaceous in age with uplift and deformation occurring in the Cretaceous during the Laramide orogeny series of mountain-building events in western North America (McCraw et al., 2009). Quaternary alluvial and colluvial deposits unconformably overlie the Mesozoic bedrock in the lower elevation and northern portions of FWDA (Anderson et al., 2003).

In the northern portion of FWDA, the surface is covered by remnants of either the Triassic Chinle Group or Quaternary alluvial deposits. Alluvial deposits are present in the northern lowland areas between bedrock remnants. Alluvial deposits are also present along intermittent streams draining the Hogback and Zuni Mountains, which flow downgradient through the northern portion of FWDA before joining the South Fork of the Rio Puerco. Alluvium deposits range in grain size from clay to gravel, typical of braided stream deposits with texture and internal structure characterized by lateral and vertical heterogeneity (Malcolm Pirnie, Inc. 2000). Data from installed wells indicate alluvial deposits are thickest near major drainages such as the South Fork of the Rio Puerco where alluvial deposits can be up to 150 feet thick. Just east of FWDA, alluvial deposits are approximately 75 feet thick, and in the Administration Area deposit thickness varies from 30 feet to 70 feet.

The majority of FWDA is underlain by the Triassic-age Chinle Group composed of non-marine, red-bed siliciclastics. The Chinle Group consist of Shinarump, Bluewater Creek, Petrified Forest, and Owl Rock Formations (Anderson et al., 2003). The Petrified Forest Formation underlies much of the installation and is subdivided into three members: Blue Mesa, Sonsela, and Painted Desert. All three members of the Petrified Forest Formation crop out in various locations across the installation. The Blue Mesa, Sonsela, and Painted Desert lithologies are green-gray smectitic mudstone, light gray to yellowish-brown cross-bedded sandstone, and reddish-brown and grayish-red smectitic mudstone (McCraw et al., 2009). In the eastern portion of FWDA, the older Bluewater Creek and Shinarump Formations crop out intermittently between layers of Quaternary alluvium (McCraw et al., 2009).

The Chinle Group is underlain by the older Permian age: San Andres Limestone and Glorieta Sandstone. The San Andres Limestone consists of fossiliferous limestone that intertongues the Glorieta Sandstone (Anderson et al., 2003). These two formations comprise the San Andres-Glorieta aquifer, which is the principal source of drinking water in the area (Malcolm Pirnie, Inc., 2000; Cooper and John, 1968).

3.4 SURFACE WATER

3.4.1 REGIONAL SURFACE WATER

Streams in the area are ephemeral and fed by rain and snowmelt from the Zuni Mountains and the Nutria Monocline. All drainages in the FWDA area are intermittent with flow only occurring during and after heavy rainfall events (summer) or snowmelt (spring). These streams transport sediment to low-lying areas in the northern portion of FWDA, creating thick and extensive alluvial deposits among remnants of Triassic strata of the Petrified Forest Formation. Main drainages at FWDA generally follow the dominant topography by flowing from south to north and discharging into the South Fork of the Rio Puerco in the northern portion of the installation. Surface drainage is relatively shallow near headwaters due to the nature of brief and heavy precipitation. Downward erosion intensifies as water moves downstream, resulting in a well-developed, steep-walled system of arroyos in the Quaternary alluvium.

3.4.2 SITE-SPECIFIC SURFACE WATER

The various drainage system surface water pathways (arroyos) throughout the installation are shown in Figure 2-3.

The three major drainage systems at FWDA can be identified as: 1) eastern drainage system in Parcels 5 through 12 and Parcels 21 through 23; 2) western drainage system in Parcels 14 through 20; and 3) southwestern corner drainage system in Parcels 2 and 3. These drainage systems are divided by either bedrock ridges or bedrock remnants. In the northwest portion of the installation, two artificial channels are present that were constructed during the 1940s to divert water away from Igloo Block A, Igloo Block B, and the Administration Area (DOE, 1990).

The eastern drainage system consists of washes that run in northwestern and northeastern directions off the slopes of the Zuni Mountains. Alluvial fans form in basins at the front of the slope as well as between bedrock remnants. In the northeast section of the installation, the drainage flows around bedrock remnants before joining the South Fork of the Rio Puerco.

The western drainage system (except for the southwest corner) consists primarily of two main drainages covering the western portion of FWDA. Tributaries of the western drainage system pass the demolition area, cross the Hogback, and deposit alluvium along the bedrock remnants (Herndon Solutions Group, 2011). The southwestern corner drainage system flows southwest and joins the Bread Springs Wash on the western side of the Hogback.

3.4.3 HYDROGEOLOGY

Groundwater is present in several rock units underlying FWDA. The Quaternary Quaternary alluvium and the Permian San Andres limestone and Glorieta sandstone are the predominant formations at FWDA capable of yielding more than a few gallons per minute (gpm) of groundwater. The Triassic-age members of the Chinle Group: The Painted Desert mudstone/claystone, the Shinarump conglomerate, and the Sonsela sandstone underlying the shallow alluvial aquifer produce minor amounts of groundwater.

The regional groundwater aquifer near FWDA is present in the Permian San Andres limestone and Glorieta sandstone formations (Cooper and John, 1968; Summers, 1972). The San Andres-Glorieta aquifer was utilized as the drinking water source for FWDA prior to the closure of the installation in 1993. Currently Well 69 (screened in the San Andres-Glorieta aquifer) produces groundwater continuously; and it may be used for non-potable purposes occasionally. The top of the San Andres-Glorieta aquifer is approximately 1,100 feet bgs near the Administration Area. The San Andres-Glorieta aquifer is about 200 feet thick and under artesian pressure. Hydraulic conductivity values range from 0.05 foot per day to 150 feet per day from one location to another (Herndon Solutions Group, 2011). Groundwater flow in the San Andres-Glorieta aquifer is northward beneath FWDA and is separated from the shallow groundwater units by shales and claystones across much of FWDA (Anderson et al., 2003).

Shallow groundwater is present in the unconsolidated alluvium and the Mesozoic-age bedrock overlying the San Andres limestone and Glorieta sandstone formations. The Quaternary alluvial aquifer, which include deposits in the Rio Puerco Valley along the northern edge of the installation is composed of gravel, sand, silt, and clay derived from Triassic- and Jurassic-age strata that border the valley. Along the northern border of the installation, hydraulic communication exists between groundwater and the Rio Puerco during periods of active stream flow. Groundwater flow in the alluvium occur primarily in discontinuous, stream-deposited sand and gravel units. Water yields from the bedrock units: Shinarump and Sonsela members, generally yield 5 to 50 gpm, and water quality is considered fair to poor.

The depth to water (DTW) at FWDA is generally between 10 and 100 feet bgs. Groundwater is present at shallow depths in the alluvium along drainages, including the Rio Puerco. DTW ranged from 13 to 77 feet bgs in the Northern Area alluvial aquifer monitoring wells during September/November 2019 (Table 3-1). Groundwater in the Northern Area bedrock aquifer monitoring wells have a DTW range from 17 to 64 feet bgs in all but one well (BGMW08) during September/November 2019 (Eco, 2021).

Minimal precipitation infiltrates through unsaturated soil to recharge FWDA groundwater. The regional aquifer and shallow groundwater units are primarily recharged through precipitation and snowmelt runoff infiltration through exposed bedrock uplands and faults south of FWDA. The Quaternary alluvial aquifer is primarily recharged from surface runoff, although some deposits in the southern part of the installation are recharged by springs from underlying bedrock aquifers. Recharge of groundwater within the alluvium occurs mainly during the wet seasons, specifically with the spring snowmelt.

Hydraulic properties differ between the unconsolidated alluvium and bedrock groundwater-bearing units. The Northern Area alluvial and bedrock groundwater elevation contours from the October 2020 quarterly water level measurements event are shown on Figure 3-1 and Figure 3-2. Flow directions are interpreted based on groundwater contours and surface topography for infiltration pathways.

Water quality parameter readings collected at FWDA during interim-measure monitoring provide information on general groundwater conditions. Groundwater conditions depend on the formation

and distance from a recharge source. Typically, groundwater adjacent to recharge sources, such as exposed bedrock uplands or surface water drainage systems, have water with lower salinity and a higher dissolved oxygen (DO) content, indicating variable groundwater conditions. DO and redox potential values indicate a mixture of reducing and aerobic conditions. Reducing conditions indicate DO is less than 1.0 milligram per liter (mg/L) and are attributed to natural conditions present in formations with high organic matter content, such as clays and shales and persistent in bedrock units and in some alluvial units.

3.4.4 NORTHERN AREA ALLUVIAL GROUNDWATER SYSTEM

Groundwater direction in the alluvium flow from a potentiometric high in the east, north, and south toward a potentiometric low west of the Administration Area (Figure 3-1). From the Administration Area, the groundwater flow direction is generally to the west.

A small groundwater mound is present in the Administration Area near monitoring wells MW01, MW02, and MW03. This feature has been previously attributed to a leaking water storage cistern (USGS, 2011a). The cistern is no longer in service, and the groundwater mound was expected to attenuate over time. However, the groundwater mound is still observed in the water-level data for monitoring well MW02 as recent as October 2019. This mound may be attributed to leakage from artesian Well 69, which was installed to replace Well 68.

Well 69 was drilled in July 1970, by Coffey Drilling Co. of Ramah, New Mexico, and installed with telescoping casing that narrows with depth. As reported in the well installation report, a 12.5-inch pilot hole was drilled to a depth of 110 feet bgs using a bentonite-based drilling mud (USGS, 1971). The pilot hole was then reamed to a 20-inch diameter and cased to 100 feet bgs with a 16-inch casing and cemented to prevent caving. A 15.5-inch diameter hole was then drilled to a depth of 1,037 feet bgs. The boring was cased with 12.75-inch diameter casing from 100 to 1,037 feet bgs and cemented in place. An 11.5-inch diameter boring was drilled from 1,037 feet bgs to a total depth of 1,350 feet bgs and cased with solid 8.75-inch diameter casing from 1,037 to 1,100 feet bgs and slotted 8.75-inch diameter casing across the producing interval from 1,100 to 1,350 feet bgs. The welded casing joints are possibly deteriorating causing a leak under artesian pressure into the alluvium. A video survey of Well 69 was performed in June 2019 to provide a visual observation of the interior of the well casing to assess possible deterioration and leaking. The video survey showed thick mineral deposits along the well casing, which made it difficult to assess the condition of the well casing.

There is a widespread aquitard between the alluvial and bedrock groundwater units across much of the Northern Area. Lithologic information from previous investigations shows a mudstone (approximately 20 to 60 feet thick) between the saturated alluvial groundwater zone and the permeable bedrock groundwater units. This information indicates that communication between the alluvial and bedrock groundwater systems is limited to the upland recharge areas present in the southern portions of the Workshop Area and potentially east and south of the Northern Area monitoring well network.

3.4.5 NORTHERN AREA BEDROCK GROUNDWATER SYSTEM

Although groundwater flow direction has not been fully characterized in the bedrock aquifer beneath the Workshop Area, groundwater flow in the shallow bedrock is generally to the north and west in the Workshop Area (Figure 3-2). Anomalously steep horizontal gradients from east to west (between wells TMW38 and TMW40D, and between wells TMW17 and TMW37) allow groundwater to flow through the path of least resistance. Contaminant transport of perchlorate to the north, rather than to the west, indicates a flow pattern of least resistance along this subsurface traverse.

Two or three water-bearing sandstone units within the Painted Desert Member of the Petrified Forest Formation are likely to exist below the Workshop Area. The upper sandstone unit, designated as Bedrock Aquifer 1 (BR1), is evaluated by monitoring wells TMW38, TMW51, TMW52, TMW53, and TMW64. The remaining bedrock monitoring wells are completed in the lower sandstone unit which is separated from the upper by a thick sequence of shale. A third water-bearing sandstone unit is assumed since groundwater from well BGMW08 was measured at 100 feet lower than those of other bedrock wells.

Since January 2013, groundwater elevations in most of the bedrock monitoring wells have been relatively stable. Over this period, most Northern Area bedrock wells DTW has declined only a few feet.

A comprehensive survey was performed in October 2019 for all the Northern Area groundwater network monitoring wells by DePauli Engineering and Surveying LLC using the New Mexico State Plane West, Zone Grid North American Datum of 1983 (NAD 83). The new survey results did not resolve the issue of interpreting bedrock aquifer flow directions. In general, most wells measured 0.7 to 1.1 feet higher with the new survey without changing any flow patterns.

3.5 NATURE AND EXTENT OF GROUNDWATER CONTAMINATION

Groundwater contamination from known sources is detected in groundwater contaminant plumes in the Northern Area in both alluvial and bedrock aquifers. Nitrate, perchlorate, explosives, one VOC, and metals are consistently detected in groundwater samples at concentrations above the cleanup levels. Eight groundwater contaminant plumes have been identified: two nitrate plumes, one in the alluvial aquifer and one in the bedrock aquifer; two perchlorate plumes, one in the alluvial aquifer and one in the bedrock aquifer; an explosives plume in the alluvial aquifer; a DRO plume in the alluvial aquifer; a GRO plume in the alluvial aquifer; and a 1,2-dichloroethane (1,2-DCA) plume in the alluvial aquifer (Eco, 2021). While metals are consistently detected in groundwater samples at concentrations above the cleanup levels, background groundwater concentrations have not been accepted for FWDA and it cannot be demonstrated whether the detected concentrations are a result of natural conditions or anthropogenic sources. A separate contractor has been tasked to investigate the background concentrations for metals. Therefore, the metals concentrations have not been mapped as contaminant plumes. SVOCs, DRO, and GRO are sporadically detected with occasional or historical exceedances of cleanup levels for SVOCs and

DRO (screening levels for GRO were established in February 2019), but the number of exceedances is too limited for these contaminants to be mapped as contaminant plumes.

Figure 3-1 and Figure 3-2 present the alluvial and bedrock groundwater elevations generated from the October 2020 water level measurement event. Plume boundaries defined by isoconcentration contours at the contaminant cleanup level concentration were generated from the October 2020 monitoring event. Northern alluvial contaminant plumes for select contaminant concentrations that can be contoured are provided in Figures 3-3 through 3-10; and Figures 3-11 through 3-13 cover the Northern Area bedrock groundwater contaminant plumes. Analytical results corresponding to the contaminant plumes are presented in Appendix B.

The nitrate plume in the alluvial aquifer appears to originate from the TNT Leaching Beds (SWMU 1) (Figure 3-3). The bedrock nitrate plume is also present near the TNT Leaching Beds (SWMU 1) (Figure 3-11) and likely migrated from the alluvial aquifer. A portion of the bedrock nitrate plume is colocated with the bedrock perchlorate plume (Figure 3-12).

RDX is the primary explosives compound of interest. This compound is consistently detected in groundwater at concentrations above the project screening value in the Workshop Area and eastern Administration Area (Figure 3-4). The widespread detection of RDX allows this compound to serve as an indicator compound for explosives compounds across FWDA. The explosives plume in the alluvial groundwater aquifer appears to originate from the TNT Leaching Beds (SWMU 1) in the Workshop Area and assume a northern trajectory due to the inferred geologic substructure. The explosives plume in bedrock appears to have the same potential source areas as nitrate and metals, which originate near the TNT Leaching Beds (SWMU 1) and Building 528 Complex (SWMU 27) (Figure 3-11).

The highest perchlorate concentrations are detected in groundwater samples from the bedrock aquifer in the Workshop Area (Eco, 2021) (Figure 3-12). The alluvial perchlorate plume is in the same vicinity as the bedrock perchlorate plume. Historical releases of perchlorate-containing materials at the Building 528 Complex (SWMU 27) are believed to have migrated from the bedrock unit to the alluvial aquifer.

One VOC was detected in groundwater samples at concentrations exceeding project screening values. The compound 1,2-DCA was historically used as a gasoline additive and degreasing solvent. The 1,2-DCA plume in the alluvial aquifer (Figure 3-7) is limited to a group of wells near a former fueling facility (SWMU 45, Building 6 Gas Station) and SWMU 50 (Structure 35, UST 7) in the Administration Area (Eco, 2021). The VOC 1,2-DCA was not detected in the bedrock aquifer.

Some SVOCs such as 2,4-dinitrophenol are periodically detected at concentrations above the project screening values and are associated with degradation of explosives compounds. Some SVOCs such as PAHs are associated with petroleum products used in industrial operations and are also periodically detected. SVOCs were released to soil at SWMU 6 (Building 11, Former Locomotive Shop) and SWMU 45 (Building 6 Gas Station) (Figure 3-8 and Figure 3-13). In a letter dated August 15, 2019, NMED requested to include 1,4-dioxane to the analytical program

for two consecutive monitoring events. The first of the two consecutive sampling events was in April 2020, and the second was in October 2020.

Background metals concentrations in groundwater have not been established for FWDA, thus, it cannot clearly be demonstrated whether the detected concentrations are a result of natural conditions or anthropogenic sources. Although the metals concentrations are not contoured, a proposed alluvial monitoring network is presented on Figure 3-6 and a bedrock monitoring network is presented on Figure 3-11.

Petroleum hydrocarbons such as DRO and GRO have been sporadically detected in multiple groundwater samples. DRO was detected above project screening values in three alluvial locations. GRO had two exceedances for project screening levels in alluvial wells. DRO was released to soil at SWMU 6 (Building 11, former Locomotive Shop), SWMU 7 (Fire Training Ground), SWMU 45 (Building 6 Gas Station), and SWMU 50 (Structure 35, UST 7) (Figure 3-9). GRO was released to soil at SWMU 45 (Building 6 Gas Station) and SWMU 50 (Structure 35, UST 7) (Figure 3-10).

Dioxins, furans, herbicides, white phosphorous, pesticides, and PCBs have not been detected above project screening values since interim measure groundwater monitoring began in 2008. Pesticide detections were attributed to surface pesticide applications (Innovar Environmental, Inc., 2016). No points of release to groundwater were identified for dioxins, furans, herbicides, pesticides, white phosphorous, or PCBs, therefore, these compound groups are not considered primary groundwater COPCs.

3.6 FATE AND TRANSPORT OF CONTAMINATION IN GROUNDWATER

Groundwater contamination has been identified in the northern Administration Area and Workshop Area in alluvial and bedrock aquifers. The known and suspected points of release to groundwater are as follows:

- The TNT Leaching Beds (SWMU 1, Parcel 21) and the Building 528 Complex (SWMU 27, Parcel 22) in the Workshop Area had releases of nitrate, explosives, and metals due to historical munitions activities (Sections 2.2.7, 2.2.10, 2.2.12, 2.2.15, 2.2.26, and 2.3).
- The Building 528 Complex (SWMU 27, Parcel 22) in the Workshop Area had releases of perchlorate due to demilitarization and recycling of munitions (Sections 2.2.12, 2.2.26, and 2.3).
- The Building 6, Gas Station (SWMU 45, Parcel 11) and the former UST 7 at Building 45 (SWMU 50, Parcel 11) in the Administration Area had releases of GRO and VOCs, and suspected release of lead due to historical leaks from USTs (Sections 2.2.11 and 2.3).
- The Building 6, Gas Station (SWMU 45, Parcel 11) had suspected releases of DRO and SVOCs from historical fueling and mechanical operations (Sections 2.2.11 and 2.3).
- The Fire Training Ground (SWMU 7, Parcel 21) had suspected releases of DRO due to historical fire-fighting operations (Sections 2.2.15). The Army has no

knowledge of the firefighting chemicals used at the facility as part of the installation activities.

- The Pesticide and Field Battery Workshop (SWMU 8, Parcel 6) had suspected release of SVOCs (Sections 2.2.16).

For the purposes of periodic groundwater monitoring, points of releases are defined as known sources of groundwater impact identified from RFIs. All the above-listed points of release were to surface or shallow subsurface soils. Additional potential sources of groundwater contamination may be present at FWDA and may be added to interim monitoring as they are confirmed during RFIs.

The primary transport mechanism to groundwater is leaching from shallow soils. There are sufficient permeable pathways to allow infiltration to reach the water table across much of the Northern Area. Highly insoluble compounds, such as PCBs, may be bound to soil materials rather than leach to groundwater.

Migration is largely controlled by the groundwater flow direction once contamination has reached alluvial groundwater. Alluvial groundwater flow is generally to the west and is controlled by the bedrock structural features in the Northern Area.

Groundwater flow across much of FWDA is believed to be slow due to low hydraulic conductivity of the alluvial and bedrock units. Groundwater monitoring from 2008 to present demonstrate that groundwater contaminant plumes are relatively stable.

Natural attenuation by diffusion, dispersion, and mineralization are believed to occur at FWDA. Mineralization, volatilization, chemical degradation, and biological degradation are potential mechanisms for contaminant degradation. Aerobic degradation and volatilization may be acting on some organic COPCs, such as VOCs and SVOCs. Aerobic conditions do not predominate in many groundwater units, and this degradation pathway is believed to be limited to small areas of shallow alluvial groundwater. Reductive chemical and chemical degradation may be acting on some COPCs such as nitrate, perchlorate, and explosives, but such degradation of COPCs has yet to be significantly demonstrated.

Source characterization and removal activities are being performed under interim measures at various locations across FWDA. Interim groundwater monitoring will continue pending final characterization and selection of an appropriate remedy.

3.7 EXPOSURE PATHWAYS FOR HUMAN RECEPTORS

The pathways for human exposure are assessed where groundwater contamination has been detected exceeding screening criteria. Exposure pathways are assessed based on current conditions and expected future land use.

Groundwater does not discharge to surface water in the Northern Area, and the top of the San Andres-Glorieta aquifer is approximately 1,100 feet bgs and separated from the shallow groundwater units by impermeable shales and claystones. All potable water used at FWDA is obtained from sources outside FWDA.

1 There are potential dermal and ingestion exposure pathways for future human receptors in the
2 Northern Area. Although local groundwater resources may be used for human consumption if the
3 property is transferred and used for residential purposes, it is unlikely to present a realistic exposure
4 scenario. Groundwater discharged from possible future drinking water wells would be a potential
5 hypothetical pathway for human exposure. Soil contaminants may migrate to groundwater in the
6 upper water column, both in the alluvial and upper bedrock units. It is improbable that soil
7 contaminants will migrate to the underlying San Andres-Glorieta aquifer. The alluvial and upper
8 bedrock aquifers are not potable without significant treatment and low yield will limit future use.

9 **3.8 CULTURAL RESOURCES**

10 Traditional cultural properties and other cultural resources have been documented within FWDA
11 boundaries. Existing groundwater monitoring wells and access routes are not located within
12 identified archaeological sites. Since groundwater sampling activities are non-intrusive and
13 confined to a small area immediately surrounding a given well, cultural resource monitoring will
14 not be required during proposed sampling activities at existing wells.

4.0 FIELD MONITORING AND SAMPLING METHODS

Field activities proposed under this Interim Northern Area GWMP include DTW measurements and groundwater sample collection from the Northern Area monitoring wells at FWDA. The different types of sampling and purging methods described in this section are identified in Table 4-1. The field gauging and sampling equipment are listed in Table 4-2.

4.1 DEPTH TO GROUNDWATER MEASUREMENTS

DTW is measured quarterly. Groundwater elevations are then calculated based on the DTW measurement, less the surveyed top of casing (TOC) measurement. The groundwater elevations are used to calculate hydraulic gradients and determine groundwater flow direction. All groundwater measurements will be collected during a 48-hour period from the Northern Area alluvium and Northern Area bedrock monitoring wells depicted in Figure 2-3. DTW measurements will be compared to previous measurements for consistency.

The DTW will be measured with an electronic water-level meter following these steps:

1. Starting with a clean water-level meter, lower the measurement probe down the well casing until the indicator lights or chimes. The indicator lights and chimes when the probe has encountered water. The measurement probe will be raised above the water, then again lowered 2-3 times. The reading will be considered accurate when three consecutive readings agree (the same). The water level measurement will be read at the surveyed reference notch (typically north end of top of well casing).
2. The DTW measurement will be compared to the previous DTW reading. If the measurement differs from the previous measurement by more than 1.0 foot, the measurement will be performed a second time.
3. Record the measurement to the nearest 0.01 foot to the top of casing reference notch and document in the field form or logbook. Monitoring wells and piezometers that do not contain more than 6 inches of water column in the well screen interval are identified as dry.
4. Remove the water-level probe from the well casing and decontaminate with non-phosphate detergent and distilled water as described in Section 4.4.

4.2 GROUNDWATER SAMPLING

Monitoring well sampling at FWDA involves a variety of purging and sampling methods, as shown in Table 4-1. Wells are sampled either with dedicated low-flow pumps (i.e., BESST and Zone Isolation Sampling Technology [ZIST]), high-volume dedicated pumps (Bennett), portable submersible pump, or hand bail. Each purging and sampling method is described in subsequent sections. As described below, only low-flow dedicated pumps by BESST and ZIST require water quality parameter stabilization. The other methods of purging and sampling require that three well volumes be removed prior to collecting a water sample. If well yield does not allow for three well

volumes, the well will be pumped dry and sampled the following day as formation water enters the well.

Low-flow purging and sampling is the preferred method at FWDA, in accordance with the NMED guidance document on low-flow sampling titled *Use of Low-Flow and Other Non-Traditional Sampling Techniques for RCRA Compliant Groundwater Monitoring* (NMED-HWB, 2001). Current wells not sampled via low-flow method will be evaluated to determine eligibility for low-flow method and proposed in future GWMPs. Field sample methods, equipment, and sample handling information are presented in Table 4-2 and Table 4-3. Field procedures for sample collection and handling are provided in Section 4.3. Water generated during purging activities and excess groundwater from sampling will be collected in designated containers and managed as IDW following the procedures described in Section 4.5. Monitoring wells that do not contain more than 6 inches of water column in the well screen interval are identified as dry. Wells identified as dry will not be sampled.

4.2.1 PRELIMINARY SITE ACTIVITIES

4.2.1.1 Initial Inspection

Upon arrival at each monitoring well, the field team will inspect the wellhead and exposed casing and will record observations in the field form or logbook. The USACE will be notified if there appears to be evidence of tampering or other damage to the well. After initial inspection of the monitoring well, the field team will implement preventive measures to reduce risk of contamination to the ground surface and sampling equipment by placing plastic sheeting or other materials such as absorbent pads or shallow plastic tubs around each wellhead. A staging area will be designated for equipment decontamination which include a non-phosphate detergent cleaning solution, reusable dedicated decontamination buckets and brushes, and a plastic sheet, absorbent pads, or plastic tubs, as appropriate. Field personnel will wear disposable nitrile (or comparable) gloves for all activities when in contact with purge water, purge equipment, or sample bottles and their preservatives.

4.2.1.2 Water Level Measurement and Well Volume Calculation

DTW will be measured from the top of the well casing reference notch and recorded to the nearest 0.01 foot by following the procedure described in Section 4.1. Well volume is the cross-sectional area of the interior of the casing multiplied by the height of the water column in the well (Depth to bottom of casing minus DTW).

One well volume can be calculated using the following equation (Ohio EPA Technical Guidance Manual for Hydrogeologic Investigations and Ground Water Monitoring Programs, June 1993):

$$V = H \times F$$

where:

V = one well volume,

H = the difference between the depth of well and DTW (ft)

F = factor for volume of 1-foot section of casing (gallons)

Note that F can also be calculated from the formula:

$$F = \pi (D/2)^2 \times 7.48 \text{ gallons per cubic foot (gal/ft}^3\text{)}$$

where:

D = the inside diameter of the well casing (ft).

Volume of Water in 1-Foot Section of Well Casing

Diameter of Casing/Tubing (inches)	F Factor (gallons)
2	0.16
2.5	0.25
4	0.65

Groundwater elevation and well volume calculations will be recorded in the field logbook or on the Groundwater Sampling Field Data Sheet (Appendix C).

4.2.2 LOW-FLOW PUMP PURGING

Low-flow purging for wells designated as low-flow in Table 4-1 is performed using dedicated pneumatic displacement pumps. The low-flow equipment consists of a flow-control system connected to the wellhead tubing which applies pneumatic pressure to a dedicated two-valve pneumatic displacement pump suspended within the well screen interval of the well. This low-flow pump system is powered by pressurized nitrogen gas cylinders. Dedicated pumps are constructed of Delrin™ (acetal homopolymer) plastic, or stainless steel, and the tubing is Teflon™-lined polyethylene. Tubing fittings that contact the sample stream are stainless steel.

Pumps and gas control devices are operated and maintained in accordance with manufacturer specifications. Pneumatic power is applied by a compressed nitrogen gas cylinder. Nitrogen gas is selected due to its inert properties and fewer impurities (as compared to compressed air). Electrical power for controller boxes is generated by a marine battery, power inverter, portable generator, or equivalent power source.

Dedicated low-flow pumps are designed to produce water flow rates with minimal drawdown in compliance with low-flow guidance (NMED-HWB, 2001). Water-quality parameters and DTW readings are recorded during purging to assure representative sample collection. Well purging and stabilization is conducted in accordance with standard practice and site-specific methods implemented by USACE.

4.2.2.1 Traditional Low-Flow and ZIST Low-Flow Dedicated Pumps

Low hydraulic conductivity conditions exist in many monitoring locations, which result in poor well yield. Bedrock wells TMW14A and TMW17 (installed in 2001) contain a ZIST packer system manufactured by BESST, Inc., to maintain the general low-flow methodology. Because these two wells have lengthy standing water columns (40 feet and 80 feet respectively) and are low yield, the constant drawdown without the ZIST packer system would prevent stabilization required for traditional low-flow. The ZIST packer system creates a seal above the well screen to minimize drawdown and produce water directly from the bedrock aquifer formation. The pump intake is

locked into the packers before purging operations and is unsealed after sample collection to allow for representative DTW measurements.

The volume of water in the dedicated tubing of the traditional and ZIST low-flow pumps will be purged to clear stagnant water before taking water quality readings. The field team will use drawdown and final pump cycle setting information from previous sampling event(s) from the well for initial controller settings. The extraction rate of the previous sampling event(s) will be matched to the extent practicable and modified based on actual well performance during the purge to assure minimal drawdown and optimal flow rates.

Traditional Low-Flow

The following steps will be performed for purging with traditional low-flow pumps:

1. Measure and record initial DTW.
2. Connect pump controller pressure line, discharge tubing to well head, and connect nitrogen cylinder to control box with intermediary pressure regulator (pressure at 0 psi).
3. Connect inline flow-through cell and water quality meter to discharge hose from well head. Discharge hose from flow-through cell should be directed to suitable container to collect the purge water for transfer to evaporation tank.
4. Slowly increase pressure to inlet side of controller box.
5. Start pump at the lowest pressure setting as calculated from DTW and slowly increase until discharge occurs. Start with pressure/vent cycle timing previously used for that well.
6. Measure the DTW again.
7. Adjust pumping rate until there is little or no water-level drawdown. It is preferable to make any necessary adjustments to pumping rates within the first 15 minutes of purging. Reduce pumping rates as needed. If the static water level is above the well screen, avoid lowering the water level into the screen if possible. Note that it is allowable for water levels to stabilize below the level of initial DTW. Measure the flow rate using a container of known volume vs time.
8. Monitor and record DTW, purge volume, purging rate, and field parameters approximately every 2 to 15 minutes during purging on the Groundwater Sampling Field Data Sheet (Appendix C). Calculate flow rate by timing and measuring discharge into a graduated cylinder or other measuring device. The time between each parameter measurement should allow the flow-through cell to completely evacuate the purge water from the previous reading. Measure the following parameters during purging:
 - Turbidity
 - Temperature
 - Specific conductivity

- Hydrogen ion activity (pH)
 - Dissolved oxygen (DO)
 - Oxidation-reduction potential (ORP)
9. Purging is considered complete and sampling may begin when the field parameters have stabilized. Stabilization for traditional low-flow has occurred when three consecutive readings are within the following limits:
- Temperature $\pm 10\%$ in degrees centigrade
 - pH ± 0.5 standard units
 - Specific conductivity $\pm 10\%$ in millisiemens per centimeter
 - DO $\pm 10\%$ or less than 1.0 mg/L
 - Turbidity $\pm 10\%$ or less than 1 nephelometric turbidity unit
 - ORP ± 10 millivolt
 - Water level = 0.00 to 0.33 foot (or 4 inches) or less drawdown during the stabilized water-quality readings.
10. Once water quality readings are stabilized (Step 9), the established water-level drawdown must not be more than 4 inches/0.33 foot from stabilization until the end of sample collection.

ZIST Low-Flow

There are two wells (TMW14A and TMW17) equipped with ZIST low-flow pumps. The steps that will be performed for purging with ZIST low-flow pumps are similar to the traditional low-flow pumps. The following steps will be performed:

1. Measure and record initial DTW.
2. Prior to pumping, lower the pump into the packer. Note that once the pump is properly seated into the packer, the water above the packer is no longer connected to the isolated zone and no water level measurement of the isolated zone will be possible during purging.
3. Connect pump controller pressure line and discharge tubing to well head and connect the nitrogen cylinder to control box with intermediary pressure regulator (pressure at 0 psi).
4. Connect inline flow-through cell and water quality meter to discharge hose from well head. Discharge hose from flow-through cell should be directed to suitable container to collect the purge water for transfer to evaporation tank, see section 4.5 for details on disposal of purge water.
5. Slowly increase pressure to inlet side of controller box.

6. Start pump at the lowest pressure setting as calculated from DTW and slowly increase until discharge occurs. Start with pressure/vent cycle timing previously used for that well.
7. During the initial purge, measure DTW in the open casing, if drawdown occurs, the mechanical packer system was not sealed properly and is leaking. The pump must then be reset or the ZIST will need to be removed, inspected, and repaired before continuing.
8. Monitor and record purge volume, purging rate, and field parameters approximately every 2 to 15 minutes during purging on the Groundwater Sampling Field Data Sheet (Appendix C). The time between each parameter measurement should allow the flow-through cell to completely evacuate the purge water from the previous reading. Measure the following parameters during purging:
 - Turbidity
 - Temperature
 - Specific conductivity
 - pH
 - DO
 - ORP
9. Record all adjustments to pumping rate (both time and flow rate).
10. Purging is considered complete and sampling will begin when the field parameters have stabilized and/or three well volumes have been purged. Stabilization has occurred when three consecutive readings are within the following limits:
 - Temperature $\pm 10\%$ in degrees centigrade
 - pH ± 0.5 standard units
 - Specific conductivity $\pm 10\%$ in millisiemens per centimeter
 - DO $\pm 10\%$ or less than 1.0 mg/L
 - Turbidity $\pm 10\%$ or less than 1 nephelometric turbidity unit
 - ORP ± 10 millivolt
 - Water level = 0.00 to 0.33 foot (or 4 inches) or less drawdown during the stabilized water-quality readings.

All measurements will be obtained using a field-parameter monitoring instrument with a transparent flow-through cell that prevents air bubble entrapment in the cell. Extraction rates from the initial pump setup are located on sample collection logs from previous sampling events and will be duplicated to the extent practical.

4.2.3 GROUNDWATER SAMPLE COLLECTION BY LOW-FLOW PUMP

After stabilizing field parameters, groundwater samples will be collected in accordance with the following steps:

1. During sample collection, maintain the pump at approximately the same flow rate as during purging and stabilization of field parameters.
2. Disconnect the water-quality sensor flow-through cell and collect samples directly from the pump discharge tubing by allowing the discharge to flow gently down the inside of the sample container to minimize turbulence. Do not allow the tubing to touch the inside of the sample container.
3. Continue to monitor DTW to assure that the water level does not decrease more than 0.33 foot (4-inches) from the established pumping level during sampling (not for ZIST-equipped wells).
4. Fill sample containers in sequence from most volatile sample type to least. Reduce pressure to avoid splash in VOC containers if necessary. Do not over fill preserved containers. Sample filtering and preservation will be performed in accordance with laboratory and method requirements as listed in Table 4-3.
5. To filter groundwater samples in the field for dissolved metals analysis, use a 0.45-micron filter attached to the end of the discharge tubing, or fill an intermediate container and filter using clean disposable syringe (follow laboratory SOPs).
6. To filter groundwater samples in the field for perchlorate analysis, use a 0.20-micron filter. A 0.45-micron filter may be used to filter water before using the 0.20-micron filter for wells with high turbidity. Fill the perchlorate container only to between half and two thirds volume to allow proper headspace for the sample. This can be done using a clean disposable syringe and attached filter.
7. After filling each sample container, immediately seal, label, and place container into an iced cooler in accordance with the sample management procedures discussed in Section 4.3.
8. Manage all liquid and solid IDW as described in Section 4.5.

4.2.4 ALTERNATIVE GROUNDWATER PURGING AND SAMPLING PROCEDURES

Some wells at FWDA require alternative methods of purging and sampling due to extremely low-yield/low-water levels. For these wells, purging and sampling are performed by hand bailing with disposable bailers, a submersible pump, or a dedicated piston pump. The methods required for purging and sampling are identified for each well in Table 4-1 and the type of equipment used is identified in Table 4-2. The sampling method used for each well will be recorded on the individual Groundwater Sampling Field Data Sheet for each well or field logbook.

These procedures emphasize the need to remove a sufficient volume of water from each well, so the sampled groundwater is representative of the surrounding formation. To achieve this, three borehole volumes will be removed from the well wherever possible. If well yield is insufficient to

generate three borehole volumes, then the well will be purged dry and allowed to recharge with sufficient volume prior to collecting the groundwater sample.

Field parameters will be monitored at a time interval determined by the purge rate. A minimum of three parameter values will be recorded on the Groundwater Sampling Field Data Sheet (Appendix C). Prior to purging, an additional DO measurement with a downhole probe will be collected on all wells without a dedicated pump. DO is the only parameter that shows a potential affect from pumping the water through a flow-through cell by possible introduction of air into the system. No other parameter has empirically been shown to be affected by pumping water through a flow-through cell. Purging is considered complete after evacuating three well volumes or when the well is emptied due to extremely slow water-level recovery. Groundwater samples must be collected within 48 hours of the well, being purged dry. This includes wells purged dry for sample collection.

Groundwater samples from these wells with low yield will be collected with disposable bailers as described below.

4.2.4.1 Disposable Bailers

The following steps describe purging and collecting groundwater samples with disposable bailers:

1. Measure and record initial DTW.
2. Attach a clean stainless-steel wire to the bailer and lower into the monitoring well; allow bailer to fill with groundwater. Try to avoid allowing bottom of bailer to come into contact with bottom of well casing unless bailing well dry.
3. Slowly and steadily raise bailer out of the monitoring well and empty purge water into a calibrated container or storage vessel designated for IDW. Record volume of water bailed on field data sheet or logbook.
4. Periodically collect and record the following groundwater parameters. Collect at least 3 groundwater parameter measurements and record all readings. Measure the following parameters during purging:
 - Turbidity
 - Temperature
 - Specific conductivity
 - pH
 - DO
 - ORP
5. Repeat process until the calculated volume of groundwater has been purged from the monitoring well (three times the well volume) or until well is dry.
6. Use a new bailer for sample collection if the well was bailed dry.
7. Collect groundwater samples with the disposable bailer by pouring the collected water from the bailer directly into the sample containers.

8. To filter groundwater samples for dissolved metals and/or perchlorates analysis, use a clean disposable syringe and filter. An intermediary container may be used to collect the groundwater sample prior to filtering. Sample filtering and preservation will be performed in accordance with laboratory and method requirements as listed in Table 4-3.

4.2.4.2 Reusable Submersible Pump

A portable submersible pump can be used to purge wells that may not have sufficient water to support low-flow pumping but contain more water than can be efficiently bailed. A portable submersible pump can also be used to purge a well with a dedicated pump in the event the dedicated pump has failed. This deviation must be clearly identified on the Groundwater Sampling Field Data Sheet for each well or field logbook. Table 4-1 indicates which wells have sufficient water for low-flow sampling methods using submersible pumps. If the well becomes dry during purging, allow well to recharge, and collect the groundwater sample with a disposable bailer. Based on current water level conditions in the field, the following procedures for purging with a submersible pump and collecting groundwater samples using low-flow or disposable bailer are described below:

1. Measure and record initial DTW.
2. Attach clean, unused tubing to the pump and secure the tubing to pump.
3. Lower the pump into the well to approximately 6 inches from the bottom of the well. Avoid disturbing the bottom of the well casing as this may disturb sediments.
4. Secure the tubing and lead line, then attach tubing to flow-through cell and lead line to control box, and then secure the control box to the power source.
5. Begin purging at a flow rate of between 0.5 to 2 gpm (2 liters per minute [lpm] to 8 lpm). During well purging, record DTW and monitor and record a minimum of three field-parameter readings and record all readings. Measure the following parameters during purging.
 - Turbidity
 - Temperature
 - Specific conductivity
 - pH
 - DO
 - ORP
6. Measure and record purge volume. Once three casing volumes have been removed, the well may be sampled. Reduce the flow rate of the pump to less than 0.2 gpm.
7. Disconnect the water-quality sensor flow-through cell and collect samples directly from the pump discharge by allowing the discharge to flow gently down the inside of the sample container to minimize turbulence.

8. If the well has been purged dry, remove pump and tubing. Allow water levels to recharge as described in Section 4.2.4 and sample with a disposable bailer following steps 6, 7, and 8 in Section 4.2.4.1.
9. Decontaminate the pump after purging is complete as described in Section 4.4.
10. Remove and dispose of tubing after purging is complete at each monitoring well. Do not reuse the pump discharge tubing. Manage all liquid and solid IDW as described in Section 4.5.

4.2.4.3 Dedicated Bennett Pump

The Bennett sample pump system consists of automatic reciprocating piston motors operated by compressed nitrogen gas to power a double acting piston fluid pump. The Bennett pump has four polyethylene tubes attached to the top of the well casing. The pressurized nitrogen gas is inserted through one tube, a second tube returns groundwater to the surface, a third tube is a gas exhaust, and the fourth tube is used as a water level indicator. Bennett pumps are installed in seven wells (MW23, MW24, TMW16, TMW18, TMW19, TMW36, and TMW37), as shown in Table 4-1. The Bennett pump intake was placed approximately 2 feet from the bottom of each monitoring well. Procedures for using a Bennett pump to purge and collect groundwater samples are as follows:

1. Measure and record initial DTW.
2. Connect the air intake tubing from the dedicated pump to the pressurized nitrogen gas cylinder. Connect the discharge tubing to the flow-through cell.
3. Turn on gas flow from the nitrogen cylinder. Use initial pumping rates previously established for borehole volume purging based on specific well yield.
4. Monitor and record all adjustments to pumping rate. Measure and record flow rate and volume of purge. Collect a minimum of three field parameters at a rate of between one per 3 minutes to one per 15 minutes depending on the purge volume and record all readings. The time between each parameter measurement should allow the flow-through cell to completely evacuate the purge water from the previous reading. Measure the following parameters during purging:
 - Turbidity
 - Temperature
 - Specific conductivity
 - pH
 - DO
 - ORP
5. If three casing volumes have been removed, the well may be sampled. Reduce the flow rate of the pump by slowly reducing the pump drive pressure so discharge rate is below 0.2 gpm.
6. If the well is purged dry, allow for recharge following requirements in Section 4.2.4.

7. Disconnect the water-quality sensor flow-through cell and collect samples directly from the pump discharge by allowing the discharge to flow gently down the inside of the sample container to minimize turbulence.
8. After filling each sample container, immediately seal, label, and place container into an iced cooler in accordance with the sample management procedures discussed in Section 4.3.
9. Manage all liquid and solid IDW as described in Section 4.5.

4.3 SAMPLE MANAGEMENT AND SAMPLE HANDLING

Proper sample handling, shipment packaging, and chain-of-custody documentation will generate quality field data and provide validity and defensibility to sample results. Sample handling protocols, careful sample packaging, and chain-of-custody requirements will be followed completely, accurately, and consistently. All samples shipped to the laboratory will be accompanied by a properly completed chain-of-custody form (Appendix C).

The unique sample identifiers and descriptive information (i.e., sample location, date, and collection time) will be listed on the chain-of-custody form. Individuals relinquishing or receiving possession of samples will sign, date, and note the time on the chain-of-custody form in the “relinquished by” or “received by” boxes, respectively. The signed chain-of-custody forms establish the transfer of sample custody from the field sampler to the laboratory.

4.3.1 SAMPLE HANDLING PROCEDURES

After filling each sample container, the container will be immediately sealed, labeled, and placed into an iced cooler for the remainder of the day’s sampling activities before packaging the samples for shipment. Groundwater samples may also be transported and stored in coolers with ice at a predetermined secure refrigerator prior to delivery to the laboratory. Samples will be transported daily via FedEx or other common courier for samples with holding times of less than 3 days. If one or more groundwater samples is collected after sample packing and shipment is completed for the day, the sample(s) will be held overnight and placed on ice in sample coolers or secure refrigerator pending the samples’ laboratory holding time. Sample containers, preservation, and holding times are presented in Table 4-3 by analytical method.

Container lids will be checked to verify they are sealed tight to prevent a leak during transport. The samples will be individually packaged in resealable plastic bags and positioned within the cooler in a manner to prevent damage. Sample containers may also be bubble wrapped to maintain sample integrity and added protection during transport to the laboratory.

Groundwater samples will be transported in rigid plastic coolers or ice chests. Coolers or ice chests will be lined with clean plastic bags. The bagged samples will be secured within the plastic bag liner inside the cooler and ice will be placed inside the plastic bag liner within a secondary plastic bag or resealable plastic bag within the cooler or ice chest. The samples and ice will be sealed in their respective plastic bags to prevent leakage and contact during transportation to the laboratory.

4.3.2 CHAIN-OF-CUSTODY REQUIREMENTS

The following information will be included on the chain-of-custody forms:

- Site name and project name or number;
- Sample identification code, sample collection date, sample collection time (in 24-hour format);
- Total number of containers for each sample, the analyses, and associated number of sample bottles for each analysis;
- Signature of the sample team leader or sample collector;
- Carrier service (e.g., FedEx or UPS), air bill number, and custody seal number, if applicable; and
- Signature, date, and time in the “relinquished by” section.

The signed chain-of-custody form will be placed in a plastic bag and taped to the inside of the lid in each cooler or ice chest. Each cooler or ice chest will have its own documentation and will be closed and secured with strapping tape and custody seal. Clear tape will be placed over the custody seal to prevent damage to the seal. When the cooler or ice chest is opened, the custody seal will be broken. The completed and signed chain-of-custody forms will become part of the project record.

4.3.3 SAMPLE SHIPPING

Samples will be transported to EMAX Laboratories, Inc. (EMAX), located at 1835 W. 205th Street, Torrance, California, for analytical testing. If requested by USACE, a second laboratory (chosen by USACE) will be used to analyze triplicate samples.

4.3.4 ANALYTICAL METHODS

Sample analysis will be performed by EMAX, a DOD ELAP-certified laboratory. Table 4-3 provides the analytical methods, container (number, size, and types), preservation, and holding times. Selected analysis for each well is presented in Section 5. Analytical methods are selected in accordance with the most recent QSM (DOD/DOE, 2019) and consistent with RCRA regulations. The most recent EPA SW-846 solid waste methods were determined to be appropriate methods to meet DQOs as well as conform to RCRA regulations and DOD guidance.

4.4 DECONTAMINATION

Non-dedicated and non-disposable equipment and sampling supplies such as water-level meters and submersible pumps will be decontaminated before and after each use. Water-level meters will be decontaminated during extraction from monitoring wells using distilled water and a non-phosphate detergent cleaning solution. Submersible pumps will be decontaminated using the following procedures:

1. Remove particulate matter or debris using a brush or handheld sprayer filled with distilled water.

2. Scrub the surfaces of the equipment using distilled water and a non-phosphate detergent cleaning solution and reusable dedicated decontamination brushes.
3. Rinse the equipment thoroughly with distilled water.
4. Place the equipment on a clean surface and allow to air dry.
5. Containerize all decontamination liquids and manage as IDW, as described in Section 4.5.
6. The area where the equipment is stored prior to reuse will be free of contaminants.

If decontaminated equipment is transported between wells or other locations, the equipment will be protected from potential sources of cross contamination as appropriate. Sampling equipment dedicated for use at specific wells will not require decontamination before use. Disposable sampling equipment that is used once and then disposed of will not require decontamination before use, provided it is wrapped in the manufacturer's packaging or otherwise protected from inadvertent contamination before use.

4.5 WASTE MANAGEMENT PROCEDURES

Purged groundwater, excess sample water from monitoring wells, decontamination liquids (non-hazardous soap and water), and solid waste (disposable sampling equipment and personal protective equipment) are typical IDW generated during the FWDA groundwater sampling events.

Purged groundwater, decontamination water, and other non-hazardous liquid IDW will be containerized at the sample collection location in appropriate containers, such as buckets with a watertight lid or polyethylene drums with a sealing bung. Water from multiple wells may be consolidated into one or more containers depending on volume. Liquid IDW containers will be emptied into one of two low-density polyethylene-lined evaporation tanks at the end of each day. The evaporation tanks are located at the site of former Building 542 in Parcel 6.

Solid waste (e.g., disposable sampling equipment, personal protective equipment, and general refuse) will be allowed to dry and placed in plastic trash bags. Small quantities of waste will be disposed of in trash containers (dumpsters) located in the Administration Area. Larger quantities of waste material (that will not fit in the dumpsters) will be transported off site for disposal as municipal waste.

4.6 QUALITY ASSURANCE PROCEDURES

4.6.1 FIELD EQUIPMENT CALIBRATION AND PREVENTATIVE MAINTENANCE

Field instruments will be calibrated, operated, and maintained in accordance with the manufacturer's instructions. Daily on-site field instrument calibrations will be performed before and during each day's use by trained technicians using certified standards. Instrument calibrations will be recorded in logbooks dedicated to calibration data and will include field instrument identification, serial number, date of calibration, standards used, and calibration results.

If there is equipment malfunction, the instrument will be removed from service, tagged, and substituted with another piece of equipment. Equipment that fails calibration or becomes inoperable during use will be tagged and removed from service. Equipment that cannot be recalibrated or repaired will be replaced. Backup equipment will be available for use in the field in case of a malfunction.

Preventive maintenance procedures for field instruments will be conducted in accordance with procedures outlined by the manufacturer's equipment manuals. All records of inspection and maintenance will be dated and documented in the appropriate field logbook. Critical spare parts for field instruments will be included in the sampling kits to minimize downtime. Backup meters will be available, when needed. Spare parts will be purchased from accepted vendors. Daily inspections of field equipment will be performed to assure proper function. If inspection results deem a piece of field equipment faulty or not usable, replacement equipment will be cleaned, calibrated, and used in place of the faulty equipment.

4.6.2 SAMPLE COLLECTION QUALITY CONTROL AND QUALITY ASSURANCE

In compliance with the most recent version of the QSM (DOD/DOE, 2019) several types of field quality control (QC) samples will be submitted to the analytical laboratory to assess the validity of the data. Quality control samples include the following: field duplicates, trip blanks, equipment rinsate blanks, matrix spike (MS), and matrix spike duplicate (MSD) samples.

Field duplicate samples will be collected at a frequency of one per 10 environmental samples. The MS/MSD samples will be collected at a frequency of one per 20 environmental samples. Quality assurance (QA) split samples may be generated at the Army's discretion to check the contractor's laboratory quality performance. Field equipment rinsate blanks are collected at the start of the sampling event, one per 20 environmental samples, and/or one at the end of the sampling event (minimum of 2 samples per event), on non-dedicated equipment.

Each shipment that contains VOC sample analyses will include a trip blank. The trip blank will be placed in the cooler containing samples designated for VOC analysis and will stay with the cooler during transportation to the analytical laboratory. Additional sample volume will be collected at specified sample locations in order to include one MS/MSD pair to be submitted to the analytical laboratory for every 20 environmental samples.

Due to recurring detections of bis(2-ethylhexyl) phthalate, a plasticizer and a common laboratory and sampling contaminant, the use of materials containing bis(2-ethylhexyl) phthalate will be avoided in the field and laboratory.

4.6.3 DOCUMENTATION QUALITY ASSURANCE

Field documentation will consist of one or more job- or area-specific field logbooks, field forms, sample chain-of-custody forms, and sample logs/labels.

4.6.3.1 Logbooks

Field logbooks provide a daily handwritten record of field activities. Logbooks will be permanently bound and have a hard cover. Logbooks will be ruled or gridded, with sequentially

numbered pages. All entries into field logbooks will be made with indelible ink. Field logbooks are detailed daily records that are kept in real time and are assigned to specific activities, positions, or areas within the site. Separate logbooks will be used for each sampling event and field team.

Documentation in field logbooks will include the following (as necessary):

- Location
- Date and time
- Names of field crew
- Names of subcontractors
- Weather conditions during field activity
- Sample type and sampling method
- Location of sample
- Sample identification number
- Decontamination procedures
- Health and safety briefings
- Sampling notes (e.g., well condition, unexpected maintenance, or work stoppage).

A separate logbook dedicated to calibration records will be maintained and will include the following information:

- Equipment or device make, model, and serial number (or another unique identifier)
- Date and time
- Calibration results
- Adverse trends in instrument calibration behavior
- Field instrument identification, date of calibration, and standards used.

Field logbook corrections will be made by crossing out mistakes with a single line, writing in the correction, initialing, and dating the entry. The use of correction fluid is not permitted. The team lead will review each page of the logbook for errors and omissions after each field day and will date and sign each reviewed page.

4.6.3.2 Field Data Record Forms

In addition to the field notebooks, field log forms will be used. These field forms will include DTW measurement forms and purging and sampling forms. These forms assure all required data and observations are recorded in a consistent manner. Information recorded on the field log forms is not intended to be a double entry, meaning that if the information is recorded on the field log form, it need only be referenced in the field logbook, not duplicated. No blank spaces will be left; all non-applicable items will be marked “not applicable.” Forms will include well sampling forms and chain-of-custody forms, as provided in Appendix C.

1 **4.6.3.3 Final Evidence File Documentation**

- 2 Evidential file documentation will be maintained under an internal project file system. The
3 USACE Contracting Officer's Representative (COR) will assure that all project documentation
4 and QA records are safely stored and retrievable.

5.0 MONITORING AND SAMPLING PROGRAM

Interim groundwater monitoring and sampling at FWDA allows the Army to track contaminant plume concentrations and migration at previously identified groundwater impact areas. The current monitoring well network is based on the current understanding of site conditions. The GWMP will be updated and revised annually as new information is obtained from interim monitoring, RFIs, or other definitive groundwater investigations. All analytical data summary tables will include data from the three previous monitoring events as required by Section V.A.2 of the FWDA RCRA permit.

5.1 INTERIM GROUNDWATER MONITORING ANALYTICAL PROGRAM

The Army has identified COPCs for interim groundwater monitoring based on existing groundwater data and point of release assessments. Sample analytical methods were selected based upon the COPCs and the DQOs. The groundwater analytical program complies with the RCRA permit (NMED, 2015a) and the QSM requirements (DOD/DOE, 2019).

Attachment 7 of the RCRA permit (NMED, 2015a) provides a hierarchy to select cleanup level criteria applicable to the FWDA groundwater monitoring program. Table 5-1 presents the list of analytes, with screening values and the contracted laboratory limits for these methods and individual analytes.

Analytes without risk screening values have been assigned the screening values for surrogate analytes that are structurally similar or that provide a conservative estimate of toxicity, as identified on Table 5-1. Six analytes listed on Table 5-1 do not have an assigned risk screening level and do not have a surrogate analyte as identified in italics below.

4-bromophenyl phenyl ether, 4-chlorophenyl phenyl ether, acenaphthylene, benzo[g,h,i]perylene, phenanthrene, and dichloroprop: Surrogate analytes were not selected for these compounds. These analytes do not have a WQCC, MCL, or EPA RSL value. If these analytes are detected in groundwater samples collected while implementing this GWMP, additional review for appropriate surrogate compounds will be conducted.

EMAX is the contracted DOD ELAP-certified laboratory selected to analyze samples from FWDA. Forty-two analytes in Table 5-1 have screening values lower than the laboratory limit of quantitation (LOQ), or limit of detection (LOD); thus, are identified as data quality exceptions. USACE is currently evaluating options to achieve lower LOQs for the remaining few compounds using enhanced analytical procedures as documented in a NMED approval letter dated May 21, 2019 (NMED, 2019b).

The following list identifies the data quality exceptions:

- TPH-DRO
- TPH-GRO
- 1,2,3-Trichloropraopane
- 1,2-Dibromo-3-Chloropropane
- 1,2-Dibromoethane

- 1 • Hexachlorobutadiene
- 2 • 1,2-Diphenylhydrazine
- 3 • 2,4-Dinitrotoluene
- 4 • 2,6-Dinitrotoluene
- 5 • 3,3-Dichlorobenzidine
- 6 • 2,6-Dinitro-2-methylphenol
- 7 • 4-Chloroaniline
- 8 • Benzidine
- 9 • Benzo[a]anthracene
- 10 • Benzo[a]pyrene
- 11 • Benzo[b]fluoranthene
- 12 • bis-(2-Chloroethyl)ether
- 13 • bis-(2-Ethylhexyl)phthalate
- 14 • Dibenz[a,h]anthracene
- 15 • Dibenzofuran
- 16 • Hexachlorobenzene
- 17 • Hexachlorobutadiene
- 18 • Hexachloroethane
- 19 • Indeno(1,2,3-cd)pyrene
- 20 • Nitrobenzene
- 21 • N-Nitrosodimethylamine
- 22 • N-Nitrosodi-n-propylamine
- 23 • Pentachlorophenol
- 24 • Phenol
- 25 • 2,6-Dinitrotoluene
- 26 • Nitroglycerin
- 27 • Pentaerythritol tetranitrate (PETN)
- 28 • Aldrin
- 29 • Alpha-BHC
- 30 • Dieldrin
- 31 • PCB-1221
- 32 • PCB-1232
- 33 • PCB-1242
- 34 • PCB-1248
- 35 • PCB-1254
- 36 • PCB-1260
- 37 • MCPA

38 Other related difficulties associated with sampling that can lead to data quality exceptions include
39 the lack of recharge in select wells, the high turbidity in select wells, and the potential for matrix
40 interference.

5.2 MONITORING LOCATION AND FREQUENCY

The GWMP was designed for each point of release in accordance with the DQOs and decision criteria described in Section 1.4. Groundwater monitoring activities consist of DTW measurements on a quarterly basis and groundwater sample collection on a semiannual basis consistent with the current groundwater monitoring program at FWDA.

Review of groundwater monitoring data from 2008 to 2021 identifies relatively stable groundwater contaminant plume configurations and predictable groundwater flow directions and gradients. Table 5-2 contains the sampling matrix in accordance with this GWMP.

An assessment of groundwater metals contamination cannot be completed without a statistically valid background evaluation and regulatory approval of groundwater background concentrations. Monitoring wells in the Northern Area alluvial aquifer can support a background evaluation; however, evaluation is pending whether additional monitoring wells in the Northern Area bedrock aquifer are needed to prepare a statistically valid background evaluation.

5.2.1 NORTHERN AREA ALLUVIAL GROUNDWATER MONITORING DESIGN

Nitrate and Nitrite Plume

The points of release for the groundwater nitrate/nitrite plume in the Northern Area appear to originate from SWMU 1 (TNT Leaching Beds, which have been removed) and SWMU 27 (Building 528 Complex). As shown on Figure 3-3, the plume extends across the Workshop Area and Administration Area. Wells TMW03, TMW34, TMW40S, and TMW46 have historically had the highest nitrate concentrations within the plume and are designated as downgradient relative to SWMU 1 (TNT Leaching Beds) and SWMU 27 (Building 528 Complex). There may be another nitrate source, possibly offsite, since BGMW02 has repeatedly shown levels of nitrate contamination. Starting in 2021, all wells sampled for nitrate and nitrite will also be sampled for additional major anions to include chloride, fluoride, sulfate, phosphate, and bromide.

Explosives Plume

The suspected points of release for the groundwater explosives plume in the Northern Area are SWMU 1 (TNT Leaching Beds) and SWMU 27 (Building 528 Complex). The alluvial aquifer explosives plume extends northward across the Workshop Area (Figure 3-4) even though alluvial groundwater flows west to northwest. Additional wells installed in 2019 and 2020 may help to further assess the alluvial aquifer explosives plume. Specifically, wells TMW59, TMW60, TMW61, and TMW62 will be used to assess the northern and western boundaries of the explosives plumes, as illustrated on Figure 3-4. Groundwater samples collected from wells TMW40S, TMW03, and TMW23 have historically had the highest RDX concentrations within the plume. To monitor suspected releases from SWMU 27 (Building 528 Complex), well TMW41 is designated for explosives analysis even though it is hydraulically upgradient of SWMU 1.

Perchlorate Plume

The point of release for the groundwater perchlorate plume in the Northern Area is SWMU 27 (Building 528 Complex). Groundwater samples from wells TMW01, TMW31S, and TMW39S have historically had the highest perchlorate concentrations within the plume (Figure 3-5). To monitor plume migration along the downgradient boundary of the plume, TMW03, TMW13, and TMW41 are designated for perchlorate analysis.

Metals Monitoring

The points of release for metals in the Northern Area are SWMU 1 (TNT Leaching Beds), SWMU 27 (Building 528 Complex), and SWMU 50 (UST 7 at Building 45). Groundwater metals plumes have not been identified at FWDA pending determination of groundwater background concentrations.

Other Organics Monitoring

The points of release for the groundwater VOC plume in the Northern Area are SWMU 45 (Building 6 Gas Station) and SWMU 50 (Structure 35, UST 7 at Building 45). The 1,2-DCA plume is adjacent to SWMU 45. Groundwater samples from wells MW18D, MW20, MW22D, and TMW33 have consistent concentrations of 1,2-DCA. Monitoring wells MW01, MW02, and MW03 are hydraulically upgradient of SWMU 45 but downgradient of SWMU 50 (Figure 3-7).

The points of release for the SVOCs in the Northern Area include SWMU 6 (Building 11, former Locomotive Shop) and SWMU 45 (Building 6 Gas Station). There are no groundwater SVOC plumes identified at FWDA.

The points of release for the DRO in the Northern Area are SWMU 6 (Building 11, former Locomotive Shop), SWMU 45 (Building 6 Gas Station), and SWMU 7 (Fire Training Ground).

The points of release for the GRO in the Northern Area are SWMU 45 (Building 6 Gas Station) and SWMU 50 (Structure 35, UST 7). The GRO releases are monitored by wells MW01, MW02, MW03, MW18D, MW20, MW22D, and TMW33.

5.2.2 NORTHERN AREA BEDROCK GROUNDWATER MONITORING DESIGN

Nitrate and Nitrite Plume and Explosives and Metals Monitoring

The points of release for the bedrock aquifer nitrate/nitrite, explosives plumes and suspected metals releases in the Northern Area are SWMU 1 (TNT Leaching Beds) and SWMU 27 (Building 528 Complex) (Figure 3-11). Two nitrate plumes are present in the bedrock aquifer across the Workshop Area. To monitor known and suspected releases from SWMU 27 (Building 528 Complex) wells TMW30, TMW31D, TMW32, TMW39D, and TMW48 are downgradient of SWMU 27. To monitor known and suspected releases from SWMU 1 (TNT Leaching Beds), wells TMW36, TMW38, and TMW40D are designated as downgradient wells. Upgradient monitoring wells have not been installed due to dry and impermeable shale bedrock present in this area.

Starting in 2021, all wells sampled for nitrate and nitrite will also be sampled for additional major anions to include chloride, fluoride, sulfate, phosphate, and bromide.

Perchlorate Plume

The point of release for the bedrock groundwater perchlorate plume in the Northern Area is SWMU 27 (Building 528 Complex). Although the extent of the perchlorate plume has not been fully defined, the contamination is located in the eastern portion of the Workshop Area (Figure 3-12). Wells TMW30, TMW31D, and TMW48 have consistent elevated groundwater perchlorate concentrations. To monitor the plume boundary wells TMW32, TMW36, TMW38, TMW39D, and TMW40D are designated as downgradient wells. Additional wells were installed in 2019 to further assess the perchlorate plume.

Other Organic COPCs Monitoring

The suspected point of release for SVOCs in bedrock aquifer of the Northern Area is SWMU 8 (Building 537, removed). There are no identified groundwater SVOC plumes at FWDA and no site related SVOC concentrations exceeding cleanup levels in groundwater samples that are attributable to historical site activities. Upgradient monitoring wells have not been installed due to dry and impermeable shale bedrock present in this area. VOC detections in the bedrock aquifer have included carbon disulfide in previous monitoring events. The Army has confirmed that this compound was not used at the facility.

5.3 DATA QUALITY EVALUATION

The data quality evaluation (DQE) process is instituted to ensure the suitability of the data to meet DQOs. The DQE process consists of three steps: Step 1 is verification of the data obtained from the project activities to be complete; Step 2 is validation of the field and analytical procedures performed relative to the contract and work plan requirements; and Step 3 is assessment of usability of the data to be suitable to meet DQOs.

Field data are assessed by the project team through a series of internal reviews. The field team lead is responsible for implementation of the correct field procedures during data collection. Senior technical review staff and USACE will evaluate completeness of the field data, determine whether the field procedures outlined in this GWMP are being followed, and verify data quality is suitable for use in groundwater monitoring. Rejected data will be qualified or removed from the database.

Laboratory analytical DQEs follow a specific process defined by the current version of the QSM (DOD/DOE, 2019), *General Data Validation Guidelines*. (Environmental Data Quality Workgroup, 2019) and *Guidance for Evaluating Performance-Based Chemical Data* (USACE, 2005). Laboratories performing sample analyses will hold current DOD ELAP accreditation and state of New Mexico accreditation/National Environmental Laboratory Accreditation Program accreditation for all appropriate fields of testing. Laboratories will also need to meet NMED and EPA standards, as required. Laboratories will submit accreditation certificates to the USACE COR.

5.3.1 GENERAL DATA QUALITY REQUIREMENTS

DQEs for all project data and deliverables will consist of the following:

1. Verification that the data produced corresponds to the data scope of work (completeness check)
2. Verification of the procedures/methods used
3. Verification that documentation/deliverables are complete
4. Verification that hard copy and electronic versions of the data are identical
5. Verification that the data seem reasonable based on analytical methodologies
6. Evaluation and qualification of laboratory analytical results based on sample receipt (sample temperature and preservation) and holding-time compliance
7. Evaluation and qualification of laboratory results based on precision and accuracy
8. Verification that analytical instrument calibration is in accordance with required instrument and method criteria
9. Evaluation and qualification of analytical results based on field and laboratory QA/QC of sample results.

5.3.2 ANALYTICAL DATA QUALITY REQUIREMENTS

Analytical data generated for FWDA will be subjected to 100% Level II validation with 10% subjected to Level III validation. Data qualifiers will be used to indicate: 1) blank contamination; 2) sample analytical anomalies associated with a constituent; 3) analytical results that fall between the detection limit (DL) and the LOQ; 4) data qualified because of an exceedance of method-specific holding times, cooler temperatures exceeding 4°C, or other significant QA/QC data deficiencies; and 5) data results that exceed the upper calibration curve limit for that constituent and associated analytical instrument. The data quality indicators include the PARCCS parameters. These indicators are described below. The validation process ensures a completeness of 95% in QA/QC reporting and 100% in sample result reporting.

Precision

Precision is the degree to which a set of measurements, obtained under similar conditions, conforms to itself. Precision data indicate the consistency and reproducibility of field sampling and/or analytical processes. Precision is usually expressed as a percentage difference or standard deviation, in either absolute or relative terms. Overall project precision is measured by the analysis of field sample/duplicate pairs and MS/MSD pairs. The relative percent difference of field duplicates, laboratory duplicates, and MS/MSD pairs will be calculated and evaluated with the limits included in Table 5-1.

Accuracy and Bias

Accuracy is the degree of agreement between a sample result and a reference value. Bias refers to the systematic inaccuracy associated with a measurement process. Analytical accuracy is determined by adding a known concentration of target analyte(s) or surrogate analyte(s) (those with properties that mimic analytes of interest, but unlikely to be found in environmental samples) to a standard reference material or a laboratory control sample consisting of an analyte-free matrix and performing the prescribed method on the reference material or laboratory control sample.

Bias introduced by the sample matrix is determined by adding a known concentration of target analyte(s) or surrogate analyte(s) to an aliquot of field sample, referred to as an MS sample, and performing the prescribed method on the spiked sample aliquot. The percentage recovery of laboratory control samples and MS samples will be evaluated with the percentage limits in Table 5-1.

Representativeness

Representativeness is a qualitative measure of the degree to which a sampling and analysis program reflects the conditions of a site. Representativeness describes the adequacy of the sample collection process and the analysis process, as determined by sample matrix homogeneity and the consistency with which analytical procedures are performed. Method blank results will meet acceptance criteria if no analytes are detected at concentrations greater than half of the LOQ, or 10% of sample results. Representativeness of normal analytical samples will be assessed by the technical lead based on previous detections and the CSM.

Completeness

Completeness is a measure of the amount of valid data collected compared to the expected amount of total data. Overall completeness will be inferred from a records review and documented data validation. Sampling completeness is assessed by evaluating the total number of samples proposed for collection compared to the actual number of samples collected and analyzed. Analytical completeness is evaluated by comparing the number of usable data points collected compared to the total number of data points generated for each analyte and sample.

Comparability

Comparability is the degree to which separate data sets can be represented as similar. The documentation and use of standardized operating procedures in the field and laboratory will help assure the comparability of measurements. Also, field triplicate samples may be collected if directed by USACE, sent to a different laboratory (to be determined), and results compared to the field results. Data will be considered in disagreement if the difference in values exceeds criteria for relative percent difference listed in Table 5-1.

Sensitivity

Sensitivity refers to the ability of an analytical method or instrument to detect target analytes at a specified concentration. The QSM (DOD/DOE, 2019) has defined the following terms associated with the analysis and reporting of environmental data:

DL. The smallest amount or concentration of a substance that can be demonstrated to be different from zero or a blank concentration with 99% confidence. At the DL, the false positive rate (Type I error) is 1%. A DL may be used as the lowest concentration for reliably reporting a detection of a specific analyte in a specific matrix with a specific method with 99% confidence.

Limit of Detection (LOD). The smallest concentration of a substance that must be present in a sample in order to be detected at the DL with 99% confidence. At the LOD, the false negative rate (Type II error) is 1%. An LOD may be used as the lowest concentration for reliably reporting a non-detect of a specific analyte in a specific matrix with a specific method at 99% confidence.

LOQ. The smallest concentration that produces a quantitative result with known and recorded precision and bias. For DOD/DOE projects, the LOQ will be set at or above the concentration of the lowest initial calibration standard and within calibration range.

Reporting Limit. The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

The LOQ will be used to evaluate sensitivity requirements. The applicable groundwater standard for the chemical is presented in Table 5-1.

5.4 ENVIRONMENTAL DATA MANAGEMENT

After review and approval, the analytical and field data will be loaded into the FWDA Electronic Data Management System (EDMS) database. An EDMS (or comparable) database is maintained for all interim groundwater monitoring results from 2008 to present. The sample result electronic data deliverables will be loaded into the automated data review (ADR) software for data validation. After validation, data output files from the ADR (or comparable) software will be exported to the FWDA database. The FWDA database will be used to prepare the validated data table output presented in reporting documents.

5.5 DATA EVALUATION

Groundwater sample laboratory results will be used to evaluate groundwater contaminant conditions at FWDA. The data evaluation will determine groundwater contaminant plume size and migration as well as general groundwater flow conditions. As described in Section 1.2 and Section 1.3, groundwater data generated during groundwater monitoring will be evaluated with respect to cleanup levels described in Attachment 7 of the RCRA permit (NMED, 2015a). The project screening value decision process is presented in Figure 1-1.

5.6 REPORTING

Analytical results will be submitted in a semiannual report prepared in accordance with *General Reporting Requirements for Routine Groundwater Monitoring at RCRA Sites* (NMED, 2003). The interim measures PMR will be submitted to NMED not more than 120 calendar days after the end of the semiannual monitoring period.

The PMR will describe the activities performed and current findings of the investigation. The PMR will include the following:

- Description of field monitoring and maintenance activities performed
- Deviations from work plan
- Evaluation of monitoring results
- DQE results
- Recommendations for subsequent monitoring
- Tabulated results of field data
- Tabulated results of analytical data
- Groundwater elevation maps
- Groundwater contaminant plume maps.

A DQE report will evaluate usability of the data with respect to the project objectives. The project chemist will describe variances, describe rejected data, and present final data qualifiers in the DQE report.

1 **6.0 SCHEDULE**

2 The first sample collection under this Interim Northern Area GWMP took place in April 2008 and
3 has continued each April and October to date. The schedule of planned groundwater sampling will
4 be consistent with the ongoing interim measure schedule.

5 Groundwater elevation data will be collected on a quarterly basis in January, April, July, and
6 October. Groundwater sampling is scheduled semiannually in April and October after measuring
7 groundwater elevations.

7.0 SAMPLING CHANGES FROM PREVIOUS PLAN

The 35 wells installed in 2019 and 2020 (BGMW11, BGMW12, MW13S, MW13D, MW25, MW26, MW27, MW28, MW29, MW30, MW31, MW32, MW33, MW34, MW35, MW36S, MW36D, MW37, MW38, MW39, TMW50, TMW51, TMW52, TMW53, TMW54, TMW55, TMW56, TMW57, TMW58, TMW59, TMW60, TMW61, TMW62, TMW63, and TMW64) were/will be sampled for the full suite of analytical for four consecutive events during 2021 and 2022. Starting in 2023, these wells will only be sampled for analytes based upon proximity towards known contaminant plumes and based on analyte detections during the initial four sampling events. The revised analytical program is listed in Table 5-2 with highlights pertaining to the changes for 2023.

Wells which have been non-detect for a given analyte group in four or more of the most recent sampling events (except for VOCs) are proposed for removal of that analytical group from the well, unless the well is in proximity to an existing plume for that analyte group. Although there are data quality exceptions for specific analytes for SVOCs, explosives, PCBs, pesticides, and herbicides, removal of these analytical groups for specific wells is proposed if no detections of any analytes for these analytical groups are reported.

Per NMED's disapproval letter, dated July 19, 2022, wells with detections of explosives or TPH-DRO are proposed to be analyzed for SVOCs in the subsequent sampling event.

Due to potential variability observed in nitrite sample results in three wells (MW27, MW35, and TMW59) during the Northern Area RFI, duplicate samples of these three wells will be collected during the April 2023 sampling event and submitted to a second laboratory for duplicate analysis for nitrite. The results of the split sample analyses will be reported in the January-June 2023 PMR.

No changes are proposed for VOCs, TPH-DRO, TPH-GRO or metals analyses.

Proposed changes to the analytical program for alluvial wells are described below:

- **BGMW01, BGMW02, BGMW03:** Remove analyses for explosives, SVOCs, and pesticides based on no detections for four or more sampling events.
- **BGMW11, BGMW12, BGMW13D, BGMW13S:** Remove analyses for pesticides, PCBs, and herbicides if no detections are reported during the 2021-2022 sampling events.
- **FW31:** Remove analyses for explosives, SVOCs, and pesticides based on no detections for four or more sampling events.
- **MW01, MW02:** Remove analyses for explosives, perchlorate, and pesticides based on no detections for four or more sampling events.
- **MW03:** Remove analyses for explosives, and perchlorate based on no detections for four or more sampling events.
- **MW18D:** Remove analyses for explosives and perchlorate based on no detections for four or more sampling events.

- 1 • **MW20:** Remove analyses for explosives, SVOCs, and pesticides based on no detections
2 for four or more sampling events.
- 3 • **MW22D:** Remove analyses for explosives, SVOCs, and pesticides based on no detections
4 for four or more sampling events.
- 5 • **MW23:** Remove analyses for explosives, major anions, SVOCs, and pesticides based on
6 no detections for four or more sampling events.
- 7 • **MW24:** Remove analyses for explosives, major anions, perchlorate, SVOCs, and
8 pesticides based on no detections for four or more sampling events.
- 9 • **MW25 through MW39:** Remove analyses for pesticides, PCBs, and herbicides if no
10 detections are reported during the 2021-2022 sampling events.
- 11 • **SMW01:** Remove analyses for explosives, major anions, perchlorate, and SVOCs based
12 on no detections for four or more sampling events.
- 13 • **TMW01:** Remove analysis for explosives based on no detections for four or more sampling
14 events.
- 15 • **TMW03, TMW04, TMW06:** Remove analysis for SVOCs based on no detections for four
16 or more sampling events.
- 17 • **TMW07:** Remove analysis for explosives based on no detections for four or more sampling
18 events.
- 19 • **TMW08:** Remove analyses for perchlorate and pesticides based on no detections for four
20 or more sampling events.
- 21 • **TMW10:** Remove analyses for explosives and perchlorate based on no detections for four
22 or more sampling events.
- 23 • **TMW11:** Add analyses for SVOCs because the well is monitored for explosives.
- 24 • **TMW15:** Remove analyses for explosives, perchlorate, and SVOCs based on no detections
25 for four or more sampling events.
- 26 • **TMW21:** Remove analysis for explosives based on no detections for four or more sampling
27 events.
- 28 • **TMW22:** Remove analyses for explosives, perchlorate, and SVOCs based on no detections
29 for four or more sampling events.
- 30 • **TMW23:** Remove analyses for perchlorate and pesticides based on no detections for four
31 or more sampling events. Add analyses for SVOCs because the well is monitored for
32 explosives.
- 33 • **TMW24:** Remove analyses for explosives, perchlorate, and pesticides based on no
34 detections for four or more sampling events.

- 1 • **TMW25:** Remove analysis for explosives based on no detections for four or more sampling
2 events.
- 3 • **TMW26:** Remove analyses for explosives and perchlorate based on no detections for four
4 or more sampling events.
- 5 • **TMW27:** Remove analysis for perchlorate based on no detections for four or more
6 sampling events.
- 7 • **TMW29:** Remove analysis for explosives based on no detections for four or more sampling
8 events.
- 9 • **TMW31S:** Remove analyses for explosives, SVOCs, and pesticides based on no detections
10 for four or more sampling events.
- 11 • **TMW33:** Remove analysis for SVOCs based on no detections for four or more sampling
12 events.
- 13 • **TMW35:** Remove analyses for SVOCs, and pesticides based on no detections for four or
14 more sampling events.
- 15 • **TMW39S:** Remove analyses for explosives, SVOCs, and pesticides based on no detections
16 for four or more sampling events.
- 17 • **TMW40S:** Remove analyses for pesticides based on no detections for four or more
18 sampling events.
- 19 • **TMW41:** Remove analyses for pesticides based on no detections for four or more sampling
20 events.
- 21 • **TMW43:** Remove analyses for pesticides based on no detections for four or more sampling
22 events.
- 23 • **TMW44:** Remove analyses for explosives, SVOCs, and pesticides based on no detections
24 for four or more sampling events.
- 25 • **TMW45:** Remove analyses for explosives, perchlorate, SVOCs, and pesticides based on
26 no detections for four or more sampling events.
- 27 • **TMW46:** Remove analyses for explosives, SVOCs, and pesticides based on no detections
28 for four or more sampling events.
- 29 • **TMW47:** Remove analyses for perchlorate, and pesticides based on no detections for four
30 or more sampling events.
- 31 • **TMW57, TMW59, TMW61, TMW62:** Remove analyses for pesticides, PCBs, and
32 herbicides if no detections are reported during the 2021-2022 sampling events.

33 Proposed changes to the analytical program for bedrock wells are described below:

- 1 • **BGMW07:** Remove analyses for explosives, major anions, perchlorate, SVOCs,
2 pesticides, and PCBs based on no detections for four or more sampling events.
- 3 • **BGMW08, BGMW09, BGMW10:** Remove analyses for explosives, perchlorate, SVOCs,
4 pesticides, and PCBs based on no detections for four or more sampling events.
- 5 • **TMW14A:** Remove analyses for explosives, major anions, and SVOCs based on no
6 detections for four or more sampling events.
- 7 • **TMW16:** Remove analyses for explosives, perchlorate, and SVOCs based on no detections
8 for four or more sampling events.
- 9 • **TMW17:** Remove analyses for major anions based on no detections for four or more
10 sampling events.
- 11 • **TMW18:** Remove analyses for explosives, perchlorate, and SVOCs based on no detections
12 for four or more sampling events.
- 13 • **TMW19:** Remove analyses for explosives, perchlorate, and SVOCs based on no detections
14 for four or more sampling events.
- 15 • **TMW30:** Remove analyses for pesticides based on no detections for four or more sampling
16 events.
- 17 • **TMW31D, TMW32:** Remove analyses for explosives, SVOCs, and pesticides based on
18 no detections for four or more sampling events.
- 19 • **TMW36:** Remove analyses for explosives, SVOCs, and pesticides based on no detections
20 for four or more sampling events.
- 21 • **TMW37:** Remove analyses for explosives, perchlorate, SVOCs, and pesticides based on
22 no detections for four or more sampling events.
- 23 • **TMW38:** Remove analyses for pesticides based on no detections for four or more sampling
24 events.
- 25 • **TMW39D, TWM40D, TMW48:** Remove analyses for explosives, SVOCs, and pesticides
26 based on no detections for four or more sampling events.
- 27 • **TMW49:** Remove analyses for pesticides based on no detections for four or more sampling
28 events.
- 29 • **TMW50, TMW51, TMW52, TMW53, TMW55, TMW58, TMW63, TMW64:** Remove
30 analyses for pesticides, PCBs, and herbicides if no detections are reported during the
31 2021–2022 sampling events.

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FIGURES

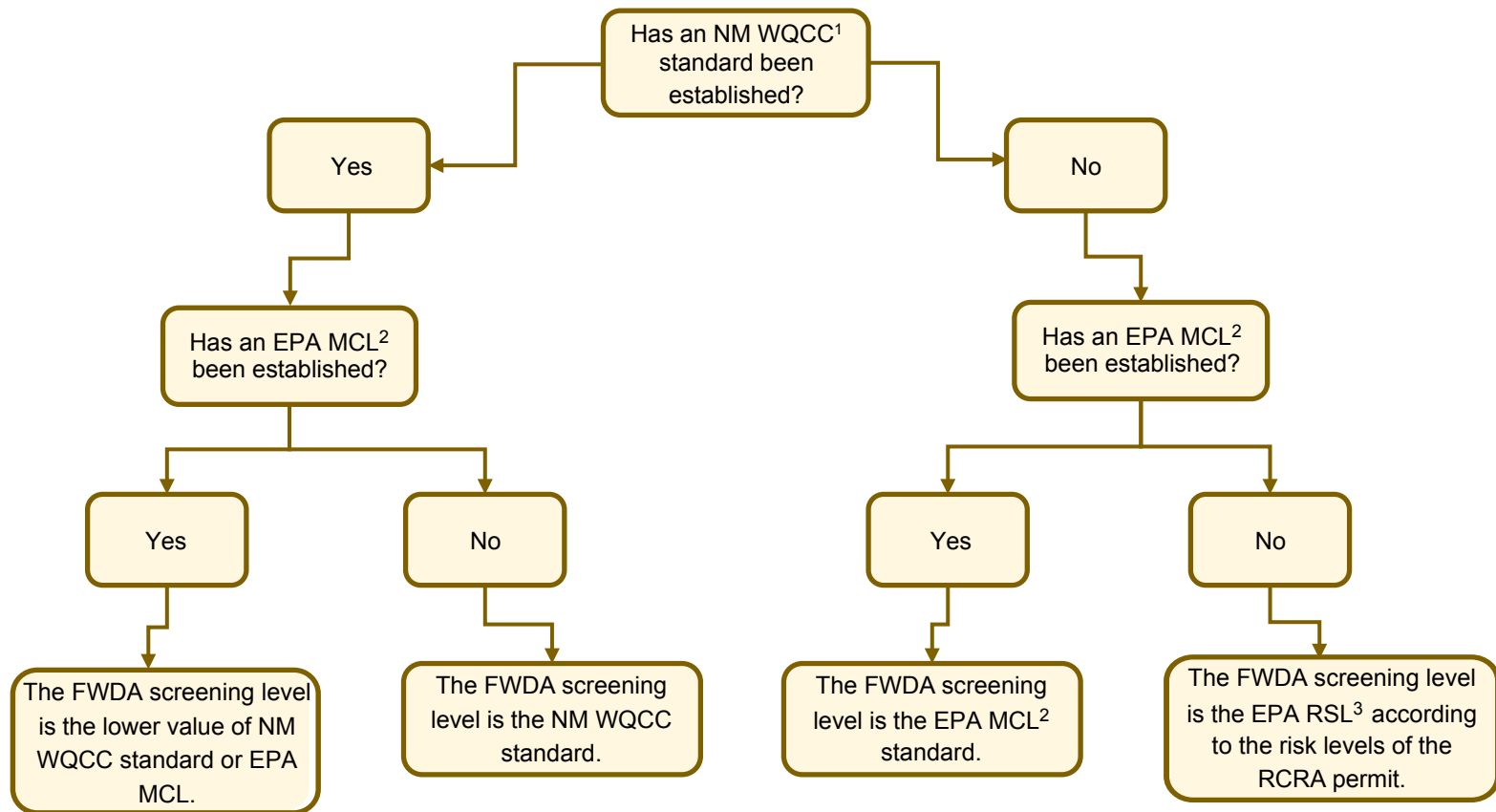


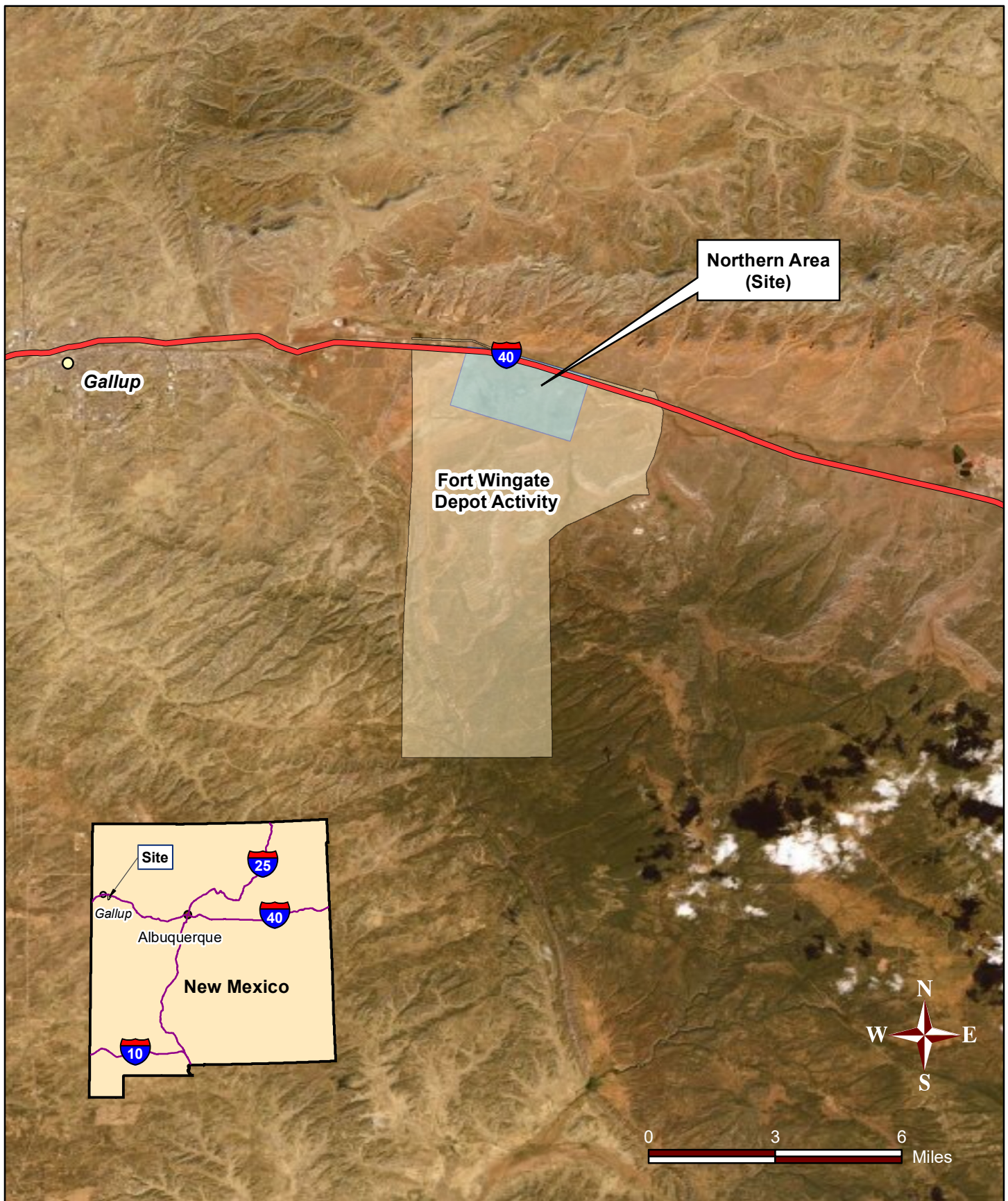
FIGURE 1-1
PROJECT SCREENING VALUE FLOW CHART
 Interim Northern Area Groundwater Monitoring Plan
 Fort Wingate Depot Activity, McKinley County, New Mexico

NOTES:

¹ New Mexico Water Quality Control Commission (NM WQCC) standards in New Mexico Administrative Code 20.6.2.4103.

² U.S. Environmental Protection Agency (EPA) drinking water maximum contaminant level (MCL) under 40 Code of Federal Regulations Parts 141 and 143.

³ Pending the development and approval of cleanup criteria, the EPA regional screening levels (based on a cancer risk of 10^{-5} and a non-cancer hazard index of 1.0) are used as temporary screening criteria in accordance with the risk criteria of the RCRA permit. The lower of the cancer and non-cancer screening levels will be used. Perchlorate screening levels are selected from the May 2020 EPA MCL.



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SITE LOCATION MAP

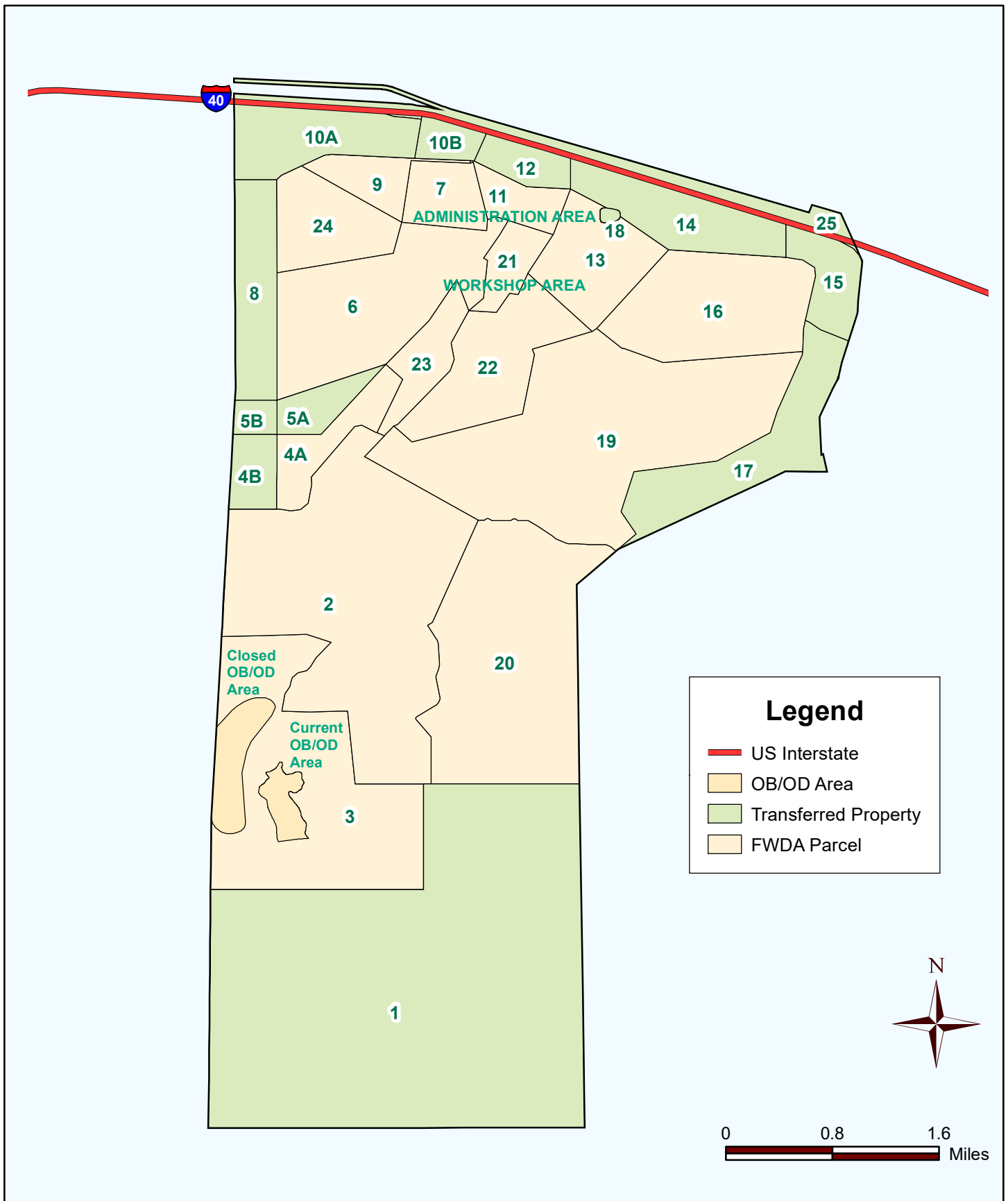
Fort Wingate Depot Activity
McKinley County, New Mexico

Project No.: Eco-18-1237

Dated October 2019

FIGURE

1-2



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SITE PARCEL MAP

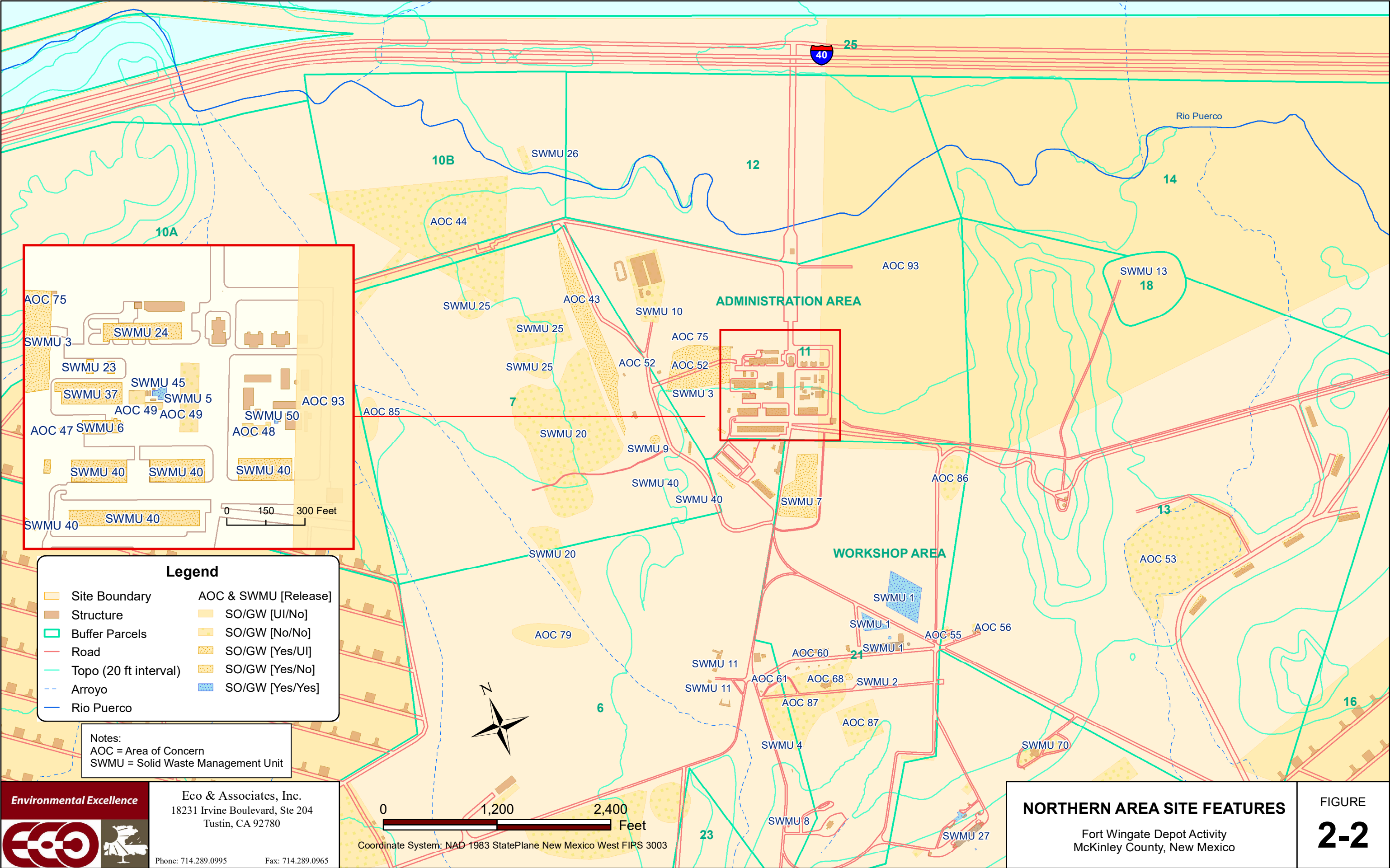
Fort Wingate Depot Activity
McKinley County, New Mexico

Project No.: Eco-18-1237

Dated October 2019

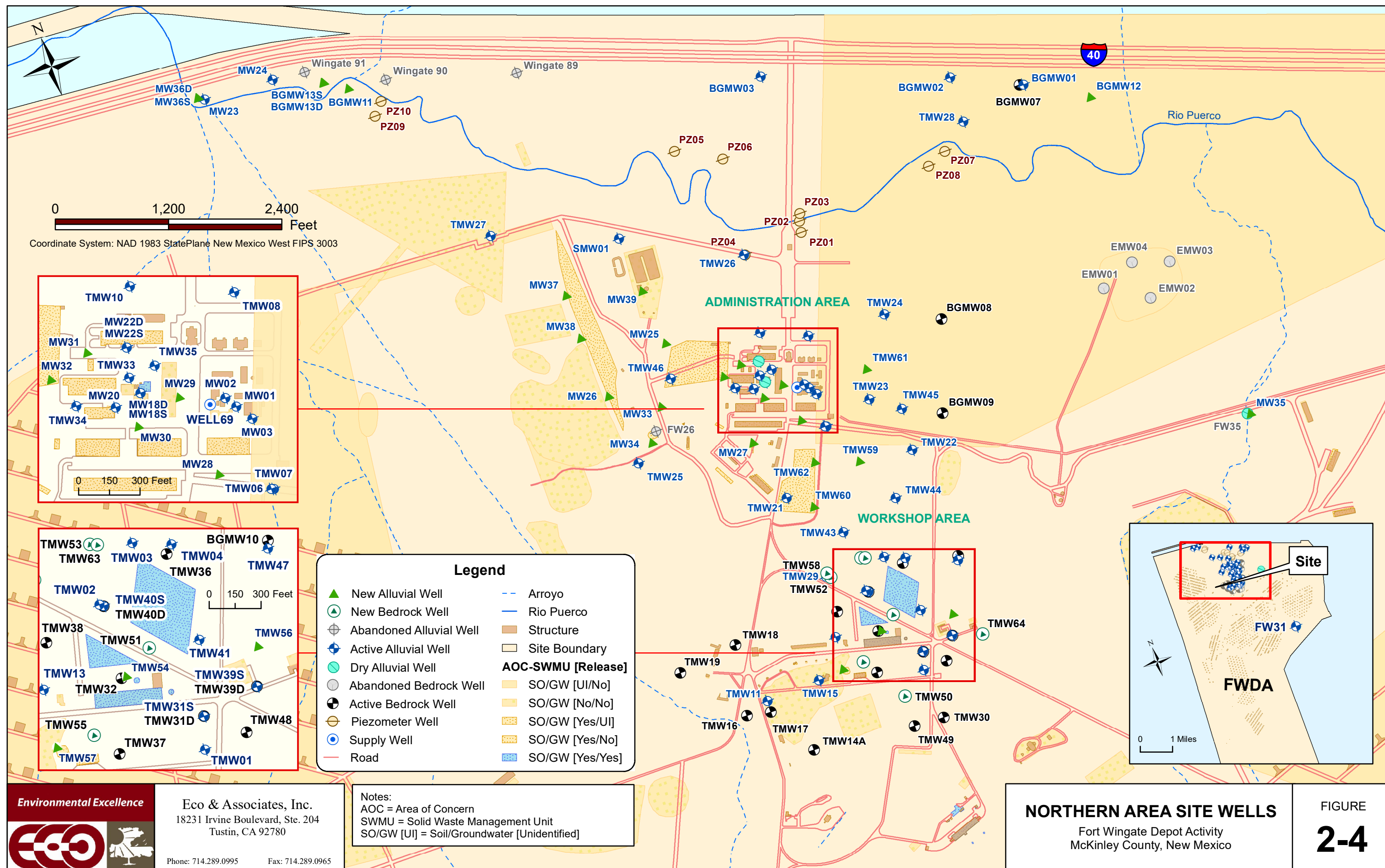
FIGURE

2-1



NORTHERN AREA SITE FEATURES
 Fort Wingate Depot Activity
 McKinley County, New Mexico

FIGURE 2-2



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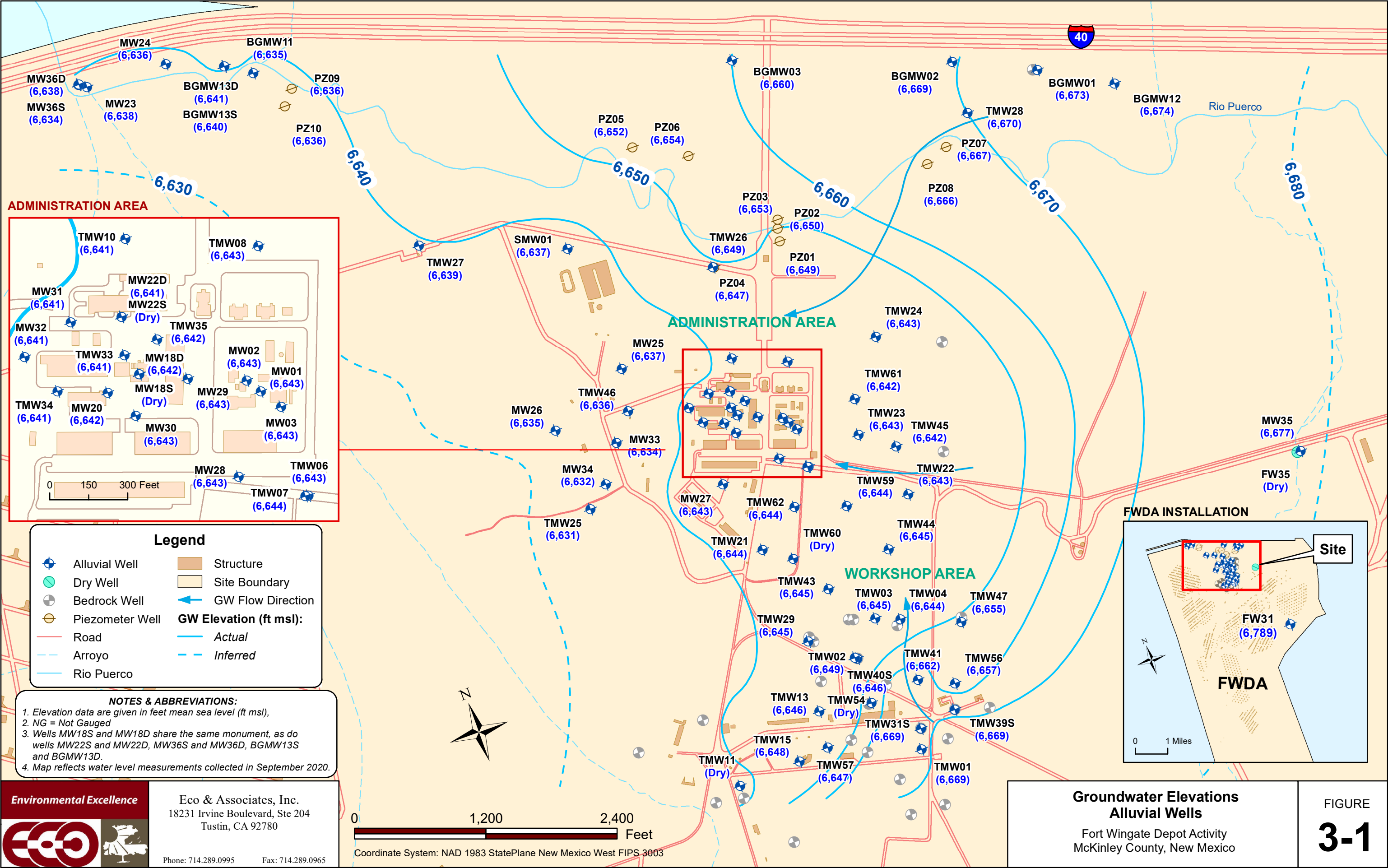


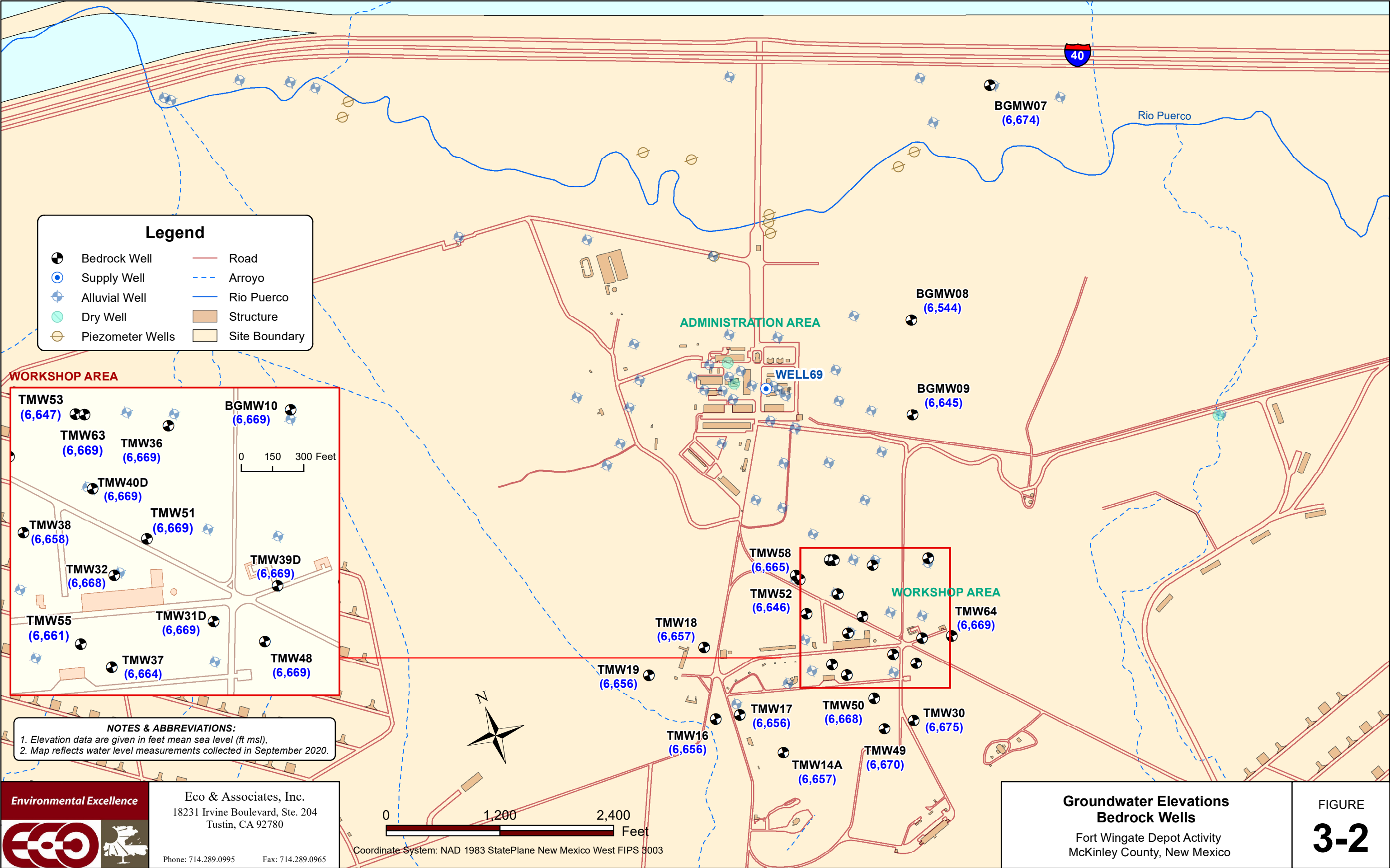
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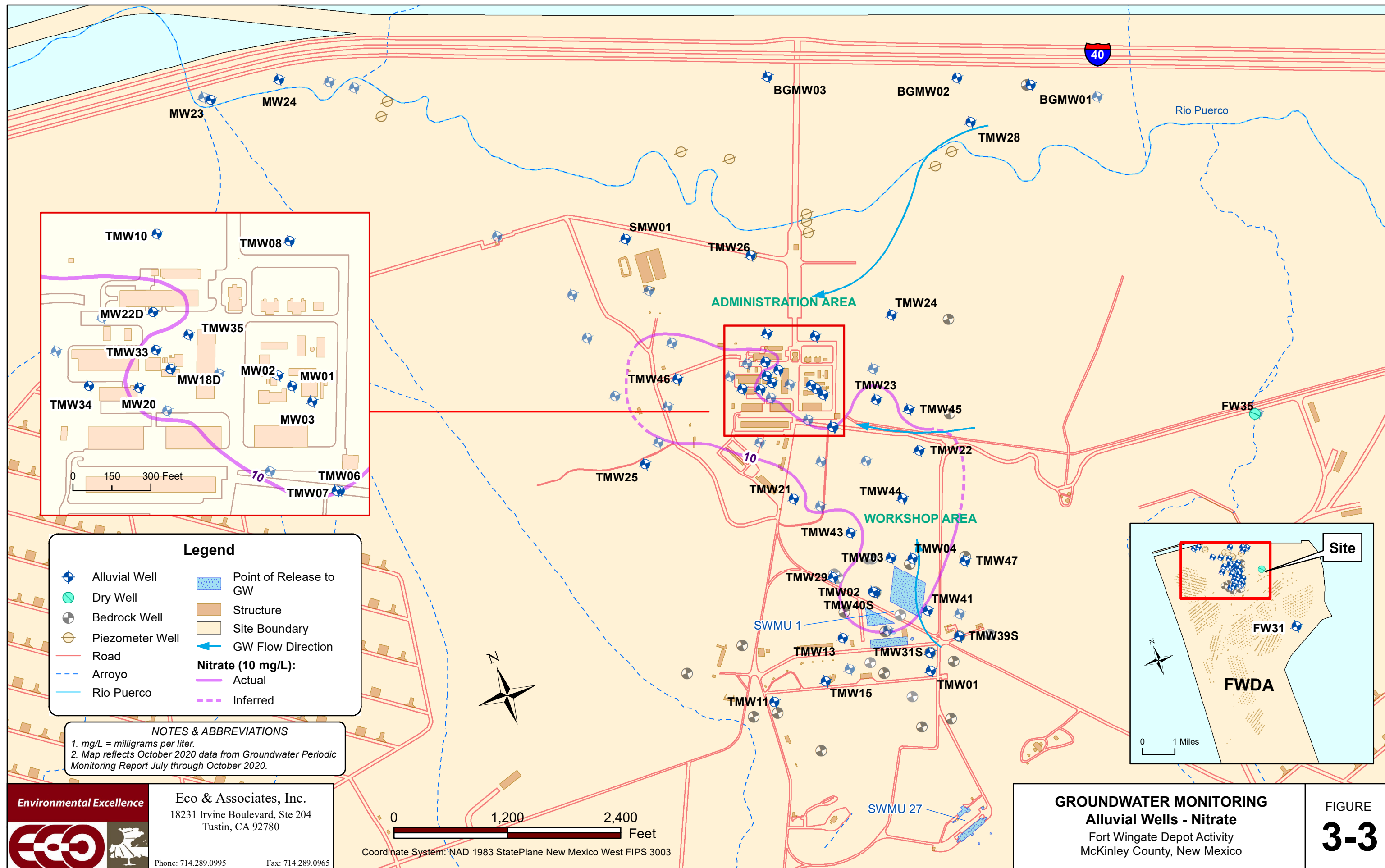
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NORTHERN AREA SITE WELLS
Fort Wingate Depot Activity
McKinley County, New Mexico

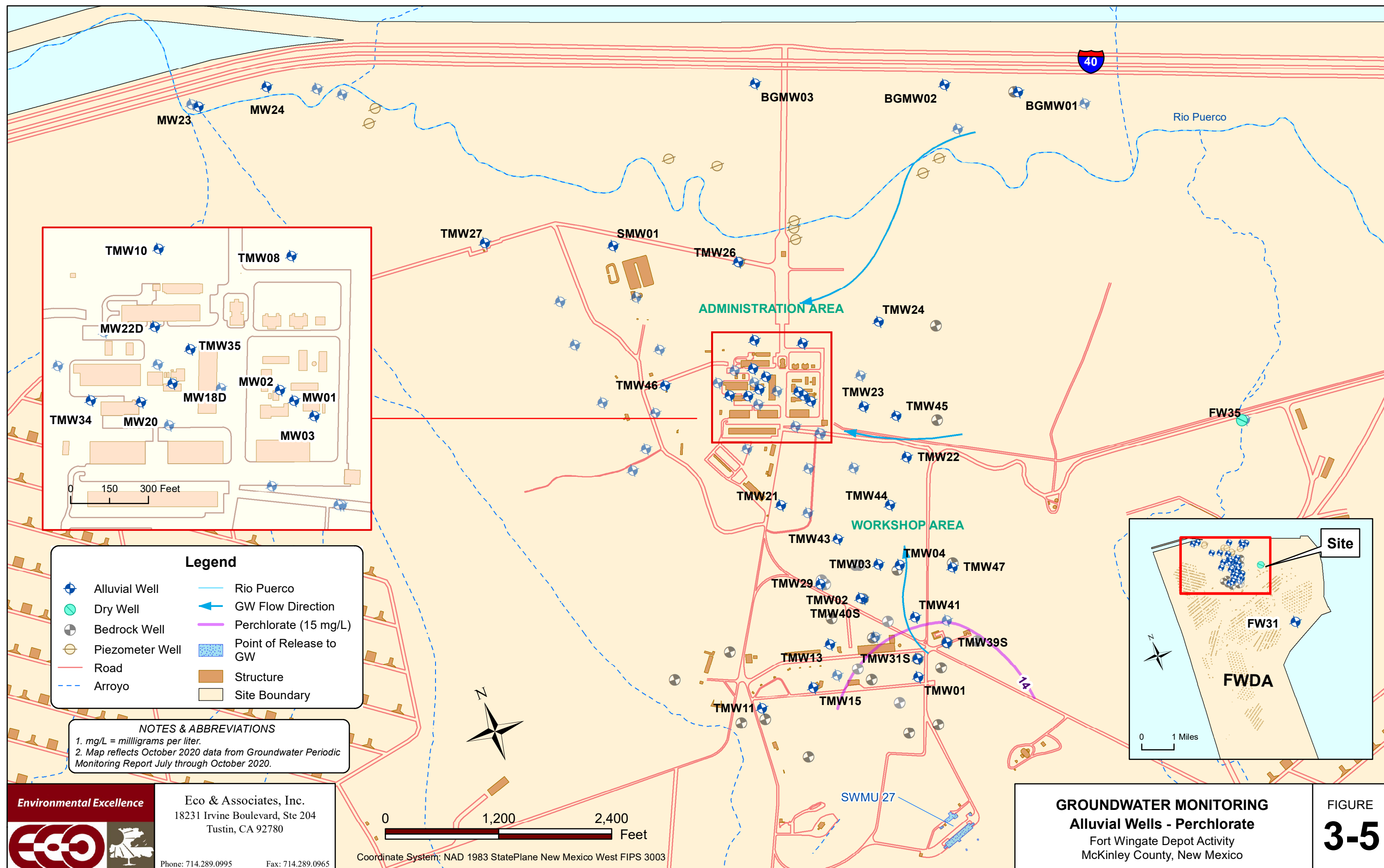
FIGURE
2-4

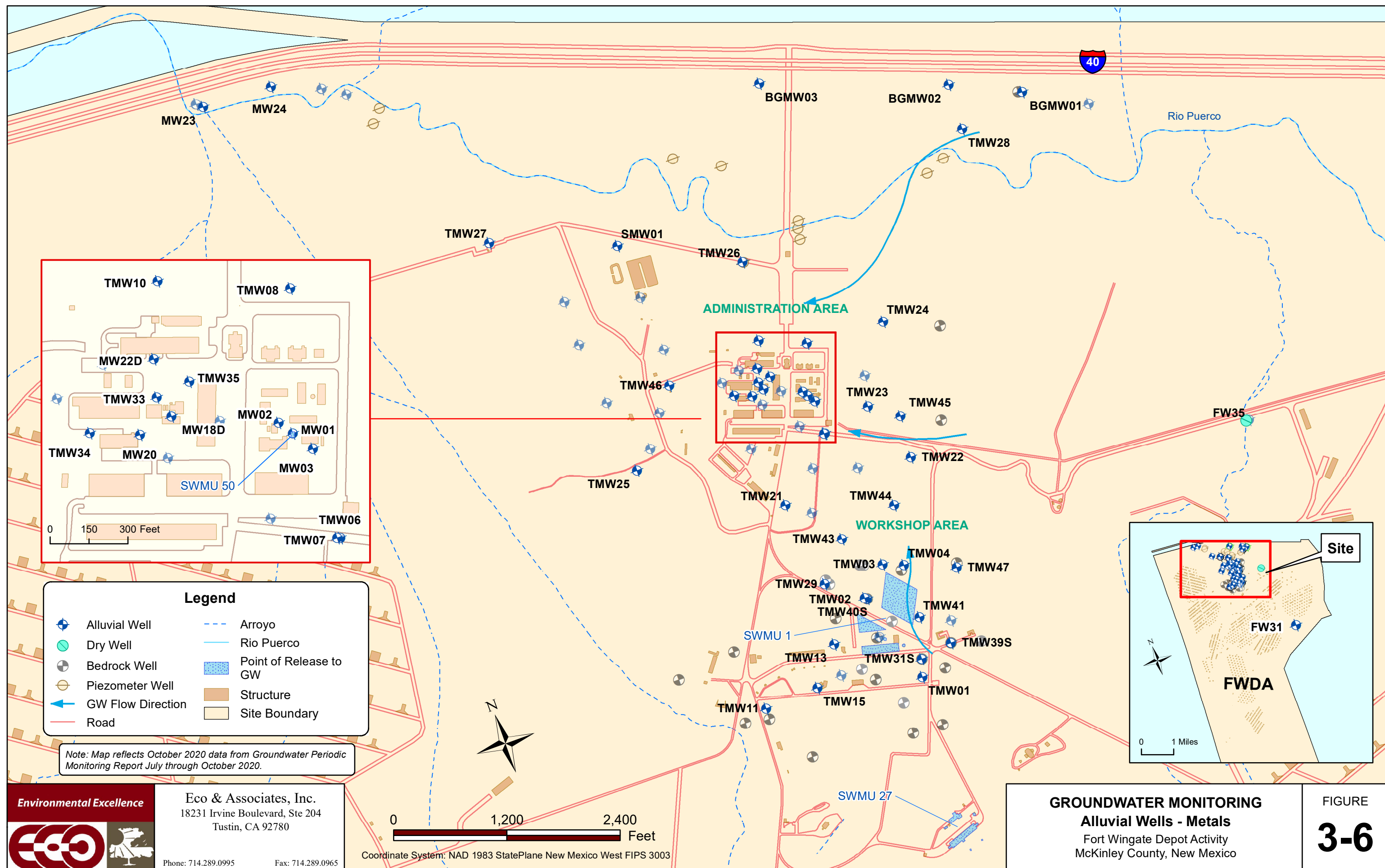






GROUNDWATER MONITORING
Alluvial Wells - Nitrate
 Fort Wingate Depot Activity
 McKinley County, New Mexico





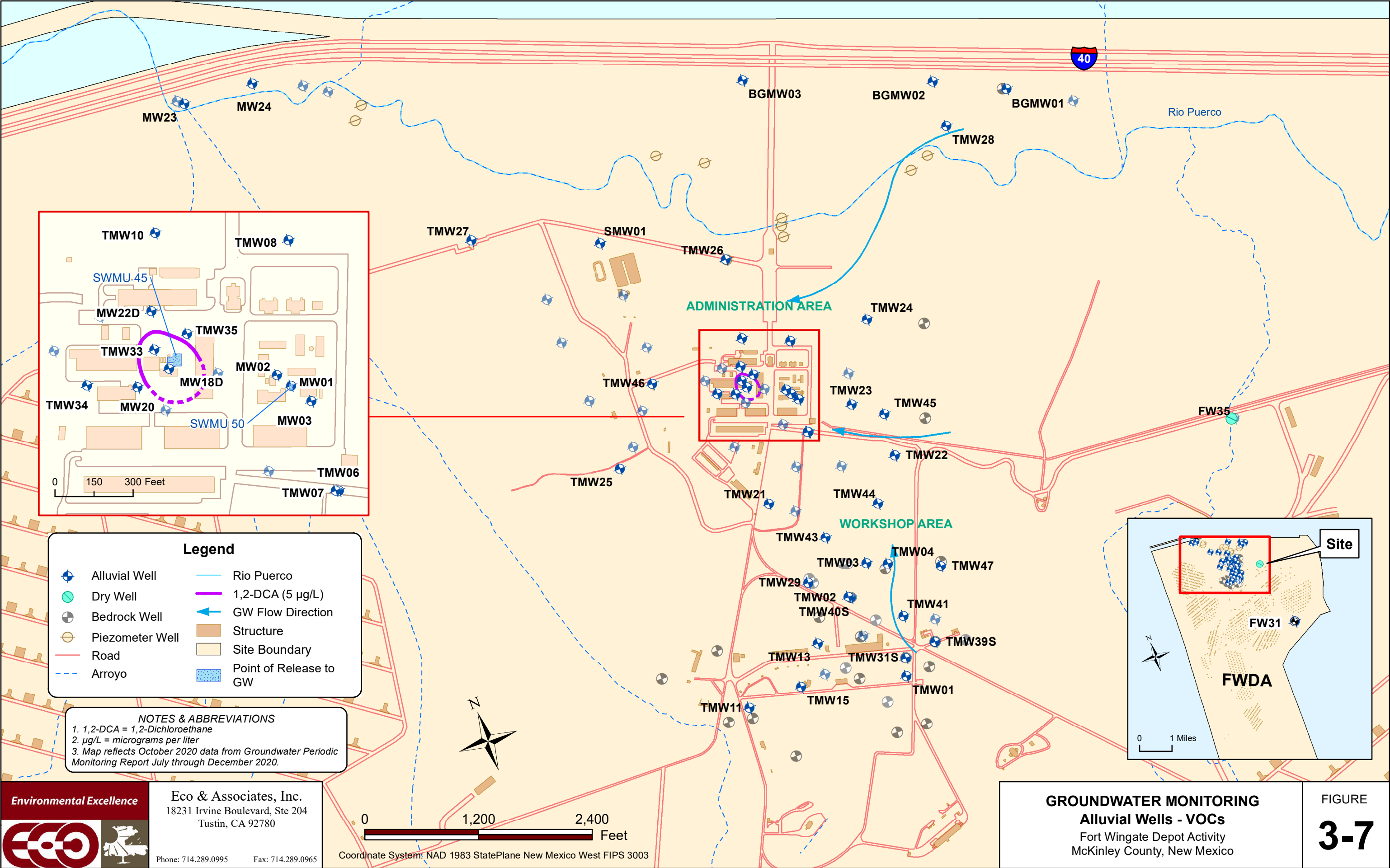
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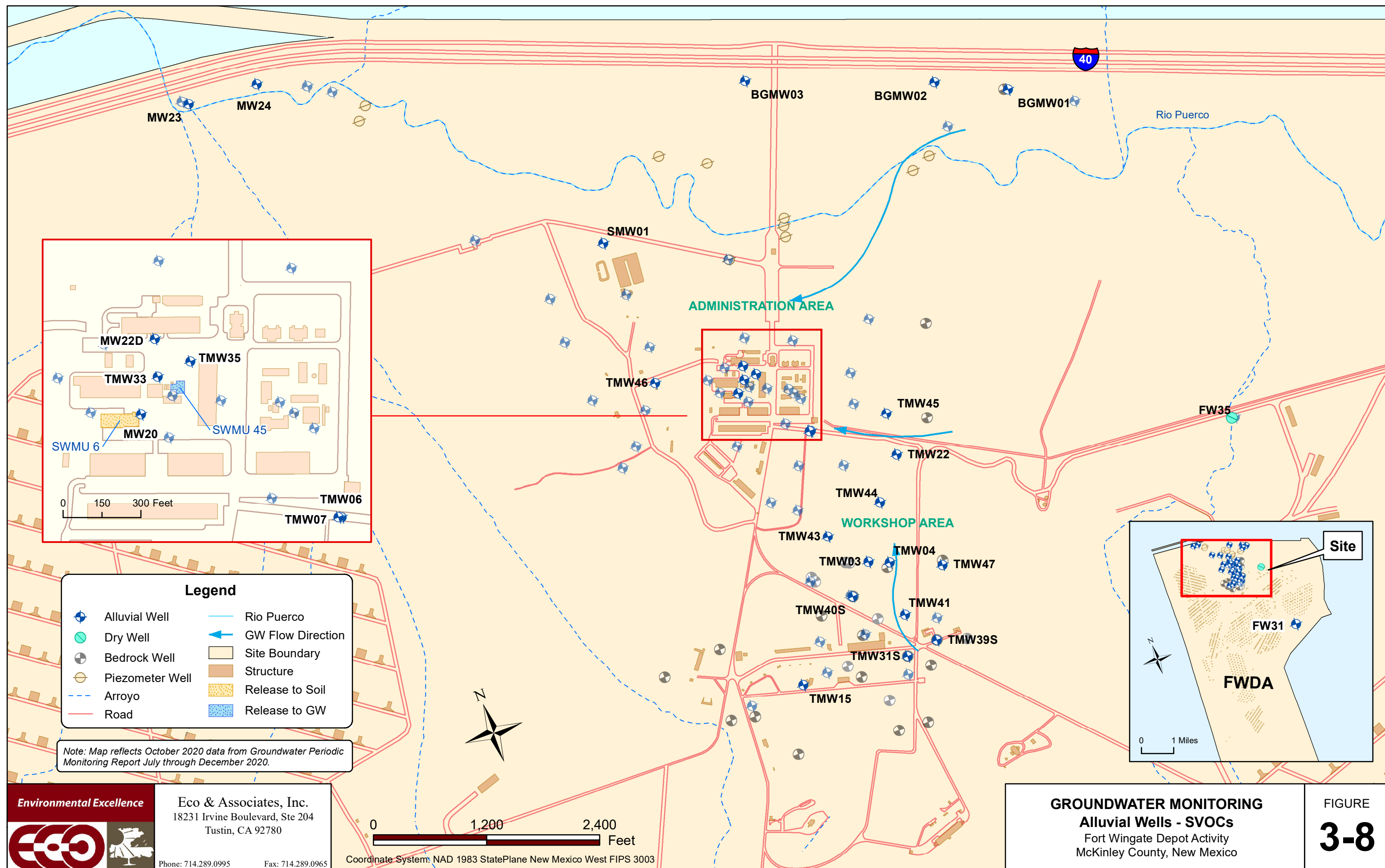
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GROUNDWATER MONITORING
Alluvial Wells - Metals
 Fort Wingate Depot Activity
 McKinley County, New Mexico

FIGURE
3-6



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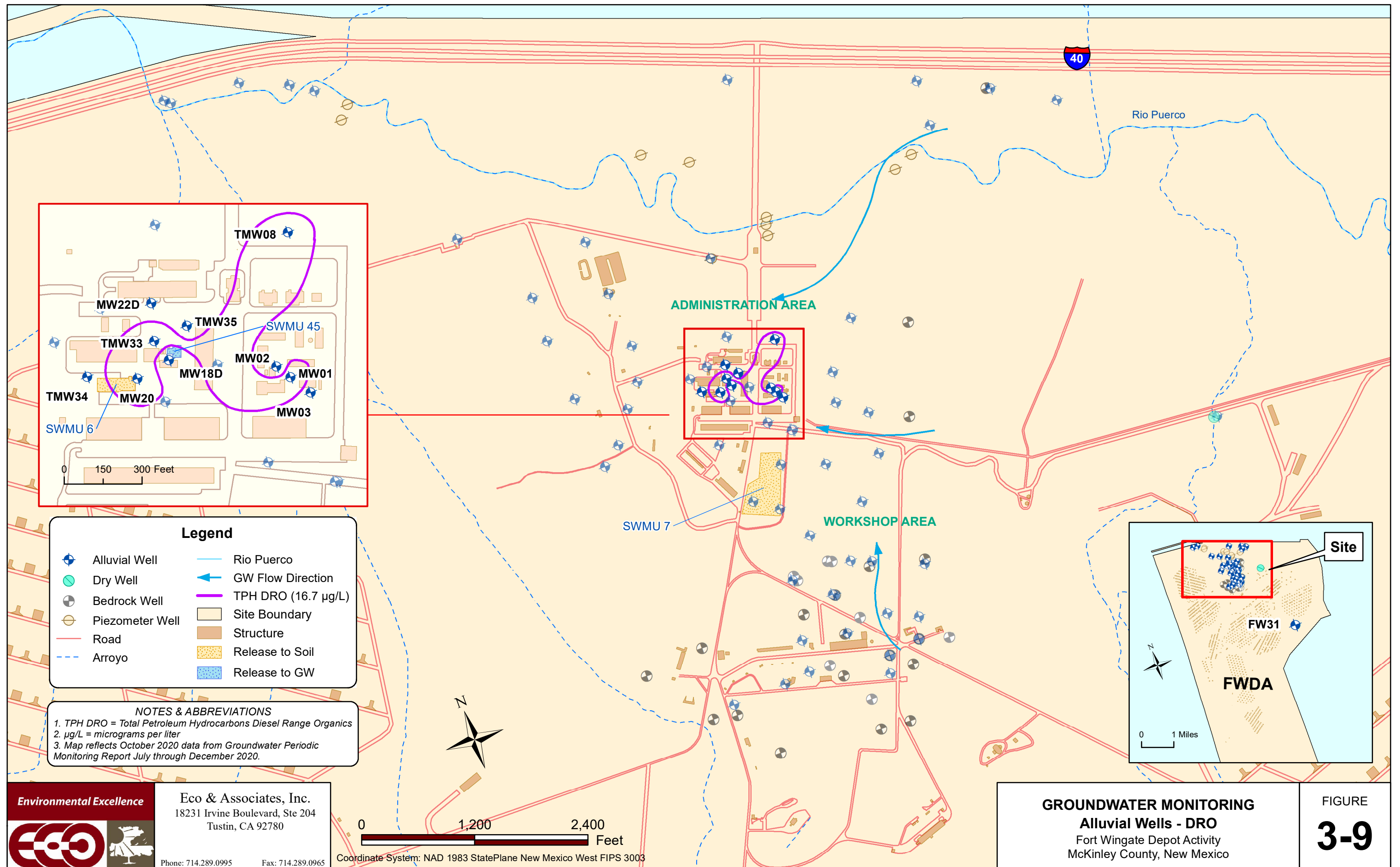


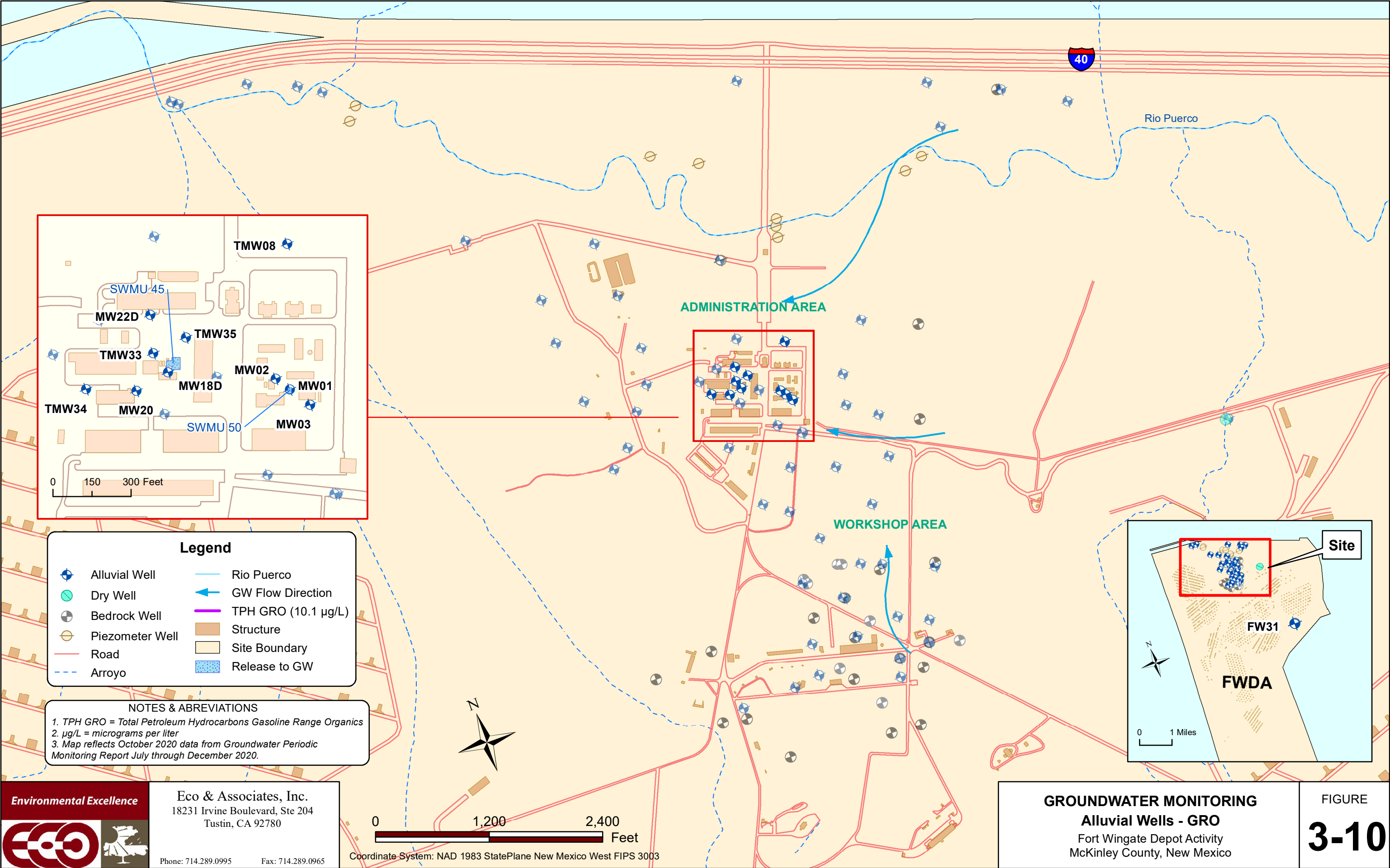
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GROUNDWATER MONITORING
Alluvial Wells - SVOCs
Fort Wingate Depot Activity
McKinley County, New Mexico





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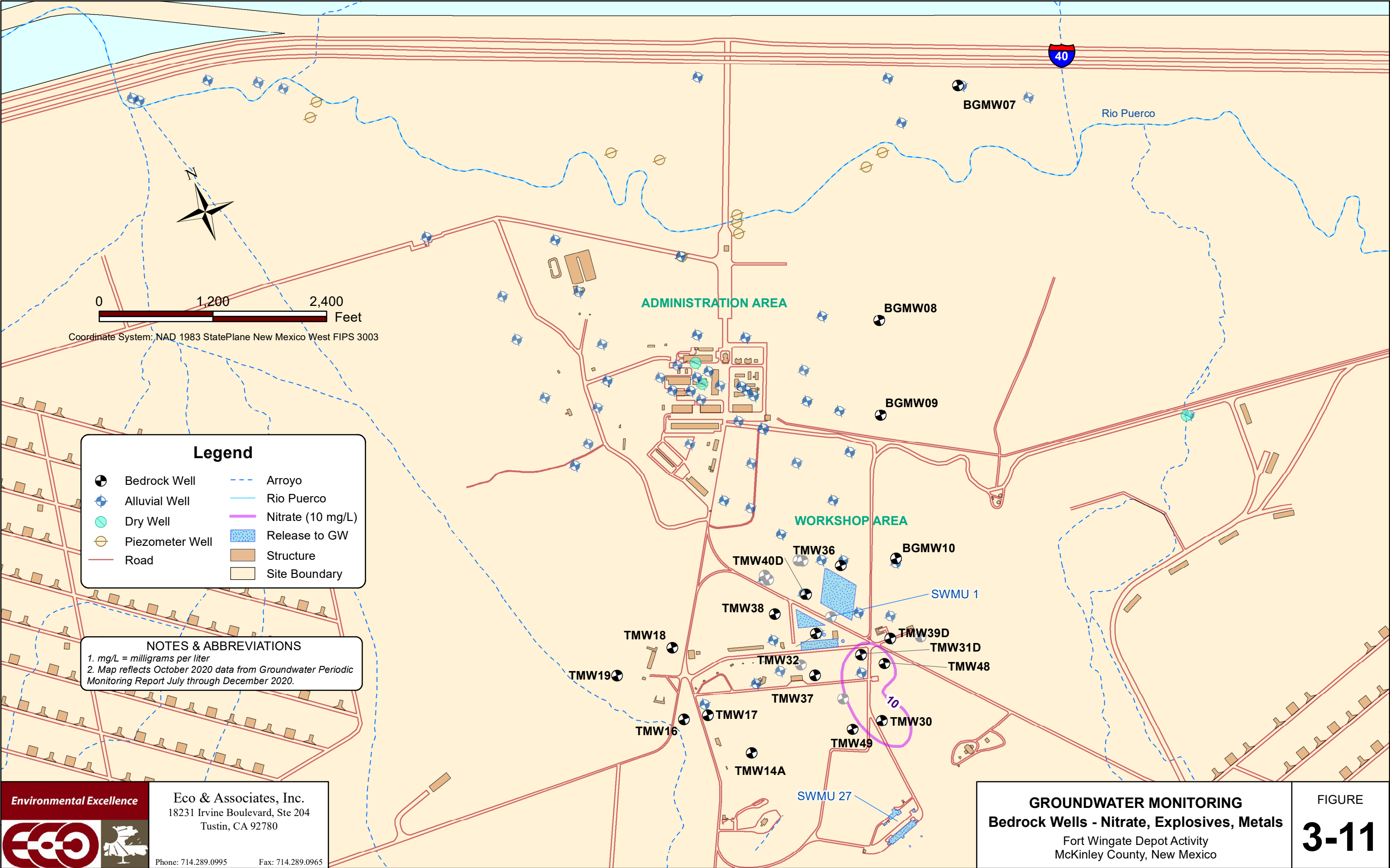
GROUNDWATER MONITORING

Alluvial Wells - GRO

Fort Wingate Depot Activity
McKinley County, New Mexico

FIGURE

3-10

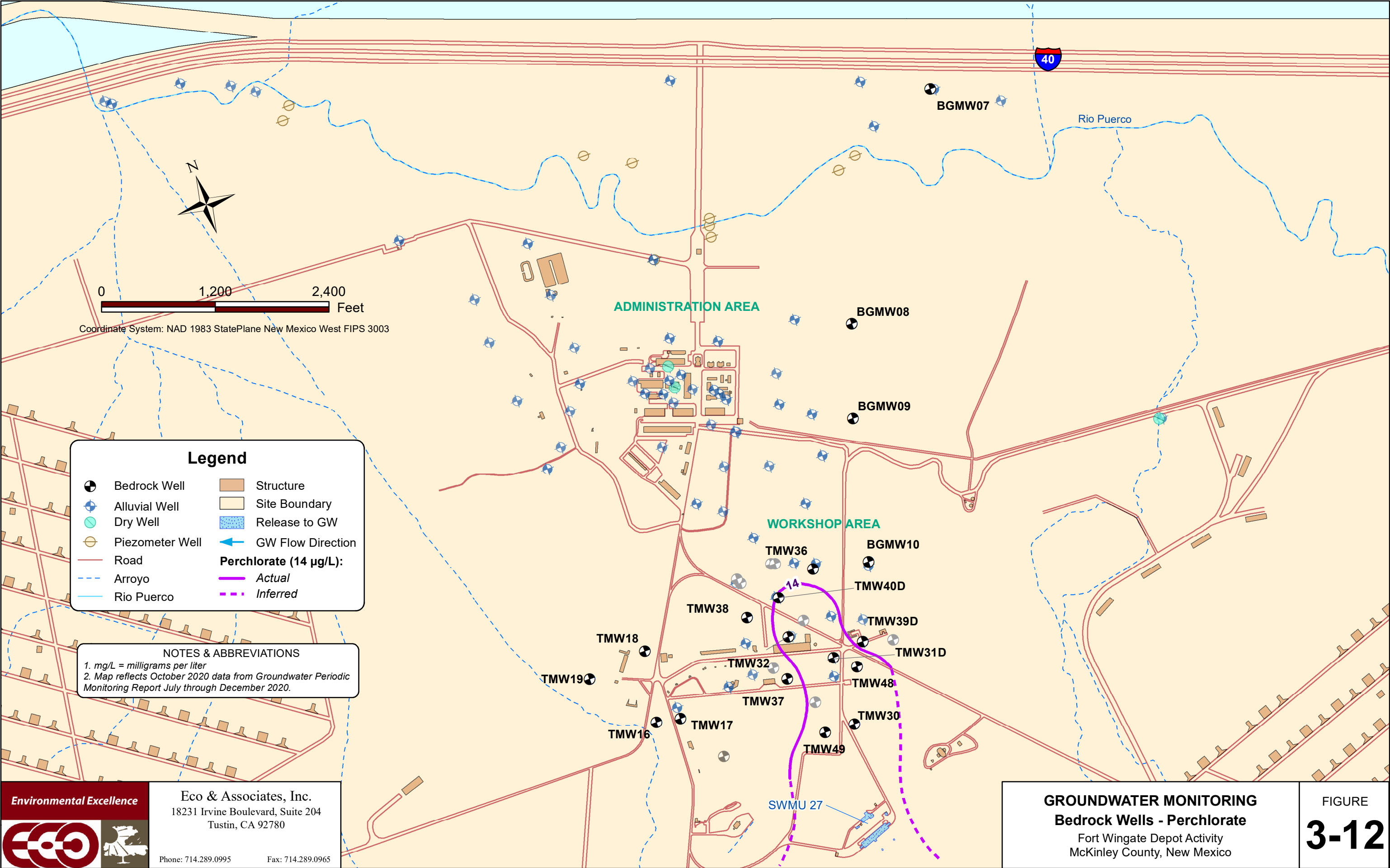


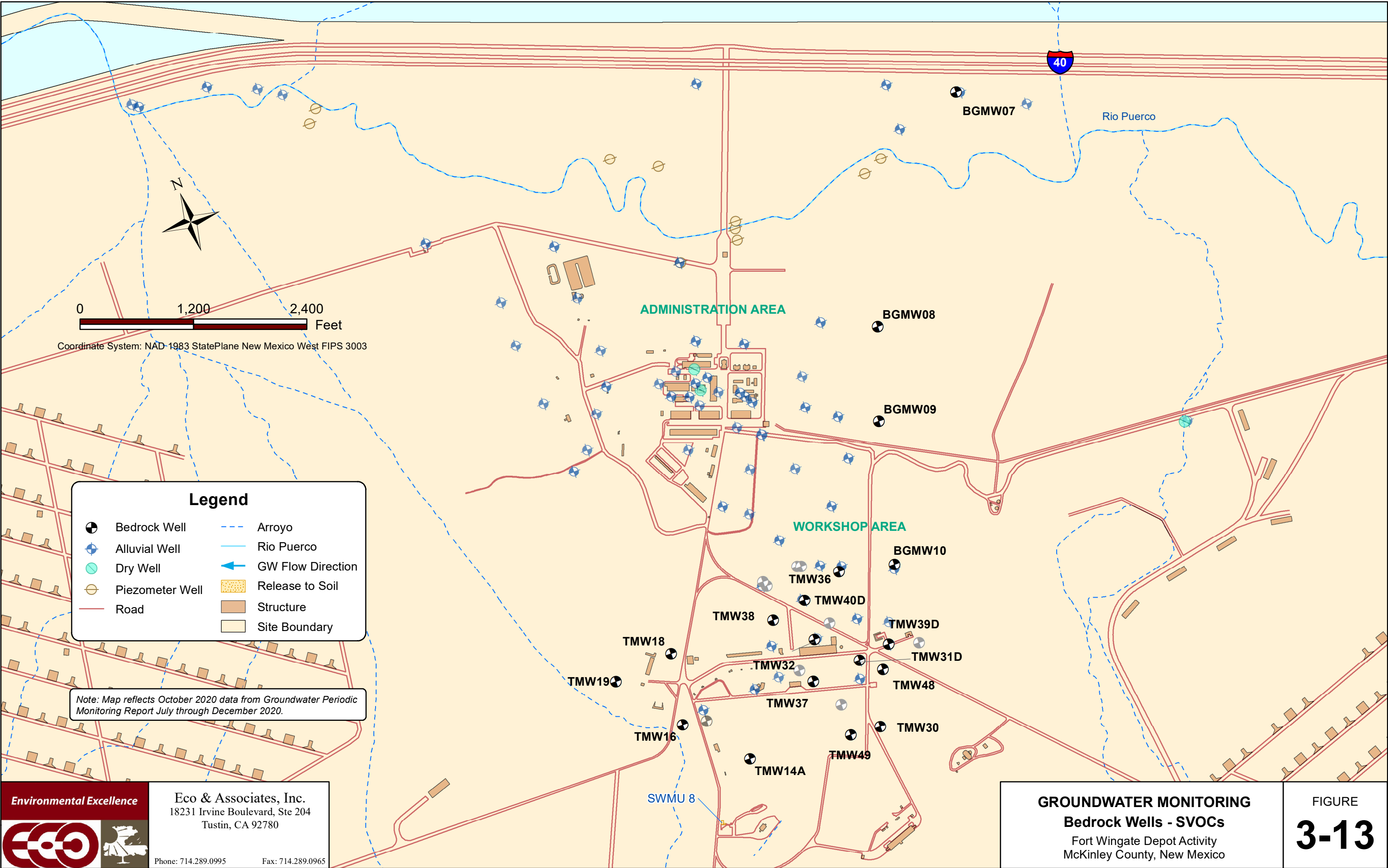
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TABLES

TABLE 2-1: NORTHERN AREA GROUNDWATER WELL CONSTRUCTION DETAILS
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Well ID	FWDA Parcel	Date Installed	Drilling Method	PREVIOUS SURVEY DATA (OLD)				OCT. 2019 SURVEY DATA (NEW)				Well Depth (ft bgs)	Boring Diameter (in)	Casing Diameter (in)	Casing/Screen Type	Screen Length (ft)	Screened Interval (ft bgs)	Screened Interval (ft amsl)	Status	Screened Formation	Description
				NORTHING ^a	EASTING ^a	GROUND ELEVATION (ft amsl) ^b	POINT ELEVATION (ft amsl) ^b	NORTHING ^a	EASTING ^a	GROUND ELEVATION (ft amsl) ^b	POINT ELEVATION (ft amsl) ^b										
BGMW01	14	02/06/2012	HSA	1645977.85	2501983.61	6690.28	6692.68	1645977.80	2501983.54	6690.82	6693.23	33	8	2.5	PVC	20.0	12.5 – 32.5	6,678.32 – 6,658.32	Active	Alluvium	Sandy Silt
BGMW02	14	02/09/2012	HSA	1646314.67	2501276.54	6689.20	6691.99	1646314.79	2501276.51	6689.73	6692.57	34	8	2.5	PVC	20.0	13.5 – 33.5	6,676.23 – 6,656.23	Active	Alluvium	Silt/Sand/Clay
BGMW03	12	02/05/2012	HSA	1647012.12	2499392.83	6677.79	6680.57	1647015.35	2499394.46	6676.63	6679.39	29	8	2.5	PVC	20.0	8.5 – 28.5	6,668.13 – 6,648.13	Active	Alluvium	Clay
BGMW07	14	22/03/2018	Sonic	1645991.80	2501943.17	6691.63	6691.63	1645985.40	2501940.79	6689.77	6692.03	300	8	2	PVC	40.0	215 – 255	6,474.77 – 6,434.77	Active	Bedrock	Silt/Sand/Clay
BGMW08	11	23/03/2018	Sonic	1643942.73	2500318.10	6685.02	6685.02	1643937.41	2500318.25	6681.72	6683.42	275	8	2	PVC	20.0	165 – 185	6,516.72 – 6,496.72	Active	Bedrock	Silt/Sand/Clay
BGMW09	11	24/03/2018	Sonic	1642995.48	2499987.66	6692.27	6692.27	1642989.21	2499987.69	6689.83	6692.01	220	8	2	PVC	30.0	106 – 136	6,583.83 – 6,553.83	Active	Bedrock	Silt/Sand/Clay
BGMW10	13	25/03/2018	Sonic	1641517.67	2499626.14	6701.49	6701.49	1641512.13	2499625.34	6699.50	6701.83	150	8	2	PVC	30.0	106 – 136	6,593.50 – 6,563.50	Active	Bedrock	Silt/Sand/Clay
BGMW11	10	07/23/2019	Sonic	–	–	–	–	1648394.59	2495240.70	6653.27	6655.96	40	6	2	PVC	20.0	20 – 40	6,633.27 – 6,613.27	Active	Alluvium	Silt/Sand/Clay
BGMW12	10	07/23/2019	Sonic	–	–	–	–	1645620.83	2502603.45	6692.40	6695.21	32	6	2	PVC	20.0	12 – 32	6,680.40 – 6,660.40	Active	Alluvium	Silt/Sand/Clay
BGMW13S	10	09/14/2019	HSA	–	–	–	–	1648541.90	2495015.20	6659.05	6661.97	69	8	2	PVC	20.0	49 – 69	6,610.05 – 6,590.05	Active	Alluvium	Silt/Sand/Clay
BGMW13D	10	09/12/2019	Sonic	–	–	–	–	1648543.12	2495010.21	6659.08	6661.83	104	6	2	PVC	20.0	84 – 104	6,575.08 – 6,555.08	Active	Alluvium	Sand/Clay/Gravelly Sand
EMW01	18	07/14/2004	HSA	1643655.61	2502045.53	6716.06	6718.38	–	–	–	–	120.7	7.8	2	PVC	15.0	105 – 120	6,611.06 – 6,596.06	Abandoned	Abandoned	Siltstone/Claystone
EMW02	18	07/19/2004	HSA/AR	1643391.22	2502476.99	6699.94	6702.49	–	–	–	–	120	6	2	PVC	15.0	93 – 108	6,606.94 – 6,591.94	Abandoned	Abandoned	Siltstone/Claystone
EMW03	18	07/21/2004	HSA/AR	1643687.88	2502800.30	6698.63	6701.09	–	–	–	–	100	6	2	PVC	15.0	78 – 93	6,620.63 – 6,605.63	Abandoned	Abandoned	Siltstone
EMW04	18	07/23/2004	HSA/AR	1643815.18	2502419.30	6705.68	6708.30	–	–	–	–	120	6	2	PVC	15.0	100 – 115	6,605.68 – 6,590.68	Abandoned	Abandoned	Claystone
FW07	21	11/22/1980	HSA	1640839.18	2498075.06	6713.00	6714.90	–	–	–	–	30.5	8	4	PVC	20.5	10 – 31	6,703.00 – 6,682.50	Abandoned	Alluvium	Silty Sand
FW08	21	11/21/1980	HSA/AR	1640572.50	2498132.47	6713.00	6714.90	–	–	–	–	51	8	4	PVC	40.0	9 – 49	6,704.00 – 6,664.00	Abandoned	Alluvium	Silty Sand/Sand/Clay
FW10	21	11/20/1980	HSA	1640848.95	2498936.89	6706.76	6708.38	–	–	–	–	51.5	10	4	PVC	40.0	9 – 49	6,697.76 – 6,657.76	Abandoned	Alluvium	Silty Sand/Silty Clay
FW11	21	11/21/1980	HSA	1641334.02	2499124.16	6701.20	6703.50	–	–	–	–	28	8	4	PVC	20.0	8 – 28	6,693.20 – 6,673.20	Abandoned	Alluvium	Clayey Sand
FW12	21	11/22/1980	HSA	1641609.82	2499038.13	6700.00	6702.00	–	–	–	–	29	8	4	PVC	20.0	9 – 29	6,691.00 – 6,671.00	Abandoned	Alluvium	Clayey Sand
FW13	21	11/22/1980	HSA	1641688.39	2498830.01	6701.20	6702.30	–	–	–	–	30.5	8	4	PVC	20.0	10.5 – 30.5	6,690.70 – 6,670.70	Abandoned	Alluvium	Clay
FW26	7	11/19/1980	HSA	1643853.34	2497067.39	6672.20	6674.40	–	–	–	–	31	8	4	PVC	20.0	11 – 31	6,661.20 – 6,641.20	Abandoned	Alluvium	Silt/Sand/Clay
FW27	9	11/17/1980	HSA	1646461.42	2494395.93	6657.75	6656.49	–	–	–	–	32	8	4	PVC	20.0	10 – 30	6,647.75 – 6,627.75	Abandoned	Alluvium	Silty Sand/Silty Clay/Clay
FW28	9	11/18/1980	HSA	1646584.14	2493050.57	6656.53	6657.50	–	–	–	–	33	8	4	PVC	23.0	10 – 33	6,646.53 – 6,623.53	Abandoned	Alluvium	Silty Clay
FW29	11	11/16/1980	HSA	1645804.02	2497681.98	6669.17	6670.96	–	–	–	–	32	8	4	PVC	20.0	10 – 30	6,659.17 – 6,639.17	Abandoned	Alluvium	Gravel/Clay
FW31	19	11/19/1980	HSA	1631192.98	2505201.31	6830.72	6832.49	1631192.71	2505201.84	6830.96	6832.70	50	8	4	PVC	40.0	10 – 50	6,820.96 – 6,780.96	Active	Alluvium	Clay
FW35	13	11/15/1980	HSA	1641888.44	2503025.94	6709.17	6711.11	1641888.76	2503025.75	6709.13	6711.31	30	8	4	PVC	20.0	10 – 30	6,699.13 – 6,679.13	Active	Alluvium	Clay
MW01	11	11/22/1996	HSA	1643726.78	2498748.62	6686.03	6686.94	1643726.81	2498748.48	6686.98	6686.79	55	10.5	2	PVC	20.0	33.6 – 53.6	6,653.38 – 6,633.38	Active	Alluvium	Sand/Silty Clay
MW02	11	11/25/1996	HSA	1643783.35	2498712.23	6685.78	6685.22	1643783.24	2498712.23	6685.60	6685.13	48	10.5	2	PVC	10.0	37 – 47	6,648.60 – 6,638.60	Active	Alluvium	Clayey Sand/Clay
MW03	11	11/26/1996	HSA	1643644.43	2498801.96	6687.50	6688.50	1643644.51	2498801.86	6687.81	6690.26	53	10.5	2	PVC	10.0	43 – 53	6,644.81 – 6,634.81	Active	Alluvium	Silty Sand/Clay
MW18S	11	11/01/1994	HSA	1643948.08	2498331.62	6684.67	6686.61	1643948.10	2498331.51	6685.30	6687.26	39	8	2	PVC	10.0	27 – 37	6,658.30 – 6,648.30	Active	Alluvium	NA
MW18D	11	11/01/1994	HSA	1643947.99	2498331.32	6684.94	6686.32	1643947.87	2498331.42	6685.30	6687.11	59	8	2	PVC	10.0	47 – 57	6,638.30 – 6,628.30	Active	Alluvium	NA
MW20	11	11/01/1994	HSA	1643922.12	2498193.80	6685.34	6687.67	1643922.23	2498193.78	6685.84	6688.35	59.4	8	2	PVC	10.0	47 – 57	6,638.84 – 6,628.84	Active	Alluvium	NA
MW22S	11	11/01/1994	HSA	1644178.59	2498343.06	6682.69	6684.69	1644178.49	2498343.07	6683.28	6685.33	43.5	8	2	PVC	10.0	31 – 41	6,652.28 – 6,642.28	Active	Alluvium	NA
MW22D	11	11/01/1994	HSA	1644178.39	2498343.15	6682.69	6684.55	1644178.41	2498343.14	6683.28	6685.34	58.6	8	2	PVC	10.0	47 – 57	6,636.28 – 6,626.28	Active	Alluvium	NA
MW23	25	06/30/2011	HSA	1648792.02	2493767.75	6652.46	6654.50	1648790.51	2493766.00	6652.99	6655.09	134	8	2.5	PVC	70.0	63.5 – 133.5	6,589.49 – 6,519.49	Active	Alluvium	Sand/Clay
MW24	25	07/02/2011	HSA	1648746.52	2494518.24	6655.09	6657.08	1648745.01	2494516.22	6655.72	6657.57	66.5	8	2.5	PVC	50.0	16 – 66	6,639.72 – 6,589.72	Active	Alluvium	Sand/Clay
MW25	11	09/10/2019	HSA	–	–	–	–	1644706.19	2497481.54	6676.18	6679.05	65.5	8	2	PVC	20.0	45.5 – 65.5	6,630.68 – 6,610.68	Active	Alluvium	Silty Sand/Clayey Sand
MW26	7	09/11/2019	HSA	–	–	–	–	1644381.65	2496720.38	6670.96	6673.93	60	8	2	PVC	20.0	40 – 60	6,630.96 – 6,610.96	Active	Alluvium	Silty Clay/Clay
MW27	6	07/15/2019	Sonic	–	–	–	–	1643397.69	2497991.57	6690.94	6693.40	63	6	2	PVC	20.0	43 – 63	6,647.94 – 6,627.94	Active	Alluvium	Silt/Sand/Clay
MW28	11	07/14/2019	Sonic	–	–	–	–	1643447.37	2498556.11	6689.51	6692.17	60	6	2	PVC	20.0	40 – 60	6,649.51 – 6,629.51	Active	Alluvium	Silt/Sand/Clay
MW29	11	07/08/2019	Sonic	–	–	–	–	1643867.32	2498500.48	6684.49	6687.14	57	6	2	PVC	20.0	37 – 57	6,647.49 – 6,627.49	Active	Alluvium	Silt/Sand/Clay
MW30	11	07/11/2019	Sonic	–	–	–	–	1643801.66	2498264.94	6686.83	6689.57	60	6	2	PVC	20.0	40 – 60	6,646.83 – 6,626.83	Active	Alluvium	Silt/Sand/Clay
MW31	11	07/12/2019	Sonic	–	–	–	–	1644225.28	2498152.69	6681.76	6684.45	56	6	2	PVC	20.0	36 – 56	6,645.76 – 6,625.76	Active	Alluvium	Silt/Sand/Clay
MW32	11	07/13/2019	Sonic	–	–	–	–	16													

TABLE 2-1: NORTHERN AREA GROUNDWATER WELL CONSTRUCTION DETAILS
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Well ID	FWDA Parcel	Date Installed	Drilling Method	PREVIOUS SURVEY DATA (OLD)				OCT. 2019 SURVEY DATA (NEW)				Well Depth (ft bgs)	Boring Diameter (in)	Casing Diameter (in)	Casing/Screen Type	Screen Length (ft)	Screened Interval (ft bgs)	Screened Interval (ft amsl)	Status	Screened Formation	Description
				NORTHING ^a	EASTING ^a	GROUND ELEVATION (ft amsl) ^b	POINT ELEVATION (ft amsl) ^b	NORTHING ^a	EASTING ^a	GROUND ELEVATION (ft amsl) ^b	POINT ELEVATION (ft amsl) ^b										
TMW08	11	08/29/1998	HSA	1644255.04	2498930.01	6678.55	6680.31	1644254.96	2498930.01	6679.56	6681.05	62	8.8	2	PVC	30.0	30 – 60	6,649.56 – 6,619.56	Active	Alluvium	Silty Sand/Clay
TMW10	11	08/20/1998	HSA	1644455.63	2498459.83	6677.74	6680.04	1644455.54	2498459.70	6678.85	6680.76	65	8.8	2	PVC	30.0	28 – 58	6,650.85 – 6,620.85	Active	Alluvium	Silty Sand/Clay
TMW11	6	09/09/1998	HSA	1640758.33	2497201.28	6716.16	6718.28	1640758.59	2497201.10	6717.32	6719.13	82	8.8	2	PVC	25.0	55 – 80	6,662.32 – 6,637.32	Active	Alluvium	Silty Gravel/Sand
TMW13	21	08/11/1998	HSA	1641150.12	2498112.40	6705.42	6707.49	1641150.09	2498112.43	6706.75	6708.21	72.5	8.8	2	PVC	10.0	60.7 – 70.7	6,646.05 – 6,636.05	Active	Alluvium	Sandy Clay/Silt
TMW14A	21	01/25/2001	AR	1640105.58	2497489.30	6721.08	6723.54	1640105.73	2497489.60	6722.53	6724.73	110	6	2	PVC	15.0	94.25 – 109.25	6,628.28 – 6,613.28	Active	Bedrock	Sandstone
TMW15	21	12/09/2001	AR	1640779.84	2497787.12	6710.80	6713.89	1640779.81	2497787.09	6711.71	6714.68	82	6	2	PVC	15.0	56 – 71	6,655.71 – 6,640.71	Active	Alluvium	Silty Gravel/Sand
TMW16	6	12/05/2001	AR	1640687.46	2496941.08	6711.65	6714.15	1640687.43	2496941.03	6712.72	6715.21	142	6	2	PVC	15.0	123 – 138	6,589.72 – 6,574.72	Active	Bedrock	Sandstone
TMW17	6	12/13/2001	AR	1640639.74	2497193.66	6717.40	6719.89	1640640.08	2497193.61	6718.53	6721.07	152	6	2	PVC	15.0	112 – 127	6,606.53 – 6,591.53	Active	Bedrock	Sandstone
TMW18	6	12/14/2001	AR	1641437.52	2497083.23	6710.14	6713.49	1641437.58	2497083.17	6711.48	6714.56	220	6	2	PVC	10.0	150 – 160	6,561.48 – 6,551.48	Active	Bedrock	Sandstone
TMW19	6	12/03/2001	AR	1641357.45	2496433.25	6697.57	6700.52	1641357.52	2496433.25	6698.93	6701.67	187	6	2	PVC	15.0	169 – 184	6,529.93 – 6,514.93	Active	Bedrock	Sandstone
TMW21	21	08/09/2002	HSA	1642714.59	2498128.03	6692.75	6695.14	1642714.81	2498128.03	6693.75	6695.86	72	8	2	PVC	10.0	48 – 58	6,645.75 – 6,635.75	Active	Alluvium	Sand/Silt/Clay
TMW22	21	08/08/2002	HSA	1642741.03	2499552.37	6689.80	6691.74	1642741.06	2499552.33	6690.90	6692.51	77	8	2	PVC	10.0	52 – 62	6,638.90 – 6,628.90	Active	Alluvium	Sand/Silt/Clay
TMW23	11	08/06/2002	HSA	1643402.27	2499309.65	6685.37	6687.66	1643402.25	2499309.78	6686.50	6688.61	72	8	2	PVC	10.0	46 – 56	6,640.50 – 6,630.50	Active	Alluvium	Clay/Sand
TMW24	11	08/03/2003	HSA	1644192.07	2499766.39	6678.52	6680.42	1644192.20	2499766.31	6679.40	6681.14	75	8	2	PVC	10.0	44 – 54	6,635.40 – 6,625.40	Active	Alluvium	Silty Sand/Silt/Sand
TMW25	7	08/01/2002	HSA	1643599.42	2496775.99	6671.09	6672.88	1643599.33	2496776.40	6671.61	6673.17	74	8	2	PVC	10.0	42.5 – 52.5	6,629.11 – 6,619.11	Active	Alluvium	Silty Sand/Clay
TMW26	11	07/30/2002	HSA	1645294.52	2498581.83	6674.88	6677.71	1645294.87	2498581.76	6675.79	6678.43	64.8	8	2	PVC	10.0	45 – 55	6,630.79 – 6,620.79	Active	Alluvium	Silt/Sand/Clay
TMW27	9	07/26/2002	HSA	1646400.43	2496126.29	6665.45	6668.13	1646399.49	2496126.68	6666.40	6668.51	102.2	8	2	PVC	10.0	60 – 70	6,606.40 – 6,596.40	Active	Alluvium	Sandy Clay/Silt
TMW28	14	07/24/2002	HSA	1645827.16	2501250.48	6686.77	6689.17	1645827.17	2501250.56	6688.08	6690.35	72.5	8	2	PVC	10.0	37 – 47	6,651.08 – 6,641.08	Active	Alluvium	Silty Sand/Sand/Clay
TMW29	21	08/19/2002	HSA	1641786.37	2498235.92	6700.31	6702.88	1641786.16	2498235.65	6701.36	6703.84	69	8	2	PVC	10.0	49 – 59	6,652.36 – 6,642.36	Active	Alluvium	Sand/Sandy Clay
TMW30	21	11/15/2009	HSA/AR	1639957.87	2498898.99	6712.35	6714.59	1639957.89	2498900.63	6713.42	6715.66	51.5	6	2	PVC	10.0	35 – 45	6,678.42 – 6,668.42	Active	Bedrock	Sandstone
TMW31S	21	11/17/2009	HSA/AR	1640689.53	2498931.95	6708.53	6710.20	1640688.54	2498932.87	6710.19	6711.45	61	6	2	PVC	10.0	50 – 60	6,660.19 – 6,650.19	Active	Alluvium	Silty Sand/Sand/Clay
TMW31D	21	11/16/2009	HSA/AR	1640689.53	2498931.95	6708.53	6710.44	1640688.10	2498933.07	6710.19	6711.99	111.5	6	2	PVC	30.0	77 – 107	6,633.19 – 6,603.19	Active	Bedrock	Sandstone
TMW32	21	11/18/2009	HSA	1641059.71	2498559.18	6707.09	6709.31	1641045.04	2498554.46	6709.03	6710.88	139.1	6	2	PVC	20.0	117 – 137	6,592.03 – 6,572.03	Active	Bedrock	Sandstone
TMW33	11	11/19/2009	HSA	1644035.48	2498303.75	6684.09	6686.60	1644034.09	2498303.21	6685.07	6687.45	60.4	6	2	PVC	20.0	37 – 57	6,648.07 – 6,628.07	Active	Alluvium	Silty Sand/Sand/Clay
TMW34	11	11/20/2009	HSA	1643993.95	2498014.09	6684.32	6687.29	1643994.55	2498012.96	6685.75	6688.36	57.3	6	2	PVC	20.0	37 – 57	6,648.75 – 6,628.75	Active	Alluvium	Silty Sand/Sand/Clay
TMW35	11	11/21/2009	HSA/AR	1644050.75	2498442.31	6684.14	6686.52	1644049.13	2498442.01	6685.52	6687.82	55	6	2	PVC	20.0	35 – 55	6,650.52 – 6,630.52	Active	Alluvium	Silty Sand/Sand/Clay
TMW36	21	11/22/2009	HSA/AR	1641645.74	2499049.17	6697.33	6699.04	1641645.67	2499049.25	6700.57	6702.23	157	6	2	PVC	20.0	132 – 152	6,568.57 – 6,548.57	Active	Bedrock	Sandstone
TMW37	21	11/23/2009	HSA/AR	1640648.14	2498397.74	6710.51	6713.09	1640648.29	2498396.27	6712.15	6714.25	111	6	2	PVC	20.0	88 – 108	6,624.15 – 6,604.15	Active	Bedrock	Sandstone
TMW38	21	09/03/2011	HSA	1641400.80	2498219.52	6704.41	6706.79	1641400.93	2498218.35	6705.03	6707.62	159.5	8	2.5	PVC	40.0	118.9 – 158.9	6,586.13 – 6,546.13	Active	Bedrock	Sandstone
TMW39S	13	07/05/2011	HSA	1640745.21	2499279.83	6706.53	6708.61	1640735.44	2499229.52	6706.69	6708.25	53	8	2.5	PVC	20.0	32.5 – 52.5	6,674.19 – 6,654.19	Active	Alluvium	Clay
TMW39D	13	09/07/2011	HSA	1640745.21	2499279.83	6706.53	6708.61	1640745.35	2499280.77	6707.08	6709.14	100.5	8	2.5	PVC	30.0	70 – 100	6,637.08 – 6,607.08	Active	Bedrock	Sandstone
TMW40S	21	09/20/2011	HSA	1641487.06	2498603.50	6703.81	6706.40	1641486.33	2498604.51	6704.37	6706.98	60.5	8	2.5	PVC	10.0	50 – 60	6,654.37 – 6,644.37	Active	Alluvium	Silt/Sand/Clay
TMW40D	21	09/20/2011	HSA	1641487.06	2498603.50	6703.81	6706.15	1641486.04	2498604.16	6704.37	6706.74	155.5	8	2.5	PVC	20.0	135 – 155	6,569.37 – 6,549.37	Active	Bedrock	Sandstone
TMW41	21	07/01/2011	HSA	1641113.86	2499058.48	6703.48	6705.21	1641113.91	2499058.49	6704.15	6705.74	66	8	2.5	PVC	10.0	55.5 – 65.5	6,648.65 – 6,638.65	Active	Alluvium	Clay with Gravel
TMW43	21	02/03/2012	HSA	1642171.46	2498570.92	6695.63	6698.63	1642171.39	2498570.91	6696.21	6699.32	78.5	8	2.5	PVC	20.0	58 – 78	6,638.21 – 6,618.21	Active	Alluvium	Sand with Gravel
TMW44	21	02/04/2012	HSA	1642323.41	2499212.51	6694.81	6697.31	1642323.34	2499212.40	6695.49	6697.99	64	8	2.5	PVC	20.0	43.5 – 63.5	6,651.99 – 6,631.99	Active	Alluvium	Silty Clay/Sand
TMW45	11	02/08/2012	HSA	1643187.53	2499597.72	6686.50	6689.00	1643187.60	2499597.65	6687.14	6689.60	59	8	2.5	PVC	20.0	38.5 – 58.5	6,648.64 – 6,628.64	Active	Alluvium	Sand/Clay
TMW46	11	02/05/2012	HSA	1644326.04	2497404.70	6678.69	6680.98	1644326.20	2497404.60	6679.41	6681.34	59	8	2.5	PVC	20.0	38.5 – 58.5	6,640.91 – 6,620.91	Active	Alluvium	Sandy Clay with Gravel
TMW47	13	02/01/2012	HSA	1641475.95	2499610.93	6699.32	6701.88	1641475.91	2499610.79	6699.87	6702.47	103	8	2.5	PVC	20.0	82.5 – 102.5	6,617.37 – 6,597.37	Active	Alluvium	Clay/Silt
TMW48	13	09/15/2011	HSA	1640515.53	2499131.31	6707.80	6709.80	1640515.51	2499132.59	6708.29	6710.37	91.5	8	2.5	PVC	20.0	71 – 91	6,637.29 – 6,617.29	Active	Bedrock	Sand
TMW49	21	09/09/2011	HSA	1639979.77	2498578.38	6712.20	6714.70	1639979.26	2498578.96	6716.30	6718.72	60	8	2.5	PVC	20.0	40 – 60	6,676.30 – 6,656.30	Active	Bed	

TABLE 2-1: NORTHERN AREA GROUNDWATER WELL CONSTRUCTION DETAILS
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Well ID	FWDA Parcel	Date Installed	Drilling Method	PREVIOUS SURVEY DATA (OLD)				OCT. 2019 SURVEY DATA (NEW)				Well Depth (ft bgs)	Boring Diameter (in)	Casing Diameter (in)	Casing/Screen Type	Screen Length (ft)	Screened Interval (ft bgs)	Screened Interval (ft amsl)	Status	Screened Formation	Description
				NORTHING ^a	EASTING ^a	GROUND ELEVATION (ft amsl) ^b	POINT ELEVATION (ft amsl) ^b	NORTHING ^a	EASTING ^a	GROUND ELEVATION (ft amsl) ^b	POINT ELEVATION (ft amsl) ^b										
PZ04 ^c	12	Fall 2012	HSA	1645288.26	2498592.56	6674.17	6676.68	1645288.57	2498592.28	6675.26	6677.80	49.3	ND	1	PVC	20.0	29.3 – 49.3	6,645.96 – 6,625.96	Active	Alluvium	Undifferentiated CL/S/ML
PZ05 ^c	12	Fall 2012	HSA	1646574.66	2498263.13	6671.53	6674.15	1646574.61	2498262.94	6672.50	6675.17	48.7	ND	1	PVC	20.0	28.7 – 48.7	6,643.80 – 6,623.80	Active	Alluvium	Undifferentiated CL/S/ML
PZ06 ^c	12	Fall 2012	HSA	1646327.75	2498718.95	6673.29	6676.04	1646328.10	2498719.31	6674.47	6677.19	49.2	ND	1	PVC	20.0	29.2 – 49.2	6,645.27 – 6,625.27	Active	Alluvium	Undifferentiated CL/S/ML
PZ07 ^c	12	Fall 2012	HSA	1645600.75	2500958.18	6682.38	6684.53	1645600.90	2500958.04	6683.24	6685.70	32.8	ND	1	PVC	20.0	12.8 – 32.8	6,670.44 – 6,650.44	Active	Alluvium	Undifferentiated CL/S/ML
PZ08 ^c	12	Fall 2012	HSA	1645511.30	2500744.34	6684.11	6686.81	1645511.40	2500744.21	6685.03	6687.93	49	ND	1	PVC	20.0	29 – 49	6,656.03 – 6,636.03	Active	Alluvium	Undifferentiated CL/S/ML
PZ09 ^c	12	Fall 2012	HSA	1648138.17	2495520.51	6651.12	6653.61	1648137.97	2495520.26	6652.37	6654.66	35.6	ND	1	PVC	15.0	20.6 – 35.6	6,631.77 – 6,616.77	Active	Alluvium	Undifferentiated CL/S/ML
PZ10 ^c	12	Fall 2012	HSA	1648008.28	2495406.66	6654.83	6657.27	1648008.64	2495408.20	6655.92	6658.31	48.5	ND	1	PVC	15.0	33.5 – 48.5	6,622.42 – 6,607.42	Active	Alluvium	Undifferentiated CL/S/ML
Wingate 89	10B	01/01/1963	–	1647927.73	2496972.14	6663.20	6663.70	–	–	–	–	ND	ND	8	PVC	ND	ND	ND	Abandoned	Alluvium	–
Wingate 90	10B	01/02/1963	–	1648335.14	2495646.34	6655.30	6656.50	–	–	–	–	102	ND	8	PVC	ND	ND	ND	Abandoned	Alluvium	–
Wingate 91	10B	01/03/1963	–	1648705.22	2494863.70	6658.80	6659.70	–	–	–	–	ND	ND	8	PVC	ND	ND	ND	Abandoned	Alluvium	–

NOTES:

^a Horizontal Coordinate System: NM NAD83 State Plane Central

^b Vertical Coordinate System: NAVD88

^c Indicates the well is used for water level measurements only and is not sampled.

ABBREVIATIONS and ACRONYMS:

amsl	= above mean sea level	in	= inches
AR	= air rotary drilling method	ML	= silt
bgs	= below ground surface	NA	= not available
CL	= lean clay	NAD83	= North American Datum of 1983
ft	= feet	NAVD88	= North American Vertical Datum of 1988
FWDA	= Fort Wingate Depot Activity	NM	= New Mexico
HSA	= hollow stem auger drilling method	PVC	= polyvinyl chloride

TABLE 2-2: NORTHERN AREA CONTAMINANTS OF POTENTIAL CONCERN BY SITE AND POINT OF RELEASE
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Parcel	SWMU or AOC Site	Soil Investigation Results Soil COPCs	Release to Soil Exceeding SSL	GW Release ^{1,2}	Proposed Interim GW Monitoring Retain as GW COPC	Area and Aquifer Zone
4A	AOC 29 (Igloo Block C)	Explosives, metals, perchlorate, WP	Removed	No	No per Interim Measures Report	None
4B	None pending transfer to U.S. Department of Interior	–	–	–	–	–
5A	AOC 78 (Feature 18 on 1973 aerial photo)	Explosives, metals, PCB	RA to determine	No	No, pending RA ¹	None
5B	None, pending transfer to U.S. Department of Interior	–	–	–	–	–
6	SWMU 4 (Building 600, Ammunition Workshop)	Explosives, metals, VOC, SVOC	No, per Parcel 6 RFI	No	No, NFA proposed under RFI	None
	SWMU 8 (Building 537, removed)	PCB, PAH	PAH and PCB in soil to greater than 5 foot depth	No	SVOC pending ICM ¹	Bedrock groundwater north of SWMU
	SWMU 11 (Buildings 541 and 542)	Explosives, metals, VOC, SVOC	No, per Parcel 6 RFI	No	No, NFA proposed under RFI	None
	SWMU 20 (Feature 4, locomotive near Building 542)	Metals, SVOC, PCB, oils, grease	No, per Parcel 6 RFI	No	No, pending ICM ¹	None
	AOC 28 (Igloo Block B)	Explosives, metals	Sampling to determine	No	No, pending metals sampling in ICM ¹	None
	AOC 42 (Building 516)	None	No, per Parcel 6 RFI	No	No, NFA proposed under RFI	None
	AOC 61 (Building 507)	None	No, per Parcel 6 RFI	No	No, NFA proposed under RFI	None
	AOC 75 (Electrical Transformers, removed)	None	No, per Parcel 6 RFI	No	No, NFA proposed under RFI	None
	AOC 80 (Feature 9 on 1962 aerial photo)	None	No, per Parcel 6 RFI	No	No, NFA proposed under RFI	None
	AOC 81 (Feature 11 on 1962 aerial photo)	None	No, per Parcel 6 RFI	No	No, NFA proposed under RFI	None
	AOC 83 (Feature 22 on 1973 aerial photo)	None	No, per Parcel 6 RFI	No	No, NFA proposed under RFI	None
	AOC 84 (Feature 12 on 1962 aerial photo)	None	No, per Parcel 6 RFI	No	No, NFA proposed under RFI	None
7	SWMU 9 (POL Waste Discharge Area)	TPH, VOC, SVOC, PCB, metals	Lead in soil to 1 foot, per Parcel 7 RFI	No	No, pending ICM ¹	None
	SWMU 25 (Trash Burning Ground Property Disposal Office, and Feature 1, 2, and 5 on 1962 aerial photo)	Pesticides, VOC, SVOC, PCB, metals	No, per Parcel 7 RFI	No	None	None
	AOC 43 (Railroad Classification Yard)	Dioxins/Furans	Yes, one surface sample	No	None	None
	AOC 75 (Electrical Transformers, removed)	None	No, per Parcel 7 RFI	No	None	None
8	None, pending transfer to U.S. Department of Interior	–	–	–	–	–
9	AOC 18 (Igloo Block A)	Explosives, metals	RFI to determine	No	No, pending Parcel 9 RFI ¹	None
	AOC 85 (Feature 11 1 on 1962 aerial photo and Feature 1 on 1973 aerial photo)	Explosives, metals	RFI to determine	No	No, pending Parcel 9 RFI ¹	None
10A	SWMU 26 (Suspected POL Area)	TPH, VOC, SVOC, PCB, metals	No, per Parcel 10 RFI	No	None	None
	AOC 44 (Former Administration and Utilities Area)	Pesticides, VOC, SVOC, metals	No, per Parcel 10 RFI	No	None	None
10B	None, pending transfer to U.S. Department of Interior	–	–	–	–	–
11	SWMU 3 (Fenced Storage Yard)	DRO, PAH, metals	PAH and DRO in soil to 1 foot depth	No	No, pending Parcel 11 Phase 2 RFI ¹	None
	SWMU 5 (Building 5, Regimental Garage)	None	No, per Parcel 11 RFI	No	None	None
	SWMU 6 (Building 11, Former Locomotive Shop)	DRO, SVOC, PCB	Yes, DRO in soil. Depth not defined.	No	DRO, SVOC	Alluvial groundwater west of SWMU
	SWMU 10 (Sewage Treatment Plan, Bldgs. 22, T 37, 63, 69 through 74d, 82, 83, document incinerator)	MEC, explosives, VOC, SVOC, nitrate, pesticides	No per Phase 1 RFI, Phase 2 RFI planned	No	No, pending Parcel 11 Phase 2 RFI ¹	None
	SWMU 23 (Buildings 7 and 9, Paint and Carpenter Shops)	DRO, SVOC, metals	PAH and metals in soil to 1 foot depth	No	No, pending Parcel 11 Phase 2 RFI ¹	None
	SWMU 24 (Buildings 15 Garage and Storage Shop)	VOC, SVOC, DRO, PCB, pesticides, metals	PAH, pesticides and metals in soil to 2 foot depth	No	No, pending Parcel 11 Phase 2 RFI ¹	None
	SWMU 37 (Buildings 9 Machine and Signal Shop)	VOC, SVOC, PCB, metals	PAH and metals in drain sediments	No	No	None
	SWMU 40 (South Administration Area, Coal Tar Storage Tanks 58 60)	VOC, SVOC, PCB, DRO, GRO, pesticides, herbicides, metals	DRO, PAH, metals, and PCB in soil to 1 foot depth	No	No, pending Parcel 11 Phase 2 RFI ¹	None
	SWMU 45 (Building 6 Gas Station)	DRO, GRO, VOC, metals	DRO, GRO, VOC	Yes	DRO GRO, VOC, SVOC, metals	Alluvial groundwater west of SWMU
	SWMU 48 (Buildings 10)	Metals	No, per Parcel 11 RFI	No	No	None
	SWMU 49 (Buildings 12)	SVOC, PCB, metals	PAH and metals in soil to 1 foot depth	No	No	None

TABLE 2-2: NORTHERN AREA CONTAMINANTS OF POTENTIAL CONCERN BY SITE AND POINT OF RELEASE
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Parcel	SWMU or AOC Site	Soil Investigation Results Soil COPCs	Release to Soil Exceeding SSL	GW Release ^{1,2}	Proposed Interim GW Monitoring Retain as GW COPC	Area and Aquifer Zone
11	SWMU 50 (Structure 35, UST 7)	GRO, DRO, VOC, metals	VOC to undetermined depth	Yes	VOC, metals	Alluvial groundwater west of SWMU
	SWMU 51 (Buildings 29)	SVOC, PCB, metals	Metals in soil to 1 foot depth	No	No	None
	SWMU 52 (Buildings T 33)	SVOC, PCB, metals	PAH and metals in soil to 1 foot depth	No	No	None
	SWMU 53 (Buildings 36)	SVOC, PCB, metals	PAH and metals in soil to 1 foot depth	No	No	None
	SWMU 54 (UST 5)	DRO, heating oil	No	No	No	No
	AOC 46 (AST near Bog. 11)	DRO	No, per Parcel 11 RFI	No	No	None
	AOC 47 (spill of photoflash powder west of Bldg.11)	Nitrate, perchlorate	No, per Parcel 11 RFI	No	No	None
	AOC 48 (Building 34, Fire Station)	VOC, SVOC, PCB, DRO, metals	No, per Parcel 11 RFI.	No	No	None
	AOC 49 (Structures 38, 39, Loading Docks)	VOC, SVOC, PCB, metals	No	No	No	No
	AOC 51 (Structure 64, UST)	GRO, DRO, VOC, metals	No, per Parcel 11 RFI. ICM planned	No	No, pending ICM ¹	None
	AOC 52 (Buildings 79, 80, Storage Vaults)	VOC, SVOC, PCB, pesticides, Herbicides, metals	No, per Parcel 11 RFI. ICM planned	No	No, pending ICM ¹	None
	AOC 55 (Structure T 49)	SVOC, PCB, metals	PAH and metals in soil to 1 foot depth	No	No	None
	AOC 56 (Structure T 50)	SVOC, PCB, metals	No	No	No	No
	AOC 57 (Building 14)	VOC, SVOC, PCB, pesticides, herbicides, metals	SVOC and metals in soil to 1 foot depth	No	No, pending ICM ¹	None
	AOC 75 (Electrical Transformers)	PCBs	No, per Parcel 11 RFI.	No	No, NFA proposed under RFI	No
	AOC 83 (Structure 63)	GRO, DRO, VOC, metals	DRO and metals in soil to 1 foot depth	No	No, pending ICM ¹	None
	AOC 87 (Structure 57)	DRO, SVOC, metals	DRO in soil to 1 foot depth	No	No	None
12	None, pending transfer to U.S. Department of Interior	–	–	–	–	–
13	AOC 53 (Lake Knudson)	Explosives, VOC, SVOC, pesticides, perchlorate, metals	No, per Parcel 13 RFI	No	No	None
	AOC 54 and AOC 57 (Buildings 306 to 311, Standard Magazines)	Explosives, perchlorate, VOC, SVOC, PCB, pesticides, metals	PAHs and metals in soil to 1 foot depth	No	No	None
	AOC 55 (Structure 506, TNT Storage Barricade)	Explosives, metals	No, per Parcel 13 RFI	No	No	None
	AOC 56 (Structure 533, explosives exceeding Barricade)	Explosives, metals	No, per Parcel 13 RFI	No	No	None
14	None, pending transfer to U.S. Department of Interior	–	–	–	–	–
15	None, transferred to U.S. Department of Interior	–	–	–	–	–
16	SWMU 16 (Functional Test Range 2/3)	Explosives, metals, asbestos, perchlorate, SVOC	Explosives and asbestos in soil to 1 foot depth	No	No, pending ICM ¹	None
	AOC 41 (Igloo Block K)	Explosives, metals	Metals in soil to 1 foot depth	No	No, pending ICM ¹	None
	AOC 57 (Buildings 306 310, Standard Magazines)	Explosives, metals	No	No	No	None
17	None, transferred to U.S. Department of Interior	–	–	–	–	–
18	SWMU 13 (Eastern Landfill, Removed)	None	Removed	No	No	None
19	SWMU 39 (Pistol Range)	Lead	RFI to determine	No	No, pending Parcel 19 RFI ¹	None
	AOC 30 (Igloo Block D)	Explosives, metals	RFI to determine	No	No, pending Parcel 19 RFI ¹	None
	AOC 31 (Igloo Block E)	Explosives, metals	RFI to determine	No	No, pending Parcel 19 RFI ¹	None
	AOC 32 (Igloo Block F)	Explosives, metals	RFI to determine	No	No, pending Parcel 19 RFI ¹	None
	AOC 34 (Igloo Block G)	Explosives, metals	RFI to determine	No	No, pending Parcel 19 RFI ¹	None
	AOC 58 (Buildings 303, 304, Standard Magazines; Building 320, Field Dunnage)	Explosives, asbestos, VOC, SVOC, PCB, metals	RFI to determine	No	No, pending Parcel 19 RFI ¹	None
	AOC 59 (Building T 422, Normal Maintenance, Bomb and Shell Paint)	Explosives, VOC, SVOC, PCB, metals	RFI to determine	No	No, pending Parcel 19 RFI ¹	None

TABLE 2-2: NORTHERN AREA CONTAMINANTS OF POTENTIAL CONCERN BY SITE AND POINT OF RELEASE
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Parcel	SWMU or AOC Site	Soil Investigation Results Soil COPCs	Release to Soil Exceeding SSL	GW Release ^{1,2}	Proposed Interim GW Monitoring Retain as GW COPC	Area and Aquifer Zone
21	SWMU 1 (TNT Leaching Beds and Building 503)	Explosives, VOC, SVOC, pesticides, herbicides, PCB, perchlorate, metals	Explosives and metals to depth of water table	Yes	Explosives, nitrate, metals	Alluvial groundwater north and west of SWMU. Suspected bedrock to southwest.
21	SWMU 2 (Building 515, Painting and Acid Washout and Acid Holding Pond)	VOC, SVOC, PCB, pesticides, metals	Metals in soil to 1 foot depth	No	No, pending ICM ¹	None
	SWMU 7 (Fire Training Ground)	VOC, SVOC, metals	DRO in soil to undefined depth	No	DRO, pending ICM1	Alluvial groundwater north and west of Building 31
	SWMU 19 (Building 501, Former Boiler House and Heating Plant 7)	VOC, SVOC, DRO, PCB, pesticides, metals	No, per Parcel 21 RFI	No	No, NFA proposed under RFI	None
	SWMU 72 (Deactivation Furnace and Acid Pits)	MEC, VOC, SVOC, DRO, metals	No, per Parcel 21 RFI	No	No, NFA proposed under RFI	None
	AOC 60 (Building 522 Ammunition Receiving)	MEC, VOC, SVOC, DRO, metals	No, per Parcel 21 RFI	No	No	None
	AOC 61 (Building 507, Smokeless Powder Magazine)	Explosives, metals	No, per Parcel 21 RFI	No	No	None
	AOC 62 (Building 508, Smokeless Powder Magazine)	Explosives, SVOC, nitrate, perchlorate, metals	No, per Parcel 21 RFI	No	No, NFA proposed under RFI	None
	AOC 63 (Building 509, Primary Collector Barricade or Propellant Baghouse)	Explosives, SVOC, nitrate, PCB, metals	Explosives in soil to 1 foot depth	No	No, pending ICM ¹	None
	AOC 64 (Building 510, Vacuum Producer Building)	Explosives, SVOC, nitrate, PCB, metals	Explosives, PCB in soil to 1 foot depth	No	No, pending ICM ¹	None
	AOC 65 (Building 511, Service Magazine)	Explosives, SVOC, PCB, metals	No, per Parcel 21 RFI	No	No, NFA proposed under RFI	None
	AOC 66 (Building 512, Service Magazine)	Explosives, SVOC, PCB, metals	No, per Parcel 21 RFI	No	No, NFA proposed under RFI	None
	AOC 67 (Building 513, Service Magazine)	Explosives, SVOC, PCB, metals	No, per Parcel 21 RFI	No	No, NFA proposed under RFI	None
	AOC 68 (Structures 514 and 545, Deboosting Barricade,	Explosives, SVOC, nitrate, PCB, metals	Explosives in soil to 1 foot depth		No, pending ICM1	None
	AOC 75 (Electrical Transformers)	PCB	No, per Parcel 21 RFI	No	No, NFA proposed under RFI	None
	AOC 86 (Feature 15 on 1973 aerial photo)	None	No	No	No, NFA proposed under RFI	None
	AOC 87 (Feature 18 on 1962 aerial photo, and Feature 23	None	No	No	No, NFA proposed under RFI	None
22	SWMU 12 (Building 536, Inspectors Workshop, Ammunition Renovation Depot, one PCB transformer)	Explosives, VOC, SVOC, pesticides, PCB, metals	Explosives, PAH, PCB, metals in manhole sediment	No	No, pending munitions response team1	None
	SWMU 27 (Building 528 Complex)	Explosives, perchlorate, VOC, SVOC, PCB, metals	PAH in soil to 1 foot depth	Yes	Perchlorate, explosives, nitrate, metals	Alluvial and bedrock groundwater north and west of SWMU
	SWMU 70 (Buildings 517 520, Disassembly Plant and Test	Explosives, SVOC, PCB, metals	No, per Parcel 22 RFI	No	No, NFA proposed under RFI	None
	AOC 30 (Igloo Block D)	Explosives, SVOC, metals	Explosives, metals in soil to 1 foot depth	No	No, pending ICM ¹	None
	AOC 69 (Buildings 301, 302, 312, Standard Magazines; Building 316, Field Lunch Room)	Explosives, VOC, SVOC, DRO, nitrate, PCB, metals	DRO, PAH, and metals in soil to 3 foot depth	No	No, pending ICM ¹	None
	AOC 71 (Former rectangular structure near TMW 5 and north of Bldg. 528)	Explosives, VOC, SVOC, nitrate, PCB, metals	No, per Parcel 22 RFI	No	No	None
	AOC 75 (Electrical Transformers)	PCB	No, per Parcel 22 RFI	No	No, NFA proposed under RFI	None
	AOC 88 (Former buildings south of Bldg. 528)	Explosives, VOC, SVOC pesticides, PCB, metals	No, per Parcel 22 RFI	No	No, NFA proposed under RFI	None
	AOC 121 (Building 528B, temporary storage igloo)	Explosives, perchlorate, VOC, SVOC, PCB, metals	No, per Parcel 22 RFI	No	No	None
	AOC 122 (Building 529)	Explosives, perchlorate, VOC, SVOC, PCB, metals	No, per Parcel 22 RFI	No	No	None
	AOC 125 (Building 550, vacuum collector barricade)	Explosives, perchlorate, VOC, SVOC, PCB, metals	No, per Parcel 22 RFI	No	No	None

TABLE 2-2: NORTHERN AREA CONTAMINANTS OF POTENTIAL CONCERN BY SITE AND POINT OF RELEASE
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Parcel	SWMU or AOC Site	Soil Investigation Results Soil COPCs	Release to Soil Exceeding SSL	GW Release ^{1,2}	Proposed Interim GW Monitoring Retain as GW COPC	Area and Aquifer Zone
23	SWMU 21 (Central Landfill, Removed)	Explosives, pesticides, herbicide, VOC, SVOC, PCB, metals	Removed. Residual PAH, metals to 18 foot depth	No	No, pending additional ICM ¹	None
	AOC 73 (Former structures along Road C 3)	Explosives, SVOC, metals	No, per Parcel 23 RFI	No	No	None
24	AOC 18 (Igloo Block A)	Explosives, SVOC, metals	Metals in soil to 1 foot depth	No	No, pending ICM ¹	None
25	None, pending transfer to U.S. Department of Interior	—	—	—	—	—

NOTES:

¹ For the purposes of interim measures planning, there is no release to groundwater considered without investigation data documenting impacts in the groundwater media.

² A pathway for transport of contaminants to groundwater is known when the contaminants are detected in groundwater in excess of screening levels. A pathway is suspected when releases of soluble contaminants exceeding soil screening levels are not vertically delineated in subsurface soils.

Blue highlight = point of groundwater release.

ABBREVIATIONS & ACRONYMS:

- AOC = area of concern
- Bldg. = building
- COPC = contaminant of potential concern
- DRO = diesel range organics
- GRO = gasoline range organics
- GW = groundwater
- ICM = interim corrective measures
- NFA = no further action
- PAH = polyaromatic hydrocarbon
- PCB = polychlorinated biphenol
- POL = petroleum, oil, and lubricants
- RA = release assessment
- RFI = Resource Conservation and Recovery Act Facility Investigation
- SSL = soil screening levels
- SVOC = semivolatile organic compound
- SWMU = solid waste management unit
- VOC = volatile organic compound

TABLE 2-3: NORTHERN AREA GROUNDWATER SAMPLING ANALYTE GROUPS WITH SCREENING LEVEL EXCEEDANCES
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Associated Wells	Zone	Constituents of Potential Concern Analyzed	Contaminants Detected	Groups with Cleanup Level/ Screening Level Exceedances	Analyte Groups Retained for Monitoring
Parcel 7 SWMU 8					
BGMW07	Bedrock	Not available	Not available	Not available	Explosives, Metals, Anions, Perchlorate, SVOCs, VOCs
BGMW08	Bedrock	Not available	Not available	Not available	
BGMW09	Bedrock	Not available	Not available	Not available	
BGMW10	Bedrock	Not available	Not available	Not available	
TMW14A	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, SVOC, VOC	Metals, Anions, SVOC, VOC	
TMW16	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Perchlorate, SVOC, VOC	Metals	
TMW17	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Metals, Anions, Perchlorate, VOC	Metals	
TMW18	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, Perchlorate, SVOC, VOC	Metals, SVOC, VOC	
TMW36	Bedrock	Explosives, Metals, Anions, Perchlorate, Phosphorus, SVOC, VOC, Cyanide, Dioxins/Furans, Herbicides, Pesticides, TPH	Explosives, Metals, Anions, Perchlorate, SVOC, Tph, VOC, Pesticides	Metals, SVOC, VOC	
TMW37	Bedrock	Explosives, Metals, Anions, Perchlorate, Phosphorus, SVOC, VOC, Cyanide, Dioxins/Furans, Herbicides, Pesticides, TPH	Explosives, Metals, Anions, Perchlorate, SVOC, Tph, VOC, Pesticides	Metals, Perchlorate, VOC	
TMW38	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, SVOC	
TWM19	Not available	Not available	Not available	Not available	
Parcel 11 SWMU 6					
BGMW01	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, SVOC, VOC	Metals	Metals, Anions, SVOCs, VOCs, TPH
BGMW03	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, Perchlorate, SVOC, VOC	Metals	
MW23	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, SVOC, VOC	
MW24	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, SVOC, VOC	Metals	
TMW24	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Metals, Anions, VOC, Pesticides	Metals	
TMW25	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Metals, Anions, VOC	Metals	

TABLE 2-3: NORTHERN AREA GROUNDWATER SAMPLING ANALYTE GROUPS WITH SCREENING LEVEL EXCEEDANCES
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Associated Wells	Zone	Constituents of Potential Concern Analyzed	Contaminants Detected	Groups with Cleanup Level/ Screening Level Exceedances	Analyte Groups Retained for Monitoring
TMW26	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Explosives, Metals, Anions, Perchlorate, VOC, Pesticides	Metals, VOC	Metals, Anions, SVOCs, VOCs, TPH
TMW28	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Metals, Anions, VOC	Metals, VOC	
TMW34	Alluvium	Metals, Anions, Perchlorate, VOC, TPH	Metals, Anions, Perchlorate, Tph, VOC	Metals, Anions	
TMW46	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, Perchlorate, SVOC	Metals, Anions	
Parcel 11 SWMU 45					
BGMW01	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, SVOC, VOC	Metals	Explosives, Metals, Anions, SVOCs, VOCs, TPH
BGMW03	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, Perchlorate, SVOC, VOC	Metals	
MW18D	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides, PCB, TPH	Explosives, Metals, Anions, Perchlorate, SVOC, Tph, VOC, Pesticides	Explosives, Metals, Anions, VOC	
MW18S	Alluvium	Not available	Not available	Not available	
MW20	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides, PCB, TPH	Metals, Anions, Perchlorate, SVOC, TPH, VOC, Pesticides	Metals, Anions, SVOC, VOC	
MW22D	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides, PCB, TPH	Metals, Anions, Perchlorate, SVOC, TPH, VOC, Pesticides	Metals, Anions, SVOC, VOC	
MW22S	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides, PCB, TPH	Explosives, Metals, Anions, Perchlorate, SVOC, Tph, VOC, Pesticides	Metals, Anions, VOC	
MW23	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, SVOC, VOC	
MW24	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, SVOC, VOC	Metals	
TMW23	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions	
TMW24	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Metals, Anions, VOC, Pesticides	Metals	

TABLE 2-3: NORTHERN AREA GROUNDWATER SAMPLING ANALYTE GROUPS WITH SCREENING LEVEL EXCEEDANCES
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Associated Wells	Zone	Constituents of Potential Concern Analyzed	Contaminants Detected	Groups with Cleanup Level/ Screening Level Exceedances	Analyte Groups Retained for Monitoring
Parcel 11 SWMU 50					
BGMW01	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, SVOC, VOC	Metals	Metals, Anions, SVOCs, VOCs, TPH
BGMW03	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, Perchlorate, SVOC, VOC	Metals	
MW01	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides, TPH	Explosives, Metals, Anions, Perchlorate, SVOC, TPH, VOC, Pesticides	Metals, Anions, VOC	
MW02	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides, TPH	Explosives, Metals, Anions, Perchlorate, SVOC, TPH, VOC	Metals, VOC	
MW03	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides, TPH	Explosives, Metals, Anions, Perchlorate, TPH, VOC	Metals, Anions, VOC	
MW23	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, SVOC, VOC	
MW24	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, SVOC, VOC	Metals	
TMW08	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides, PCB, TPH	Metals, Anions, SVOC, TPH, VOC, Pesticides	Metals, Anions, VOC	
TMW24	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Metals, Anions, VOC, Pesticides	Metals	
TMW45	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, Perchlorate, SVOC, VOC	Metals	
Parcel 21 SWMU 1					
BGMW01	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, SVOC, VOC	Metals	Explosives, Metals, Anions, Perchlorate, SVOCs, VOCs, TPH
BGMW02	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, Perchlorate, SVOC, VOC	Metals, Anions	
BGMW03	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, Perchlorate, SVOC, VOC	Metals	
BGMW07	Bedrock	Not available	Not available	Not available	

TABLE 2-3: NORTHERN AREA GROUNDWATER SAMPLING ANALYTE GROUPS WITH SCREENING LEVEL EXCEEDANCES
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Associated Wells	Zone	Constituents of Potential Concern Analyzed	Contaminants Detected	Groups with Cleanup Level/ Screening Level Exceedances	Analyte Groups Retained for Monitoring
BGMW08	Bedrock	Not available	Not available	Not available	Explosives, Metals, Anions, Perchlorate, SVOCs, VOCs, TPH
BGMW09	Bedrock	Not available	Not available	Not available	
BGMW10	Bedrock	Not available	Not available	Not available	
MW03	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides, TPH	Explosives, Metals, Anions, Perchlorate, Tph, VOC	Metals, Anions, VOC	
MW22D	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides, PCB, TPH	Metals, Anions, Perchlorate, SVOC, Tph, VOC, Pesticides	Metals, Anions, SVOC, VOC	
MW23	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, SVOC, VOC	
MW24	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, SVOC, VOC	Metals	
SMW01	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC	Metals, Anions, SVOC	
TMW02	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, Perchlorate, VOC	Explosives, Metals, Anions, Perchlorate	
TMW03	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, Perchlorate, SVOC, VOC	Explosives, Metals, Anions, SVOC	
TMW04	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, Perchlorate, SVOC, VOC	Explosives, Metals, Anions	
TMW06	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, SVOC, VOC	Metals, Anions	

TABLE 2-3: NORTHERN AREA GROUNDWATER SAMPLING ANALYTE GROUPS WITH SCREENING LEVEL EXCEEDANCES
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Associated Wells	Zone	Constituents of Potential Concern Analyzed	Contaminants Detected	Groups with Cleanup Level/ Screening Level Exceedances	Analyte Groups Retained for Monitoring
TMW07	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, SVOC, VOC	Metals, Anions, SVOC	Explosives, Metals, Anions, Perchlorate, SVOCs, VOCs, TPH
TMW08	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides, PCB, TPH	Metals, Anions, SVOC, TPH, VOC, Pesticides	Metals, Anions, VOC	
TMW10	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides, PCB, TPH	Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions	
TMW11	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, Perchlorate, VOC	Metals, Anions, VOC	
TMW13	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, PCB	Metals, Anions, Perchlorate, VOC	Metals, Anions, VOC	
TMW14A	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, SVOC, VOC	Metals, Anions, SVOC, VOC	
TMW15	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC	Metals, VOC	
TMW16	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Perchlorate, SVOC, VOC	Metals	
TMW17	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Metals, Anions, Perchlorate, VOC	Metals	
TMW18	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, Perchlorate, SVOC, VOC	Metals, SVOC, VOC	
TMW19	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Perchlorate, SVOC, VOC	Metals, SVOC	
TMW21	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, Perchlorate, VOC	Metals, Anions	
TMW22	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides, TPH	Explosives, Metals, Anions, Perchlorate, SVOC, VOC	Metals, Anions	
TMW23	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions	
TMW24	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Metals, Anions, VOC, Pesticides	Metals	

TABLE 2-3: NORTHERN AREA GROUNDWATER SAMPLING ANALYTE GROUPS WITH SCREENING LEVEL EXCEEDANCES
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Associated Wells	Zone	Constituents of Potential Concern Analyzed	Contaminants Detected	Groups with Cleanup Level/ Screening Level Exceedances	Analyte Groups Retained for Monitoring
TMW25	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Metals, Anions, VOC	Metals	Explosives, Metals, Anions, Perchlorate, SVOCs, VOCs, TPH
TMW26	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Explosives, Metals, Anions, Perchlorate, VOC, Pesticides	Metals, VOC	
TMW27	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Metals, Perchlorate, VOC	Metals	
TMW28	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Metals, Anions, VOC	Metals, VOC	
TMW29	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Metals, Anions, Perchlorate, VOC	Metals, Anions, VOC	
TMW31S	Alluvium	Explosives, Metals, Anions, Perchlorate, Phosphorus, SVOC, VOC, Cyanide, Dioxins/Furans, Herbicides, Pesticides, TPH	Explosives, Metals, Anions, Perchlorate, SVOC, TPH, VOC	Metals, Anions, Perchlorate, SVOC	
TMW34	Alluvium	Metals, Anions, Perchlorate, VOC, TPH	Metals, Anions, Perchlorate, TPH, VOC	Metals, Anions	
TMW36	Bedrock	Explosives, Metals, Anions, Perchlorate, Phosphorus, SVOC, VOC, Cyanide, Dioxins/Furans, Herbicides, Pesticides, TPH	Explosives, Metals, Anions, Perchlorate, SVOC, TPH, VOC, Pesticides	Metals, SVOC, VOC	
TMW37	Bedrock	Explosives, Metals, Anions, Perchlorate, Phosphorus, SVOC, VOC, Cyanide, Dioxins/Furans, Herbicides, Pesticides, TPH	Explosives, Metals, Anions, Perchlorate, SVOC, TPH, VOC, Pesticides	Metals, Perchlorate, VOC	
TMW38	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, SVOC	
TMW40	Not available	Not available	Not available	Not available	
TMW40S	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate	

TABLE 2-3: NORTHERN AREA GROUNDWATER SAMPLING ANALYTE GROUPS WITH SCREENING LEVEL EXCEEDANCES
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Associated Wells	Zone	Constituents of Potential Concern Analyzed	Contaminants Detected	Groups with Cleanup Level/ Screening Level Exceedances	Analyte Groups Retained for Monitoring
TMW41	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals	Explosives, Metals, Anions, Perchlorate, SVOCs, VOCs, TPH
TMW43	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, SVOC, VOC	Metals	
TMW44	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC	Explosives, Metals, Anions	
TMW45	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, Perchlorate, SVOC, VOC	Metals	
TMW46	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, Perchlorate, SVOC	Metals, Anions	
TMW47	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, VOC, Pesticides	Anions	
TMW49	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Perchlorate	
Parcel 21 SWMU 7					
BGMW01	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, SVOC, VOC	Metals	Metals, Anions, SVOCs, VOCs
BGMW03	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, Perchlorate, SVOC, VOC	Metals	
MW23	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, SVOC, VOC	
MW24	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, SVOC, VOC	Metals	
TMW21	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, Perchlorate, VOC	Metals, Anions	
TMW25	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Metals, Anions, VOC	Metals	
TMW45	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, Perchlorate, SVOC, VOC	Metals	
Parcel 22 SWMU 27					
BGMW01	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, SVOC, VOC	Metals	Explosives, Metals, Anions, Perchlorate, SVOCs, VOCs
BGMW03	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, Perchlorate, SVOC, VOC	Metals	

TABLE 2-3: NORTHERN AREA GROUNDWATER SAMPLING ANALYTE GROUPS WITH SCREENING LEVEL EXCEEDANCES
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Associated Wells	Zone	Constituents of Potential Concern Analyzed	Contaminants Detected	Groups with Cleanup Level/ Screening Level Exceedances	Analyte Groups Retained for Monitoring
BGMW07	Bedrock	Not available	Not available	Not available	Explosives, Metals, Anions, Perchlorate, SVOCs, VOCs
BGMW08	Bedrock	Not available	Not available	Not available	
BGMW09	Bedrock	Not available	Not available	Not available	
BGMW10	Bedrock	Not available	Not available	Not available	
MW23	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, SVOC, VOC	
MW24	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, SVOC, VOC	Metals	
TMW01	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, Perchlorate, VOC	Metals, Anions, Perchlorate, VOC	
TMW02	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, Perchlorate, VOC	Explosives, Metals, Anions, Perchlorate	
TMW03	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, Perchlorate, SVOC, VOC	Explosives, Metals, Anions, SVOC	
TMW11	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, Perchlorate, VOC	Metals, Anions, VOC	
TMW13	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, PCB	Metals, Anions, Perchlorate, VOC	Metals, Anions, VOC	
TMW14A	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans	Explosives, Metals, Anions, SVOC, VOC	Metals, Anions, SVOC, VOC	

TABLE 2-3: NORTHERN AREA GROUNDWATER SAMPLING ANALYTE GROUPS WITH SCREENING LEVEL EXCEEDANCES
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Associated Wells	Zone	Constituents of Potential Concern Analyzed	Contaminants Detected	Groups with Cleanup Level/ Screening Level Exceedances	Analyte Groups Retained for Monitoring
TMW15	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Dioxins/Furans, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC	Metals, VOC	Explosives, Metals, Anions, Perchlorate, SVOCs, VOCs
TMW30	Bedrock	Explosives, Metals, Anions, Perchlorate, Phosphorus, SVOC, VOC, Cyanide, Dioxins/Furans, Herbicides, Pesticides, TPH	Explosives, Metals, Anions, Perchlorate, SVOC, TPH, VOC, Pesticides	Metals, Anions, Perchlorate	
TMW31D	Bedrock	Explosives, Metals, Anions, Perchlorate, Phosphorus, SVOC, VOC, Cyanide, Dioxins/Furans, Herbicides, Pesticides, TPH	Explosives, Metals, Anions, Perchlorate, SVOC, VOC	Anions, Perchlorate	
TMW31S	Alluvium	Explosives, Metals, Anions, Perchlorate, Phosphorus, SVOC, VOC, Cyanide, Dioxins/Furans, Herbicides, Pesticides, TPH	Explosives, Metals, Anions, Perchlorate, SVOC, TPH, VOC	Metals, Anions, Perchlorate, SVOC	
TMW32	Bedrock	Explosives, Metals, Anions, Perchlorate, Phosphorus, SVOC, VOC, Cyanide, Dioxins/Furans, Herbicides, Pesticides, TPH	Explosives, Metals, Anions, Perchlorate, SVOC, TPH, VOC	Metals, Anions, Perchlorate	
TMW36	Bedrock	Explosives, Metals, Anions, Perchlorate, Phosphorus, SVOC, VOC, Cyanide, Dioxins/Furans, Herbicides, Pesticides, TPH	Explosives, Metals, Anions, Perchlorate, SVOC, TPH, VOC, Pesticides	Metals, SVOC, VOC	
TMW38	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, SVOC	
TMW39D	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC	Metals, Perchlorate	
TMW39S	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Perchlorate, SVOC, VOC	
TMW40D	Bedrock	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, Perchlorate	Metals, Anions, Perchlorate	
TMW40S	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate	
TMW41	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals	
TMW47	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, VOC, Pesticides	Anions	

TABLE 2-3: NORTHERN AREA GROUNDWATER SAMPLING ANALYTE GROUPS WITH SCREENING LEVEL EXCEEDANCES
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Associated Wells	Zone	Constituents of Potential Concern Analyzed	Contaminants Detected	Groups with Cleanup Level/ Screening Level Exceedances	Analyte Groups Retained for Monitoring
TMW48	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Explosives, Metals, Anions, Perchlorate, SVOC	Metals, Anions, Perchlorate	Explosives, Metals, Anions, Perchlorate, SVOCs, VOCs
TMW49	Alluvium	Explosives, Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Anions, Perchlorate, SVOC, VOC, Pesticides	Metals, Perchlorate	

ABBREVIATIONS and ACRONYMS:

AOC = area of concern

PCB = polychlorinated biphenyl

SVOC = semivolatile organic compound

TPH = total petroleum hydrocarbons

VOC = volatile organic compound

TABLE 2-4: NORTHERN AREA MONITORING NETWORK BY SITE AND POINT OF RELEASE
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

COPC	Point of Release/Parcel Number	Release Type	Primary Downgradient Well	Upgradient Well	Background Well	Sentinel Well
Nitrates	SWMU 1/Parcel 21	Alluvial = Large	MW03	BGMW02	BGMW01	MW23
			MW22D	TMW24	BGMW03	MW24
			SMW01	TMW47		
			TMW03			
			TMW10			
			TMW21			
			TMW22			
			TMW23			
			TMW25			
			TMW34			
			TMW40S			
			TMW43			
			TMW45			
			TMW46			
		Bedrock = Suspected	TMW02	None, dry	BGMW07	None
			TMW36		BGMW08	
			TMW38		BGMW09	
			TMW40D		BGMW10	
					TMW18	
					TMW19	
	SWMU 27/Parcel 22	Bedrock = Large	TMW02	None, dry	BGMW07	None
			TMW30		BGMW08	
			TMW31D		BGMW09	
			TMW32		BGMW10	
			TMW39D		TMW18	
			TMW48		TMW19	
		Alluvial = Suspected	TMW01	None, dry	BGMW01	MW23
			TMW13		BGMW03	MW24
			TMW31S			
			TMW41			
Explosives	SWMU 1/Parcel 21	Alluvial = Large	MW03	BGMW02	BGMW01	MW23
			TMW03	TMW47	BGMW03	MW24
			TMW06			
			TMW22			

TABLE 2-4: NORTHERN AREA MONITORING NETWORK BY SITE AND POINT OF RELEASE
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

COPC	Point of Release/Parcel Number	Release Type	Primary Downgradient Well	Upgradient Well	Background Well	Sentinel Well
Explosives		Bedrock = Suspected	TMW23			
			TMW40S			
			TMW43			
			TMW45			
			TMW02	None, dry	TMW18	None
			TMW36		TMW19	
			TMW38			
			TMW40D			
	SWMU 27/Parcel 22	Bedrock = Large	TMW02	None, dry	BGMW07	None
			TMW30		BGMW08	
			TMW31D		BGMW09	
			TMW32		BGMW10	
			TMW39D		TMW18	
			TMW48		TMW19	
		Alluvial = Suspected	TMW01	None, dry	BGMW01	MW23
			TMW13		BGMW03	MW24
			TMW31S			
			TMW41			
Perchlorate	SWMU 27/Parcel 22	Bedrock = Large	TMW02	None, dry	BGMW07	None
			TMW30		BGMW08	
			TMW31D		BGMW09	
			TMW32		BGMW10	
			TMW36		TMW18	
			TMW38		TMW19	
			TMW39D			
			TMW40D			
			TMW48			
		Alluvial = Large	TMW01	None, dry	BGMW01	MW23
			TMW03		BGMW03	MW24
			TMW13			
			TMW31S			
			TMW39S			
			TMW41			

TABLE 2-4: NORTHERN AREA MONITORING NETWORK BY SITE AND POINT OF RELEASE
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

COPC	Point of Release/Parcel Number	Release Type	Primary Downgradient Well	Upgradient Well	Background Well	Sentinel Well
Metals	SWMU 45/Parcel 11	Suspected	MW18D	TMW24	BGMW01	MW23
			TMW33		BGMW03	MW24
			TMW34			
	SWMU 50/Parcel 11	Suspected	MW01	TMW24	BGMW01	MW23
			MW18D		BGMW03	MW24
	SWMU 1/Parcel 21	Alluvial = Large	TMW10	BGMW02	BGMW01	MW23
			TMW21	TMW24	BGMW03	MW24
			TMW23	TMW47		
			TMW25			
			TMW27			
			TMW34			
			TMW40S			
			TMW44			
			TMW46			
		Bedrock = Suspected	TMW02	None, dry	BGMW07	None
			TMW36		BGMW08	
			TMW38		BGMW09	
			TMW40D		BGMW10	
					TMW18	
					TMW19	
	SWMU 27/Parcel 22	Bedrock = Large	TMW02	None, dry	BGMW07	None
			TMW30		BGMW08	
			TMW31D		BGMW09	
			TMW32		BGMW10	
			TMW36		TMW18	
			TMW39D		TMW19	
			TMW48			
		Alluvial = Suspected	TMW01	None, dry	BGMW01	MW23
			TMW13		BGMW03	MW24
			TMW31S			
			TMW41			

TABLE 2-4: NORTHERN AREA MONITORING NETWORK BY SITE AND POINT OF RELEASE
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

COPC	Point of Release/Parcel Number	Release Type	Primary Downgradient Well	Upgradient Well	Background Well	Sentinel Well
VOC	SWMU 45/Parcel 11	Small	MW18D MW20 MW22D TMW33 TMW46	TMW24 TMW45	BGMW01 BGMW03	MW23 MW24
	SWMU 50/Parcel 11	Small	MW01 MW02 MW03	TMW24 TMW45	BGMW01 BGMW03	MW23 MW24
SVOC	SWMU 8/Parcel 6	Suspected	TMW14A TMW16 TMW17	None, dry	BGMW07 BGMW08 BGMW09 BGMW10 TMW18 TMW19	None
	SWMU 6/Parcel 11	Suspected	TMW34 TMW46	TMW24	BGMW01 BGMW03	MW23 MW24
	SWMU 45/Parcel 11	Small	MW18D MW20 TMW34 TMW46	TMW24	BGMW01 BGMW03	MW23 MW24
DRO	SWMU 6/Parcel 11	Suspected	MW18D TMW25 TMW34 TMW46	TMW24	BGMW01 BGMW03	MW23 MW24
	SWMU 7/Parcel 21	Suspected	TMW21 TMW25	TMW45	BGMW01 BGMW03	MW23 MW24
	SWMU 45/Parcel 11	Small	MW18D MW20 MW22D TMW33	TMW24	BGMW01 BGMW03	MW23 MW24

TABLE 2-4: NORTHERN AREA MONITORING NETWORK BY SITE AND POINT OF RELEASE
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

COPC	Point of Release/Parcel Number	Release Type	Primary Downgradient Well	Upgradient Well	Background Well	Sentinel Well
GRO	SWMU 45/Parcel 11	Small	MW18D MW20 MW22D TMW33	TMW24	BGMW01 BGMW03	MW23 MW24
	SWMU 50/Parcel 11	Small	MW01 MW02 MW03 TMW46	TMW24 TMW45	BGMW01 BGMW03	MW23 MW24

NOTES:

Large = contaminant plume greater than 500 feet in any direction

Small = contaminant plume less than 500 feet in longest dimension

Suspected = contaminant plume not delineated historically

ABBREVIATIONS & ACRONYMS:

COPC = contaminant of potential concern

DRO = diesel range organics

GRO = gasoline range organics

SVOC = semivolatile organic compound

SWMU = solid waste management unit

VOC = volatile organic compound

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
Northern Area Groundwater Elevations (Wells Screened in Alluvial Sediments)										
BGMW01	Alluvial	2.40	12.5-32.5	33.0	6,690.28	6,692.68	Jul-14	16.82	19.22	6,673.46
							Oct-14	16.87	19.27	6,673.41
							Jan-15	16.62	19.02	6,673.66
							Mar-15	16.55	18.95	6,673.73
							Jul-15	17.02	19.42	6,673.26
							Oct-15	17.24	19.64	6,673.04
							Jan-16	16.91	19.31	6,673.37
							Apr-16	16.95	19.35	6,673.33
							Jul-16	17.47	19.87	6,672.81
							Oct-16	17.59	19.99	6,672.69
							Jan-17	17.22	19.62	6,673.06
							Apr-17	17.08	19.48	6,673.20
							Jul-17	17.68	20.08	6,672.60
							Oct-17	17.82	20.22	6,672.46
							Jan-18	17.60	20.00	6,672.68
							Apr-18	17.38	19.78	6,672.90
							Jul-18	18.04	20.44	6,672.24
							Oct-18	18.15	20.55	6,672.13
							Jan-19	17.89	20.29	6,672.39
							Apr-19	17.47	19.87	6,672.81
		2.41	12.5-32.5	33.0	6,690.82	6,693.23	Jul-19	17.95	20.36	6,672.87
							Sep-19	18.21	20.62	6,672.61
							Jan-20	17.67	20.08	6,673.15
							Apr-20	17.54	19.95	6,673.28
							Jul-20	18.44	20.85	6,672.38
							Oct-20	18.06	20.47	6,672.76
BGMW02	Alluvial	2.79	13.5-33.5	34.0	6,689.20	6,691.99	Jul-14	18.38	21.17	6,670.82
							Oct-14	18.62	21.41	6,670.58
							Jan-15	18.34	21.13	6,670.86
							Mar-15	18.17	20.96	6,671.03
							Jul-15	18.57	21.36	6,670.63
							Oct-15	19.02	21.81	6,670.18
							Jan-16	18.68	21.47	6,670.52
							Apr-16	18.56	21.35	6,670.64
							Jul-16	18.98	21.77	6,670.22
							Oct-16	19.37	22.16	6,669.83
							Jan-17	18.98	21.77	6,670.22
							Apr-17	18.63	21.42	6,670.57
							Jul-17	19.03	21.82	6,670.17
							Oct-17	19.52	22.31	6,669.68
							Jan-18	19.24	22.03	6,669.96
							Apr-18	18.83	21.62	6,670.37
							Jul-18	19.61	22.40	6,669.59
							Oct-18	19.92	22.71	6,669.28
							Jan-19	19.17	21.96	6,670.03
							Apr-19	19.04	21.83	6,670.16
		2.84	13.5-33.5	34.0	6,689.73	6,692.57	Jul-19	19.08	21.92	6,670.65
							Sep-19	18.89	21.73	6,670.84
							Jan-20	19.26	22.10	6,670.47
							Apr-20	19.19	22.03	6,670.54
							Jul-20	20.06	22.90	6,669.67
							Oct-20	20.35	23.19	6,669.38

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
BGMW03	Alluvial	2.76	8.5-28.5	29.0	6,677.79	6,680.57	Jul-14	14.29	17.05	6,663.52
							Oct-14	14.39	17.15	6,663.42
							Jan-15	13.61	16.37	6,664.20
							Mar-15	13.33	16.09	6,664.48
							Jul-15	14.21	16.97	6,663.60
							Oct-15	14.33	17.09	6,663.48
							Jan-16	13.95	16.71	6,663.86
							Apr-16	13.73	16.49	6,664.08
							Jul-16	14.77	17.53	6,663.04
							Oct-16	15.12	17.88	6,662.69
							Jan-17	14.37	17.13	6,663.44
							Apr-17	13.97	16.73	6,663.84
							Jul-17	16.11	18.87	6,661.70
							Oct-17	15.21	17.97	6,662.60
							Jan-18	14.32	17.08	6,663.49
							Apr-18	13.87	16.63	6,663.94
							Jul-18	15.24	18.00	6,662.57
							Oct-18	15.59	18.35	6,662.22
							Jan-19	14.83	17.59	6,662.98
							Apr-19	14.55	17.31	6,663.26
		2.77			6,676.63	6,679.39	Jul-19	15.61	18.38	6,661.01
							Sep-19	16.14	18.91	6,660.48
							Jan-20	15.16	17.93	6,661.46
							Apr-20	14.63	17.40	6,661.99
							Jul-20	16.01	18.78	6,660.61
							Oct-20	16.49	19.26	6,660.13
							Nov-19	17.19	19.48	6,636.08
							Apr-20	15.86	18.15	6,637.41
							Jul-20	17.27	19.56	6,636.00
							Oct-20	17.90	20.19	6,635.37
BGMW11	Alluvial	2.29	20-40	40.0	6,653.27	6,655.56	Nov-19	17.19	19.48	6,636.08
							Apr-20	15.86	18.15	6,637.41
							Jul-20	17.27	19.56	6,636.00
							Oct-20	17.90	20.19	6,635.37
BGMW12	Alluvial	2.81	12-32	32.0	6,692.40	6,695.21	Nov-19	17.58	20.39	6,674.82
							Apr-20	17.14	19.95	6,675.26
							Jul-20	18.94	21.75	6,673.46
							Oct-20	18.18	20.99	6,674.22
BGMW13S	Alluvial	2.92	49-69	69.0	6,659.05	6,661.97	Nov-19	18.88	21.80	6,640.17
							Apr-20	18.39	21.31	6,640.66
							Jul-20	18.97	21.89	6,640.08
							Oct-20	19.43	22.35	6,639.62
BGMW13D	Alluvial	2.75	84-104	104.0	6,659.08	6,661.83	Nov-19	18.05	20.80	6,641.03
							Apr-20	17.67	20.42	6,641.41
							Jul-20	18.14	20.89	6,640.94
							Oct-20	18.53	21.28	6,640.55

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
FW31	Alluvial	1.74	10.0-50.0	50.0	6,830.72	6,832.49	Jul-14	40.66	42.40	6,790.09
							Oct-14	40.75	42.49	6,790.00
							Jan-15	40.67	42.41	6,790.08
							Mar-15	40.65	42.39	6,790.10
							Jul-15	40.81	42.55	6,789.94
							Oct-15	40.92	42.66	6,789.83
							Jan-16	40.85	42.59	6,789.90
							Apr-16	40.91	42.65	6,789.84
							Jul-16	41.09	42.83	6,789.66
							Oct-16	41.18	42.92	6,789.57
							Jan-17	NM	NM	NM
							Apr-17	41.09	42.83	6,789.66
							Jul-17	41.26	43.00	6,789.49
							Oct-17	41.30	43.04	6,789.45
							Jan-18	41.36	43.10	6,789.39
							Apr-18	41.27	43.01	6,789.48
							Jul-18	41.35	43.09	6,789.40
							Oct-18	41.40	43.14	6,789.35
							Jan-19	41.39	43.13	6,789.36
							Apr-19	41.26	43.00	6,789.49
		1.74			6,830.96	6,832.70	Jul-19	41.52	43.26	6,789.44
							Sep-19	41.58	43.32	6,789.38
							Jan-20	41.64	43.38	6,789.32
							Apr-20	41.59	43.33	6,789.37
							Jul-20	41.80	43.54	6,789.16
							Oct-20	41.89	43.63	6,789.07
FW35	Alluvial	2.18	10.0-30.0	30.0	6,709.17	6,711.11	Jul-14	26.77	28.95	6,682.16
							Oct-14	28.11	30.29	6,680.82
							Jan-15	27.67	29.85	6,681.26
							Mar-15	27.33	29.51	6,681.60
							Jul-15	28.81	30.99	6,680.12
							Oct-15	Dry	Dry	Dry
							Jan-16	Dry	Dry	Dry
							Apr-16	Dry	Dry	Dry
							Jul-16	Dry	Dry	Dry
							Oct-16	Dry	Dry	Dry
							Jan-17	Dry	Dry	Dry
							Apr-17	Dry	Dry	Dry
							Jul-17	Dry	Dry	Dry
							Oct-17	Dry	Dry	Dry
							Jan-18	Dry	Dry	Dry
							Apr-18	Dry	Dry	Dry
							Jul-18	Dry	Dry	Dry
							Oct-18	Dry	Dry	Dry
							Jan-19	Dry	Dry	Dry
							Apr-19	Dry	Dry	Dry
		2.18			6,709.13	6,711.31	Jul-19	Dry	Dry	Dry
							Sep-19	Dry	Dry	Dry
							Jan-20	Dry	Dry	Dry
							Apr-20	Dry	Dry	Dry
							Jul-20	Dry	Dry	Dry
							Oct-20	Dry	Dry	Dry

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE

2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
MW01	Alluvial	-0.09	33.6-53.6	55.0	6,686.03	6,685.94	Jul-14	42.65	42.56	6,643.38
		Oct-14					42.72	42.63	6,643.31	
		Jan-15					42.63	42.54	6,643.40	
		Mar-15					42.78	42.69	6,643.25	
		Jul-15					42.72	42.63	6,643.31	
		Oct-15					42.92	42.83	6,643.11	
		Jan-16					42.86	42.77	6,643.17	
		Apr-16					43.04	42.95	6,642.99	
		Jul-16					43.08	42.99	6,642.95	
		Oct-16					43.11	43.02	6,642.92	
		Jan-17					43.28	43.19	6,642.75	
		Apr-17					43.24	43.15	6,642.79	
		Jul-17					43.37	43.28	6,642.66	
		Oct-17					43.48	43.39	6,642.55	
		Jan-18					43.53	43.44	6,642.50	
		Apr-18					43.49	43.40	6,642.54	
		Jul-18					43.46	43.37	6,642.57	
		Oct-18					43.51	43.42	6,642.52	
		Jan-19					43.70	43.61	6,642.33	
		Apr-19					43.76	43.67	6,642.27	
		-0.19			6,686.98	6,686.79	Jul-19	43.89	43.70	6,643.09
		Sep-19					43.84	43.65	6,643.14	
		Jan-20					44.00	43.81	6,642.98	
		Apr-20					43.96	43.77	6,643.02	
		Jul-20					43.99	43.80	6,642.99	
		Oct-20					44.07	43.88	6,642.91	
MW02	Alluvial	-0.56	37.0-47.0	48.0	6,685.78	6,685.22	Jul-14	40.89	40.33	6,644.89
		Oct-14					41.07	40.51	6,644.71	
		Jan-15					41.27	40.71	6,644.51	
		Mar-15					41.32	40.76	6,644.46	
		Jul-15					41.37	40.81	6,644.41	
		Oct-15					41.51	40.95	6,644.27	
		Jan-16					41.53	40.97	6,644.25	
		Apr-16					41.71	41.15	6,644.07	
		Jul-16					41.71	41.15	6,644.07	
		Oct-16					41.83	41.27	6,643.95	
		Jan-17					41.98	41.42	6,643.80	
		Apr-17					42.00	41.44	6,643.78	
		Jul-17					42.12	41.56	6,643.66	
		Oct-17					42.25	41.69	6,643.53	
		Jan-18					42.29	41.73	6,643.49	
		Apr-18					42.32	41.76	6,643.46	
		Jul-18					42.39	41.83	6,643.39	
		Oct-18					42.35	41.79	6,643.43	
		Jan-19					42.60	42.04	6,643.18	
		Apr-19					42.62	42.06	6,643.16	
		-0.46			6,685.60	6,685.13	Jul-19	42.54	42.08	6,643.05
		Sep-19					42.49	42.03	6,643.10	
		Jan-20					42.65	42.19	6,642.94	
		Apr-20					44.30	43.84	6,641.29	
		Jul-20					42.73	42.27	6,642.86	
		Oct-20					42.79	42.33	6,642.80	

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
MW03	Alluvial	2.03	43.0-53.0	53.0	6,687.50	6,689.53	Jul-14	44.33	46.36	6,643.17
							Oct-14	44.32	46.35	6,643.18
							Jan-15	44.27	46.30	6,643.23
							Mar-15	44.39	46.42	6,643.11
							Jul-15	44.40	46.43	6,643.10
							Oct-15	44.48	46.51	6,643.02
							Jan-16	44.39	46.42	6,643.11
							Apr-16	44.62	46.65	6,642.88
							Jul-16	44.60	46.63	6,642.90
							Oct-16	44.84	46.87	6,642.66
							Jan-17	44.64	46.67	6,642.86
							Apr-17	44.70	46.73	6,642.80
							Jul-17	44.89	46.92	6,642.61
							Oct-17	45.07	47.10	6,642.43
							Jan-18	44.93	46.96	6,642.57
		Apr-18			44.96	46.99	6,642.54			
		2.45			6,687.81	6,690.26	Jul-18	44.95	46.98	6,642.55
							Oct-18	44.81	46.84	6,642.69
							Jan-19	45.04	47.07	6,642.46
							Apr-19	45.22	47.25	6,642.28
							Jul-19	44.76	47.21	6,643.05
							Sep-19	44.57	47.02	6,643.24
							Jan-20	44.81	47.26	6,643.00
							Apr-20	44.84	47.29	6,642.97
							Jul-20	44.80	47.25	6,643.01
							Oct-20	44.95	47.40	6,642.86
MW18D	Alluvial		1.81	47.0-57.0			59.9	6,684.94	6,686.32	Jul-14
		Oct-14			41.74	43.55				6,642.77
		Jan-15			41.60	43.41				6,642.91
		Mar-15			41.80	43.61				6,642.71
		Jul-15			41.69	43.50				6,642.82
		Oct-15			41.90	43.71				6,642.61
		Jan-16			41.84	43.65				6,642.67
		Apr-16			42.07	43.88				6,642.44
		Jul-16			42.08	43.89				6,642.43
		Oct-16			42.23	44.04				6,642.28
		Jan-17			42.21	44.02				6,642.30
		Apr-17			42.26	44.07				6,642.25
		Jul-17			42.39	44.20				6,642.12
		Oct-17			42.62	44.43				6,641.89
1.81	6,685.30	6,687.11	Jan-18	42.51	44.32	6,642.00				
			Apr-18	42.58	44.39	6,641.93				
			Jul-18	42.63	44.44	6,641.88				
			Oct-18	42.47	44.28	6,642.04				
			Jan-19	42.67	44.48	6,641.84				
			Apr-19	42.89	44.70	6,641.62				
			Jul-19	42.94	44.75	6,642.36				
			Sep-19	42.80	44.61	6,642.50				
			Jan-20	43.00	44.81	6,642.30				
			Apr-20	44.12	45.93	6,641.18				
Jul-20	43.10	44.91	6,642.20							
Oct-20	43.19	45.00	6,642.11							

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
MW18S	Alluvial	2.05	27.0-37.0	39.0	6,684.67	6,686.61	Jul-14	Dry	Dry	Dry
							Oct-14	Dry	Dry	Dry
							Jan-15	Dry	Dry	Dry
							Mar-15	Dry	Dry	Dry
							Jul-15	Dry	Dry	Dry
							Oct-15	Dry	Dry	Dry
							Jan-16	Dry	Dry	Dry
							Apr-16	Dry	Dry	Dry
							Jul-16	Dry	Dry	Dry
							Oct-16	Dry	Dry	Dry
							Jan-17	Dry	Dry	Dry
							Apr-17	Dry	Dry	Dry
		Jul-17			Dry	Dry	Dry			
		Oct-17			Dry	Dry	Dry			
		Jan-18			Dry	Dry	Dry			
		Apr-18			Dry	Dry	Dry			
		Jul-18			Dry	Dry	Dry			
		Oct-18			Dry	Dry	Dry			
		Jan-19			Dry	Dry	Dry			
		Apr-19			Dry	Dry	Dry			
		Jul-19			Dry	Dry	Dry			
		Sep-19			Dry	Dry	Dry			
		Jan-20			Dry	Dry	Dry			
		Apr-20			Dry	Dry	Dry			
		Jul-20			Dry	Dry	Dry			
		Oct-20			Dry	Dry	Dry			
MW20	Alluvial	2.33	47.0-57.0	59.4	6,685.34	6,687.67	Jul-14	43.00	45.33	6,642.34
							Oct-14	43.12	45.45	6,642.22
							Jan-15	42.99	45.32	6,642.35
							Mar-15	43.09	45.42	6,642.25
							Jul-15	43.05	45.38	6,642.29
							Oct-15	43.23	45.56	6,642.11
							Jan-16	43.19	45.52	6,642.15
							Apr-16	43.28	45.61	6,642.06
							Jul-16	43.36	45.69	6,641.98
							Oct-16	43.49	45.82	6,641.85
							Jan-17	43.60	45.93	6,641.74
							Apr-17	43.49	45.82	6,641.85
		Jul-17			43.62	45.95	6,641.72			
		Oct-17			43.83	46.16	6,641.51			
		Jan-18			43.82	46.15	6,641.52			
		Apr-18			43.77	46.10	6,641.57			
		Jul-18			43.93	46.26	6,641.41			
		Oct-18			43.92	46.25	6,641.42			
		Jan-19			43.95	46.28	6,641.39			
		Apr-19			44.05	46.38	6,641.29			
		Jul-19			43.96	46.47	6,641.88			
		Sep-19			43.99	46.50	6,641.85			
		Jan-20			44.07	46.58	6,641.77			
		Apr-20			43.83	46.34	6,642.01			
		Jul-20			44.23	46.74	6,641.61			
		Oct-20			44.27	46.78	6,641.57			

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
MW22D	Alluvial	1.86	47.0-57.0	58.6	6,682.69	6,684.55	Jul-14	40.41	42.27	6,642.28
							Oct-14	40.55	42.41	6,642.14
							Jan-15	40.39	42.25	6,642.30
							Mar-15	40.45	42.31	6,642.24
							Jul-15	40.47	42.33	6,642.22
							Oct-15	40.71	42.57	6,641.98
							Jan-16	40.66	42.52	6,642.03
							Apr-16	40.81	42.67	6,641.88
							Jul-16	40.88	42.74	6,641.81
							Oct-16	41.06	42.92	6,641.63
							Jan-17	41.07	42.93	6,641.62
							Apr-17	41.06	42.92	6,641.63
							Jul-17	41.20	43.06	6,641.49
							Oct-17	41.45	43.31	6,641.24
		Jan-18			41.54	43.40	6,641.15			
		2.06			6,683.28	6,685.34	Apr-18	41.33	43.19	6,641.36
							Jul-18	41.55	43.41	6,641.14
							Oct-18	41.69	43.55	6,641.00
							Jan-19	41.55	43.41	6,641.14
							Apr-19	41.61	43.47	6,641.08
							Jul-19	41.58	43.64	6,641.70
							Sep-19	41.58	43.64	6,641.70
							Jan-20	41.71	43.77	6,641.57
							Apr-20	41.67	43.73	6,641.61
							Jul-20	41.80	43.86	6,641.48
							Oct-20	41.91	43.97	6,641.37
MW22S	Alluvial		2.00	31.0-41.0			43.5	6,682.69	6,684.69	Jul-14
		Oct-14			40.27	42.27				6,642.42
		Jan-15			40.18	42.18				6,642.51
		Mar-15			40.37	42.37				6,642.32
		Jul-15			40.29	42.29				6,642.40
		Oct-15			40.53	42.53				6,642.16
		Jan-16			40.47	42.47				6,642.22
		Apr-16			40.61	42.61				6,642.08
		Jul-16			40.70	42.70				6,641.99
		Oct-16			Dry	Dry				Dry
		Jan-17			Dry	Dry				Dry
		Apr-17			Dry	Dry				Dry
		Jul-17			Dry	Dry				Dry
		Oct-17			Dry	Dry				Dry
		Jan-18			Dry	Dry				Dry
		Apr-18			Dry	Dry				Dry
		Jul-18			Dry	Dry				Dry
		Oct-18			Dry	Dry				Dry
		Jan-19			Dry	Dry				Dry
		Apr-19			Dry	Dry				Dry
		2.05	6,683.28		6,685.33	Jul-19		Dry	Dry	Dry
						Sep-19		Dry	Dry	Dry
						Jan-20		Dry	Dry	Dry
						Apr-20		Dry	Dry	Dry
						Jul-20		Dry	Dry	Dry
						Oct-20		Dry	Dry	Dry

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)			
MW23	Alluvial	2.04	63.5-133.5	134.0	6,652.46	6,654.50	Jul-14	13.16	15.20	6,639.30			
							Oct-14	13.49	15.53	6,638.97			
							Jan-15	13.22	15.26	6,639.24			
							Mar-15	12.71	14.75	6,639.75			
							Jul-15	12.64	14.68	6,639.82			
							Oct-15	13.08	15.12	6,639.38			
							Jan-16	12.94	14.98	6,639.52			
							Apr-16	13.32	15.36	6,639.14			
							Jul-16	13.00	15.04	6,639.46			
							Oct-16	13.59	15.63	6,638.87			
							Jan-17	13.33	15.37	6,639.13			
							Apr-17	12.72	14.76	6,639.74			
							Jul-17	12.96	15.00	6,639.50			
							Oct-17	13.36	15.40	6,639.10			
		Jan-18			13.35	15.39	6,639.11						
		Apr-18			13.47	15.51	6,638.99						
		2.10			6,652.99	6,655.09	Jul-18	13.90	15.94	6,638.56			
							Oct-18	13.98	16.02	6,638.48			
							Jan-19	13.99	16.03	6,638.47			
							Apr-19	13.10	15.14	6,639.36			
							Jul-19	13.65	15.75	6,639.34			
							Sep-19	13.93	16.03	6,639.06			
							Jan-20	14.05	16.15	6,638.94			
							Apr-20	16.02	18.12	6,636.97			
							Jul-20	14.41	16.51	6,638.58			
							Oct-20	14.90	17.00	6,638.09			
MW24	Alluvial		1.99	16.0-66.0			66.5	6,655.09	6,657.08	Jul-14	17.87	19.86	6,637.22
										Oct-14	18.32	20.31	6,636.77
		Jan-15			17.72	19.71				6,637.37			
		Mar-15			17.31	19.30				6,637.78			
		Jul-15			17.50	19.49				6,637.59			
		Oct-15			19.54	21.53				6,635.55			
		Jan-16			17.63	19.62				6,637.46			
		Apr-16			17.95	19.94				6,637.14			
		Jul-16			17.79	19.78				6,637.30			
		Oct-16			18.64	20.63				6,636.45			
		Jan-17			17.85	19.84				6,637.24			
		Apr-17			17.30	19.29				6,637.79			
		Jul-17			17.82	19.81				6,637.27			
		1.85	6,655.72		6,657.57	Oct-17		18.76	20.75	6,636.33			
						Jan-18		16.57	18.56	6,638.52			
						Apr-18		17.98	19.97	6,637.11			
						Jul-18		18.61	20.60	6,636.48			
						Oct-18		18.93	20.92	6,636.16			
						Jan-19		18.66	20.65	6,636.43			
						Apr-19		18.06	20.05	6,637.03			
						Jul-19		18.57	20.42	6,637.15			
						Sep-19		17.31	19.16	6,638.41			
						Jan-20		18.10	19.95	6,637.62			
						Apr-20		18.14	19.99	6,637.58			
						Jul-20		19.49	21.34	6,636.23			
						Oct-20		19.30	21.15	6,636.42			

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE

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Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
MW25	Alluvial	2.87	45.5-65.5	65.5	6,676.18	6,679.05	Nov-19	38.90	41.77	6,637.28
							Apr-20	38.45	41.32	6,637.73
							Jul-20	38.81	41.68	6,637.37
							Oct-20	39.05	41.92	6,637.13
MW26	Alluvial	2.97	40-60	60.0	6,670.96	6,673.93	Nov-19	35.73	38.70	6,635.23
							Apr-20	27.36	30.33	6,643.60
							Jul-20	35.55	38.52	6,635.41
							Oct-20	35.76	38.73	6,635.20
MW27	Alluvial	2.46	43-63	63.0	6,690.94	6,693.40	Nov-19	42.68	45.14	6,648.26
							Apr-20	47.94	50.40	6,643.00
							Jul-20	48.02	50.48	6,642.92
							Oct-20	48.07	50.53	6,642.87
MW28	Alluvial	2.66	40-60	60.0	6,689.51	6,692.17	Nov-19	46.11	48.77	6,643.40
							Apr-20	46.28	48.94	6,643.23
							Jul-20	46.32	48.98	6,643.19
							Oct-20	46.37	49.03	6,643.14
MW29	Alluvial	2.65	37-57	57.0	6,684.49	6,687.14	Nov-19	41.47	44.12	6,643.02
							Apr-20	41.58	44.23	6,642.91
							Jul-20	41.70	44.35	6,642.79
							Oct-20	41.77	44.42	6,642.72
MW30	Alluvial	2.75	40-60	60.0	6,686.83	6,689.57	Nov-19	43.67	46.42	6,643.15
							Apr-20	43.82	46.57	6,643.00
							Jul-20	44.16	46.91	6,642.66
							Oct-20	43.96	46.71	6,642.86
MW31	Alluvial	2.68	36-56	56.0	6,681.76	6,684.45	Nov-19	40.50	43.18	6,641.27
							Apr-20	40.39	43.07	6,641.38
							Jul-20	40.64	43.32	6,641.13
							Oct-20	40.76	43.44	6,641.01
MW32	Alluvial	2.54	40-60	60.0	6,684.84	6,687.37	Nov-19	44.03	46.57	6,640.80
							Apr-20	43.73	46.27	6,641.10
							Jul-20	44.99	47.53	6,639.84
							Oct-20	44.13	46.67	6,640.70
MW33	Alluvial	3.01	37-57	57.0	6,675.98	6,679.00	Nov-19	42.16	45.17	6,633.83
							Apr-20	41.64	44.65	6,634.35
							Jul-20	41.78	44.79	6,634.21
							Oct-20	42.01	45.02	6,633.98
MW34	Alluvial	2.88	40-60	60.0	6,672.91	6,675.80	Nov-19	40.83	43.71	6,632.09
							Apr-20	40.33	43.21	6,632.59
							Jul-20	40.35	43.23	6,632.57
							Oct-20	40.73	43.61	6,632.19
MW35	Alluvial	2.42	41-61	61.0	6,708.96	6,711.38	Nov-19	20.87	23.29	6,688.09
							Apr-20	30.67	33.09	6,678.29
							Jul-20	31.17	33.59	6,677.79
							Oct-20	31.57	33.99	6,677.39
MW36S	Alluvial	2.77	30-50	50.0	6,653.54	6,656.31	Nov-19	19.18	21.95	6,634.36
							Apr-20	18.97	21.74	6,634.57
							Jul-20	19.33	22.10	6,634.21
							Oct-20	19.87	22.64	6,633.67
MW36D	Alluvial	2.75	55-75	75.0	6,653.48	6,656.23	Nov-19	14.40	17.15	6,639.08
							Apr-20	14.14	16.89	6,639.34
							Jul-20	14.70	17.45	6,638.78
							Oct-20	15.16	17.91	6,638.32

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
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Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
SMW01	Alluvial	1.53	29.9-49.9	50.2	6,668.41	6,669.94	Jul-14	29.32	30.85	6,639.09
							Oct-14	29.56	31.09	6,638.85
							Jan-15	29.19	30.72	6,639.22
							Mar-15	29.27	30.80	6,639.14
							Jul-15	29.66	31.19	6,638.75
							Oct-15	29.92	31.45	6,638.49
							Jan-16	29.67	31.20	6,638.74
							Apr-16	29.88	31.41	6,638.53
							Jul-16	30.30	31.83	6,638.11
							Oct-16	30.58	32.11	6,637.83
		Jan-17			30.34	31.87	6,638.07			
		Apr-17			31.27	32.80	6,637.14			
		Jul-17			30.77	32.30	6,637.64			
		Oct-17			31.17	32.70	6,637.24			
		Jan-18			30.84	32.37	6,637.57			
		Apr-18			30.66	32.19	6,637.75			
		Jul-18			31.25	32.78	6,637.16			
		Oct-18			31.29	32.82	6,637.12			
		Jan-19			31.32	32.85	6,637.09			
		Apr-19			31.26	32.79	6,637.15			
		Jul-19			31.52	32.89	6,637.16			
		Sep-19			31.13	32.50	6,637.55			
		Jan-20			31.66	33.03	6,637.02			
		Apr-20			31.38	32.75	6,637.30			
		Jul-20			31.49	32.86	6,637.19			
		Oct-20			31.94	33.31	6,636.74			
TMW01	Alluvial	2.05	44.0-59.0	60.0	6,709.79	6,711.84	Jul-14	36.66	38.71	6,673.13
							Oct-14	36.96	39.01	6,672.83
							Jan-15	36.96	39.01	6,672.83
							Mar-15	37.18	39.23	6,672.61
							Jul-15	37.32	39.37	6,672.47
							Oct-15	37.57	39.62	6,672.22
							Jan-16	37.58	39.63	6,672.21
							Apr-16	37.89	39.94	6,671.90
							Jul-16	38.11	40.16	6,671.68
							Oct-16	38.36	40.41	6,671.43
							Jan-17	38.29	40.34	6,671.50
							Apr-17	38.61	40.66	6,671.18
							Jul-17	38.80	40.85	6,670.99
							Oct-17	39.15	41.20	6,670.64
							Jan-18	39.25	41.30	6,670.54
							Apr-18	39.36	41.41	6,670.43
							Jul-18	39.63	41.68	6,670.16
							Oct-18	39.73	41.78	6,670.06
							Jan-19	40.10	42.15	6,669.69
							Apr-19	40.07	42.12	6,669.72
		Jul-19			40.78	42.50	6,670.00			
		Sep-19			40.79	42.51	6,669.99			
		Jan-20			41.10	42.82	6,669.68			
		Apr-20			41.26	42.98	6,669.52			
		Jul-20			41.48	43.20	6,669.30			
		Oct-20			41.69	43.41	6,669.09			
		1.72			6,710.79	6,712.50				

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
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Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW02	Alluvial	2.01	67.9-81.9	85.0	6,703.34	6,705.35	Jul-14	53.67	55.68	6,649.67
							Oct-14	53.75	55.76	6,649.59
							Jan-15	53.68	55.69	6,649.66
							Mar-15	53.81	55.82	6,649.53
							Jul-15	53.84	55.85	6,649.50
							Oct-15	53.89	55.90	6,649.45
							Jan-16	53.81	55.82	6,649.53
							Apr-16	54.03	56.04	6,649.31
							Jul-16	54.75	56.76	6,648.59
							Oct-16	54.17	56.18	6,649.17
							Jan-17	53.93	55.94	6,649.41
							Apr-17	54.15	56.16	6,649.19
							Jul-17	55.27	57.28	6,648.07
							Oct-17	54.38	56.39	6,648.96
							Jan-18	54.35	56.36	6,648.99
							Apr-18	54.42	56.43	6,648.92
							Jul-18	54.27	56.28	6,649.07
							Oct-18	54.47	56.48	6,648.87
							Jan-19	54.47	56.48	6,648.87
							Apr-19	54.49	56.50	6,648.85
		1.53			6,704.51	6,706.03	Jul-19	55.19	56.72	6,649.31
							Sep-19	54.95	56.48	6,649.55
							Jan-20	55.10	56.63	6,649.40
							Apr-20	55.15	56.68	6,649.35
							Jul-20	55.15	56.68	6,649.35
							Oct-20	55.26	56.79	6,649.24
TMW03	Alluvial	2.06	49.8-69.8	70.1	6,700.37	6,702.43	Jul-14	55.09	57.15	6,645.28
							Oct-14	55.18	57.24	6,645.19
							Jan-15	55.12	57.18	6,645.25
							Mar-15	55.26	57.32	6,645.11
							Jul-15	55.26	57.32	6,645.11
							Oct-15	55.33	57.39	6,645.04
							Jan-16	55.26	57.32	6,645.11
							Apr-16	55.34	57.40	6,645.03
							Jul-16	55.39	57.45	6,644.98
							Oct-16	55.44	57.50	6,644.93
							Jan-17	55.33	57.39	6,645.04
							Apr-17	55.50	57.56	6,644.87
							Jul-17	55.55	57.61	6,644.82
							Oct-17	55.63	57.69	6,644.74
							Jan-18	55.69	57.75	6,644.68
							Apr-18	55.67	57.73	6,644.70
							Jul-18	55.76	57.82	6,644.61
							Oct-18	55.73	57.79	6,644.64
							Jan-19	55.88	57.94	6,644.49
							Apr-19	55.83	57.89	6,644.54
		1.87			6,701.35	6,703.22	Jul-19	56.14	58.01	6,645.21
							Sep-19	56.02	57.89	6,645.33
							Jan-20	56.21	58.08	6,645.14
							Apr-20	56.23	58.10	6,645.12
							Jul-20	56.22	58.09	6,645.13
							Oct-20	56.38	58.25	6,644.97

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
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Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW04	Alluvial	1.86	50.0-70.0	70.5	6,699.00	6,700.86	Jul-14	54.59	56.45	6,644.41
							Oct-14	54.65	56.51	6,644.35
							Jan-15	54.56	56.42	6,644.44
							Mar-15	54.66	56.52	6,644.34
							Jul-15	54.64	56.50	6,644.36
							Oct-15	54.68	56.54	6,644.32
							Jan-16	54.64	56.50	6,644.36
							Apr-16	54.83	56.69	6,644.17
							Jul-16	54.80	56.66	6,644.20
							Oct-16	54.85	56.71	6,644.15
							Jan-17	55.63	57.49	6,643.37
							Apr-17	54.87	56.73	6,644.13
		1.80			6,699.85	6,701.65	Jul-17	54.94	56.80	6,644.06
							Oct-17	55.02	56.88	6,643.98
							Jan-18	55.03	56.89	6,643.97
							Apr-18	55.03	56.89	6,643.97
							Jul-18	55.12	56.98	6,643.88
							Oct-18	54.92	56.78	6,644.08
							Jan-19	55.18	57.04	6,643.82
							Apr-19	55.17	57.03	6,643.83
							Jul-19	55.32	57.12	6,644.53
							Sep-19	55.07	56.87	6,644.78
							Jan-20	55.31	57.11	6,644.54
							Apr-20	55.40	57.20	6,644.45
							Jul-20	55.29	57.09	6,644.56
							Oct-20	55.40	57.20	6,644.45
TMW06	Alluvial	1.55	45.0-55.0	57.0	6,689.08	6,690.63	Jul-14	45.64	47.19	6,643.44
							Oct-14	45.72	47.27	6,643.36
							Jan-15	45.55	47.10	6,643.53
							Mar-15	45.76	47.31	6,643.32
							Jul-15	45.67	47.22	6,643.41
							Oct-15	45.78	47.33	6,643.30
							Jan-16	45.59	47.14	6,643.49
							Apr-16	45.97	47.52	6,643.11
							Jul-16	46.01	47.56	6,643.07
							Oct-16	45.96	47.51	6,643.12
							Jan-17	45.62	47.17	6,643.46
							Apr-17	46.03	47.58	6,643.05
		1.47			6,689.87	6,691.34	Jul-17	46.12	47.67	6,642.96
							Oct-17	46.23	47.78	6,642.85
							Jan-18	46.16	47.71	6,642.92
							Apr-18	46.14	47.69	6,642.94
							Jul-18	46.21	47.76	6,642.87
							Oct-18	46.08	47.63	6,643.00
							Jan-19	46.24	47.79	6,642.84
							Apr-19	46.41	47.96	6,642.67
							Jul-19	46.56	48.03	6,643.31
							Sep-19	46.35	47.82	6,643.52
							Jan-20	46.45	47.92	6,643.42
							Apr-20	46.64	48.11	6,643.23
							Jul-20	46.55	48.02	6,643.32
							Oct-20	46.62	48.09	6,643.25

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
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Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW07	Alluvial	1.39	65.0-75.0	76.0	6,689.08	6,690.47	Jul-14	46.02	47.41	6,643.06
							Oct-14	45.67	47.06	6,643.41
							Jan-15	45.86	47.25	6,643.22
							Mar-15	45.71	47.10	6,643.37
							Jul-15	45.93	47.32	6,643.15
							Oct-15	45.65	47.04	6,643.43
							Jan-16	45.49	46.88	6,643.59
							Apr-16	45.56	46.95	6,643.52
							Jul-16	45.76	47.15	6,643.32
							Oct-16	45.61	47.00	6,643.47
							Jan-17	45.80	47.19	6,643.28
							Apr-17	45.59	46.98	6,643.49
							Jul-17	46.47	47.86	6,642.61
							Oct-17	46.39	47.78	6,642.69
							Jan-18	46.29	47.68	6,642.79
		Apr-18			45.75	47.14	6,643.33			
		Jul-18			46.38	47.77	6,642.70			
		Oct-18			45.71	47.10	6,643.37			
		Jan-19			46.19	47.58	6,642.89			
		Apr-19			45.95	47.34	6,643.13			
		Jul-19			46.51	47.89	6,643.34			
		Sep-19			45.96	47.34	6,643.89			
		Jan-20			46.47	47.85	6,643.38			
		Apr-20			45.91	47.29	6,643.94			
		Jul-20			46.39	47.77	6,643.46			
		Oct-20			46.17	47.55	6,643.68			
TMW08	Alluvial	1.76	30.0-60.0	62.0	6,678.55	6,680.31	Jul-14	35.17	36.93	6,643.38
							Oct-14	35.31	37.07	6,643.24
							Jan-15	35.18	36.94	6,643.37
							Mar-15	35.41	37.17	6,643.14
							Jul-15	35.32	37.08	6,643.23
							Oct-15	35.44	37.20	6,643.11
							Jan-16	35.28	37.04	6,643.27
							Apr-16	35.62	37.38	6,642.93
							Jul-16	35.60	37.36	6,642.95
							Oct-16	35.81	37.57	6,642.74
							Jan-17	35.57	37.33	6,642.98
							Apr-17	35.82	37.58	6,642.73
		Jul-17			35.94	37.70	6,642.61			
		Oct-17			36.21	37.97	6,642.34			
		Jan-18			35.98	37.74	6,642.57			
		Apr-18			35.91	37.67	6,642.64			
		Jul-18			36.13	37.89	6,642.42			
		Oct-18			35.88	37.64	6,642.67			
		Jan-19			35.31	37.07	6,643.24			
		Apr-19			36.38	38.14	6,642.17			
		Jul-19			36.67	38.16	6,642.89			
		Sep-19			36.24	37.73	6,643.32			
		Jan-20			36.60	38.09	6,642.96			
		Apr-20			36.81	38.30	6,642.75			
		Jul-20			36.72	38.21	6,642.84			
		Oct-20			36.90	38.39	6,642.66			

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
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Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW10	Alluvial	2.30	28.0-58.0	65.0	6,677.74	6,680.04	Jul-14	35.48	37.78	6,642.26
							Oct-14	35.60	37.90	6,642.14
							Jan-15	35.45	37.75	6,642.29
							Mar-15	35.64	37.94	6,642.10
							Jul-15	35.62	37.92	6,642.12
							Oct-15	35.77	38.07	6,641.97
							Jan-16	35.61	37.91	6,642.13
							Apr-16	35.86	38.16	6,641.88
							Jul-16	35.98	38.28	6,641.76
							Oct-16	36.20	38.50	6,641.54
							Jan-17	36.07	38.37	6,641.67
							Apr-17	36.07	38.37	6,641.67
							Jul-17	36.26	38.56	6,641.48
							Oct-17	36.60	38.90	6,641.14
							Jan-18	36.47	38.77	6,641.27
							Apr-18	36.38	38.68	6,641.36
							Jul-18	36.64	38.94	6,641.10
							Oct-18	36.62	38.92	6,641.12
							Jan-19	36.82	39.12	6,640.92
							Apr-19	36.82	39.12	6,640.92
		1.91			6,678.85	6,680.76	Jul-19	37.35	39.26	6,641.50
							Sep-19	37.23	39.14	6,641.62
							Jan-20	37.48	39.39	6,641.37
							Apr-20	37.49	39.40	6,641.36
							Jul-20	37.54	39.45	6,641.31
							Oct-20	37.78	39.69	6,641.07
TMW11	Alluvial	2.12	55.0-80.0	82.0	6,716.16	6,718.28	Jul-14	65.46	67.58	6,650.70
							Oct-14	65.61	67.73	6,650.55
							Jan-15	65.68	67.80	6,650.48
							Mar-15	65.69	67.81	6,650.47
							Jul-15	65.81	67.93	6,650.35
							Oct-15	65.98	68.10	6,650.18
							Jan-16	66.07	68.19	6,650.09
							Apr-16	66.10	68.22	6,650.06
							Jul-16	66.28	68.40	6,649.88
							Oct-16	66.27	68.39	6,649.89
							Jan-17	66.47	68.59	6,649.69
							Apr-17	66.84	68.96	6,649.32
							Jul-17	66.62	68.74	6,649.54
							Oct-17	66.85	68.97	6,649.31
							Jan-18	66.93	69.05	6,649.23
							Apr-18	67.00	69.12	6,649.16
							Jul-18	67.14	69.26	6,649.02
							Oct-18	67.31	69.43	6,648.85
							Jan-19	72.90	75.02	6,643.26
							Apr-19	72.09	74.21	6,644.07
		1.80			6,717.32	6,719.13	Jul-19	77.45	79.25	6,639.88
							Sep-19	76.68	78.48	6,640.65
							Jan-20	77.88	79.68	6,639.45
							Apr-20	77.13	78.93	6,640.20
							Jul-20	80.01	81.81	6,637.32
							Oct-20	80.16	81.96	6,637.17

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
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Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW13	Alluvial	2.07	60.7-70.7	72.5	6,705.42	6,707.49	Jul-14	58.30	60.37	6,647.12
							Oct-14	58.40	60.47	6,647.02
							Jan-15	58.39	60.46	6,647.03
							Mar-15	58.43	60.50	6,646.99
							Jul-15	58.49	60.56	6,646.93
							Oct-15	58.59	60.66	6,646.83
							Jan-16	58.62	60.69	6,646.80
							Apr-16	58.68	60.75	6,646.74
							Jul-16	58.75	60.82	6,646.67
							Oct-16	58.89	60.96	6,646.53
							Jan-17	58.82	60.89	6,646.60
							Apr-17	58.93	61.00	6,646.49
		1.46			6,706.75	6,708.21	Jul-17	58.95	61.02	6,646.47
							Oct-17	59.13	61.20	6,646.29
							Jan-18	59.16	61.23	6,646.26
							Apr-18	59.18	61.25	6,646.24
							Jul-18	59.27	61.34	6,646.15
							Oct-18	59.34	61.41	6,646.08
							Jan-19	59.36	61.43	6,646.06
							Apr-19	59.40	61.47	6,646.02
							Jul-19	60.14	61.60	6,646.61
							Sep-19	60.14	61.60	6,646.61
							Jan-20	60.30	61.76	6,646.45
							Apr-20	60.36	61.82	6,646.39
							Jul-20	60.42	61.88	6,646.33
							Oct-20	60.54	62.00	6,646.21
TMW15	Alluvial	3.09	56.0-71.0	82.0	6,710.80	6,713.89	Jul-14	61.85	64.94	6,648.95
							Oct-14	61.96	65.05	6,648.84
							Jan-15	61.99	65.08	6,648.81
							Mar-15	62.02	65.11	6,648.78
							Jul-15	62.13	65.22	6,648.67
							Oct-15	62.26	65.35	6,648.54
							Jan-16	62.29	65.38	6,648.51
							Apr-16	62.33	65.42	6,648.47
							Jul-16	62.44	65.53	6,648.36
							Oct-16	62.61	65.70	6,648.19
							Jan-17	62.61	65.70	6,648.19
							Apr-17	62.65	65.74	6,648.15
		2.97			6,711.71	6,714.68	Jul-17	62.74	65.83	6,648.06
							Oct-17	63.06	66.15	6,647.74
							Jan-18	62.98	66.07	6,647.82
							Apr-18	63.00	66.09	6,647.80
							Jul-18	63.17	66.26	6,647.63
							Oct-18	63.25	66.34	6,647.55
							Jan-19	63.31	66.40	6,647.49
							Apr-19	63.39	66.48	6,647.41
							Jul-19	63.63	66.60	6,648.08
							Sep-19	63.71	66.68	6,648.00
							Jan-20	63.82	66.79	6,647.89
							Apr-20	63.76	66.73	6,647.95
							Jul-20	64.11	67.08	6,647.60
							Oct-20	64.14	67.11	6,647.57

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW21	Alluvial	2.39	48.0-58.0	72.0	6,692.75	6,695.14	Jul-14	48.46	50.85	6,644.29
							Oct-14	48.51	50.90	6,644.24
							Jan-15	48.43	50.82	6,644.32
							Mar-15	48.52	50.91	6,644.23
							Jul-15	48.51	50.90	6,644.24
							Oct-15	48.49	50.88	6,644.26
							Jan-16	48.49	50.88	6,644.26
							Apr-16	48.66	51.05	6,644.09
							Jul-16	48.65	51.04	6,644.10
							Oct-16	48.69	51.08	6,644.06
							Jan-17	48.80	51.19	6,643.95
							Apr-17	48.73	51.12	6,644.02
							Jul-17	48.79	51.18	6,643.96
							Oct-17	48.94	51.33	6,643.81
							Jan-18	48.97	51.36	6,643.78
							Apr-18	48.94	51.33	6,643.81
		2.11			6,693.75	6,695.86	Jul-18	49.07	51.46	6,643.68
							Oct-18	49.04	51.43	6,643.71
							Jan-19	49.15	51.54	6,643.60
							Apr-19	49.13	51.52	6,643.62
							Jul-19	49.06	51.17	6,644.69
							Sep-19	49.52	51.63	6,644.23
							Jan-20	49.59	51.70	6,644.16
							Apr-20	49.90	52.01	6,643.85
							Jul-20	49.72	51.83	6,644.03
							Oct-20	49.79	51.90	6,643.96
TMW22	Alluvial	1.94	52.0-62.0	77.0	6,689.80	6,691.74	Jul-14	46.78	48.72	6,643.02
							Oct-14	46.74	48.68	6,643.06
							Jan-15	46.58	48.52	6,643.22
							Mar-15	46.77	48.71	6,643.03
							Jul-15	46.73	48.67	6,643.07
							Oct-15	46.77	48.71	6,643.03
							Jan-16	46.52	48.46	6,643.28
							Apr-16	46.89	48.83	6,642.91
							Jul-16	46.80	48.74	6,643.00
							Oct-16	46.55	48.49	6,643.25
							Jan-17	46.45	48.39	6,643.35
							Apr-17	46.82	48.76	6,642.98
							Jul-17	46.96	48.90	6,642.84
							Oct-17	47.11	49.05	6,642.69
							Jan-18	46.87	48.81	6,642.93
							Apr-18	46.91	48.85	6,642.89
		1.61			6,690.90	6,692.51	Jul-18	46.99	48.93	6,642.81
							Oct-18	46.62	48.56	6,643.18
							Jan-19	46.95	48.89	6,642.85
							Apr-19	47.09	49.03	6,642.71
							Jul-19	47.48	49.09	6,643.42
							Sep-19	47.14	48.75	6,643.76
							Jan-20	47.35	48.96	6,643.55
							Apr-20	47.41	49.02	6,643.49
							Jul-20	47.37	48.98	6,643.53
							Oct-20	47.45	49.06	6,643.45

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW23	Alluvial	2.29	46.0-56.0	72.0	6,685.37	6,687.66	Jul-14	43.15	45.44	6,642.22
							Oct-14	43.20	45.49	6,642.17
							Jan-15	43.03	45.32	6,642.34
							Mar-15	43.19	45.48	6,642.18
							Jul-15	43.03	45.32	6,642.34
							Oct-15	43.14	45.43	6,642.23
							Jan-16	42.91	45.20	6,642.46
							Apr-16	43.26	45.55	6,642.11
							Jul-16	43.21	45.50	6,642.16
							Oct-16	43.28	45.57	6,642.09
							Jan-17	42.81	45.10	6,642.56
							Apr-17	43.20	45.49	6,642.17
							Jul-17	43.35	45.64	6,642.02
							Oct-17	43.51	45.80	6,641.86
		Jan-18			43.32	45.61	6,642.05			
		2.11			6,686.50	6,688.61	Apr-18	44.26	46.55	6,641.11
							Jul-18	43.37	45.66	6,642.00
							Oct-18	43.11	45.40	6,642.26
							Jan-19	42.90	45.19	6,642.47
							Apr-19	43.49	45.78	6,641.88
							Jul-19	43.72	45.83	6,642.78
							Sep-19	43.51	45.62	6,642.99
							Jan-20	43.61	45.72	6,642.89
							Apr-20	43.64	45.75	6,642.86
							Jul-20	43.69	45.80	6,642.81
							Oct-20	43.88	45.99	6,642.62
TMW24	Alluvial		1.90	44.0-54.0			75.0	6,678.52	6,680.42	Jul-14
		Oct-14			36.41	38.31				6,642.11
		Jan-15			36.22	38.12				6,642.30
		Mar-15			36.30	38.20				6,642.22
		Jul-15			36.13	38.03				6,642.39
		Oct-15			36.25	38.15				6,642.27
		Jan-16			35.92	37.82				6,642.60
		Apr-16			36.15	38.05				6,642.37
		Jul-16			36.16	38.06				6,642.36
		Oct-16			36.32	38.22				6,642.20
		Jan-17			35.75	37.65				6,642.77
		Apr-17			36.09	37.99				6,642.43
		1.74			6,679.40	6,681.14				Jul-17
			Oct-17					36.44	38.34	6,642.08
			Jan-18					36.19	38.09	6,642.33
			Apr-18					36.06	37.96	6,642.46
			Jul-18					36.29	38.19	6,642.23
			Oct-18					36.00	37.90	6,642.52
			Jan-19					35.85	37.75	6,642.67
			Apr-19					36.26	38.16	6,642.26
			Jul-19					36.43	38.17	6,642.97
			Sep-19					36.21	37.95	6,643.19
			Jan-20					36.32	38.06	6,643.08
			Apr-20					36.79	38.53	6,642.61
			Jul-20					36.35	38.09	6,643.05
		Oct-20	36.60		38.34	6,642.80				

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
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Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW25	Alluvial	1.79	42.5-52.5	74.0	6,671.09	6,672.88	Jul-14	37.13	38.92	6,633.96
							Oct-14	37.26	39.05	6,633.83
							Jan-15	37.07	38.86	6,634.02
							Mar-15	37.14	38.93	6,633.95
							Jul-15	37.03	38.82	6,634.06
							Oct-15	37.21	39.00	6,633.88
							Jan-16	37.20	38.99	6,633.89
							Apr-16	37.31	39.10	6,633.78
							Jul-16	37.26	39.05	6,633.83
							Oct-16	37.46	39.25	6,633.63
		Jan-17			37.25	39.04	6,633.84			
		Apr-17			37.29	39.08	6,633.80			
		Jul-17			37.42	39.21	6,633.67			
		Oct-17			37.79	39.58	6,633.30			
		Jan-18			37.58	39.37	6,633.51			
		Apr-18			37.47	39.26	6,633.62			
		Jul-18			37.67	39.46	6,633.42			
		Oct-18			37.53	39.32	6,633.56			
		Jan-19			37.86	39.65	6,633.23			
		Apr-19			37.77	39.56	6,633.32			
		Jul-19			38.06	39.62	6,633.55			
		Sep-19			38.11	39.67	6,633.50			
		Jan-20			38.23	39.79	6,633.38			
		Apr-20			38.37	39.93	6,633.24			
		Jul-20			38.37	39.93	6,633.24			
		Oct-20			40.27	41.83	6,631.34			
TMW26	Alluvial	2.83	45.0-55.0	64.8	6,674.88	6,677.71	Jul-14	23.72	26.55	6,651.16
							Oct-14	24.23	27.06	6,650.65
							Jan-15	24.30	27.13	6,650.58
							Mar-15	24.32	27.15	6,650.56
							Jul-15	24.22	27.05	6,650.66
							Oct-15	24.65	27.48	6,650.23
							Jan-16	24.75	27.58	6,650.13
							Apr-16	24.47	27.30	6,650.41
							Jul-16	24.77	27.60	6,650.11
							Oct-16	25.28	28.11	6,649.60
		Jan-17			NM	NM	NM			
		Apr-17			24.90	27.73	6,649.98			
		Jul-17			25.06	27.89	6,649.82			
		Oct-17			25.35	28.18	6,649.53			
		Jan-18			25.24	28.07	6,649.64			
		Apr-18			25.20	28.03	6,649.68			
		Jul-18			25.16	27.99	6,649.72			
		Oct-18			25.27	28.10	6,649.61			
		Jan-19			25.29	28.12	6,649.59			
		Apr-19			25.33	28.16	6,649.55			
		Jul-19			25.38	28.21	6,650.22			
		Sep-19			25.77	28.60	6,649.83			
		Jan-20			25.98	28.81	6,649.62			
		Apr-20			29.22	32.05	6,646.38			
		Jul-20			26.13	28.96	6,649.47			
		Oct-20			26.43	29.26	6,649.17			

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW27	Alluvial	2.68	60.0-70.0	102.2	6,665.45	6,668.13	Jul-14	25.36	28.04	6,640.09
							Oct-14	25.63	28.31	6,639.82
							Jan-15	25.52	28.20	6,639.93
							Mar-15	25.39	28.07	6,640.06
							Jul-15	25.38	28.06	6,640.07
							Oct-15	25.76	28.44	6,639.69
							Jan-16	25.64	28.32	6,639.81
							Apr-16	25.57	28.25	6,639.88
							Jul-16	25.95	28.63	6,639.50
							Oct-16	26.06	28.74	6,639.39
							Jan-17	25.81	28.49	6,639.64
							Apr-17	25.71	28.39	6,639.74
							Jul-17	25.85	28.53	6,639.60
							Oct-17	26.31	28.99	6,639.14
							Jan-18	26.11	28.79	6,639.34
							Apr-18	25.96	28.64	6,639.49
							Jul-18	26.21	28.89	6,639.24
							Oct-18	26.40	29.08	6,639.05
							Jan-19	26.38	29.06	6,639.07
							Apr-19	26.24	28.92	6,639.21
		2.11			6,666.40	6,668.51	Jul-19	26.24	28.92	6,639.59
							Sep-19	26.47	29.15	6,639.36
							Jan-20	26.59	29.27	6,639.24
							Apr-20	26.44	29.12	6,639.39
							Jul-20	26.74	29.42	6,639.09
							Oct-20	27.05	29.73	6,638.78
TMW28	Alluvial	2.40	37.0-47.0	72.5	6,686.77	6,689.17	Jul-14	16.28	18.96	6,670.21
							Oct-14	16.68	19.36	6,669.81
							Jan-15	16.34	19.02	6,670.15
							Mar-15	16.01	18.69	6,670.48
							Jul-15	16.67	19.35	6,669.82
							Oct-15	17.15	19.83	6,669.34
							Jan-16	16.75	19.43	6,669.74
							Apr-16	16.67	19.35	6,669.82
							Jul-16	17.09	19.77	6,669.40
							Oct-16	17.63	20.31	6,668.86
							Jan-17	17.21	19.89	6,669.28
							Apr-17	15.96	18.64	6,670.53
							Jul-17	16.94	19.62	6,669.55
							Oct-17	17.72	20.40	6,668.77
							Jan-18	17.51	20.19	6,668.98
							Apr-18	17.26	19.94	6,669.23
							Jul-18	17.97	20.65	6,668.52
							Oct-18	18.21	20.89	6,668.28
							Jan-19	17.88	20.56	6,668.61
							Apr-19	15.70	18.38	6,670.79
		2.27			6,688.08	6,690.35	Jul-19	17.33	19.60	6,670.75
							Sep-19	18.32	20.59	6,669.76
							Jan-20	18.04	20.31	6,670.04
							Apr-20	17.84	20.11	6,670.24
							Jul-20	18.93	21.20	6,669.15
							Oct-20	18.30	20.57	6,669.78

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
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Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW29	Alluvial	2.57	49.0-59.0	69.0	6,700.31	6,702.88	Jul-14	54.88	57.45	6,645.43
							Oct-14	54.99	57.56	6,645.32
							Jan-15	54.94	57.51	6,645.37
							Mar-15	55.00	57.57	6,645.31
							Jul-15	55.01	57.58	6,645.30
							Oct-15	55.05	57.62	6,645.26
							Jan-16	55.09	57.66	6,645.22
							Apr-16	55.20	57.77	6,645.11
							Jul-16	55.21	57.78	6,645.10
							Oct-16	55.28	57.85	6,645.03
							Jan-17	55.19	57.76	6,645.12
							Apr-17	55.32	57.89	6,644.99
							Jul-17	55.39	57.96	6,644.92
		Oct-17			55.50	58.07	6,644.81			
		Jan-18			55.52	58.09	6,644.79			
		Apr-18			55.56	58.13	6,644.75			
		Jul-18			55.62	58.19	6,644.69			
		Oct-18			55.63	58.20	6,644.68			
		Jan-19			55.74	58.31	6,644.57			
		Apr-19			55.69	58.26	6,644.62			
		Jul-19			55.90	58.38	6,645.46			
		Sep-19			55.87	58.35	6,645.49			
		Jan-20			56.02	58.50	6,645.34			
		Apr-20			56.04	58.52	6,645.32			
		Jul-20			56.08	58.56	6,645.28			
		Oct-20			56.21	58.69	6,645.15			
TMW31S	Alluvial	0.01	50.0-60.0	61.0	6,710.19	6,710.20	Jul-14	37.85	37.86	6,672.34
							Oct-14	38.12	38.13	6,672.07
							Jan-15	38.10	38.11	6,672.09
							Mar-15	38.34	38.35	6,671.85
							Jul-15	38.49	38.50	6,671.70
							Oct-15	38.75	38.76	6,671.44
							Jan-16	38.69	38.70	6,671.50
							Apr-16	39.10	39.11	6,671.09
							Jul-16	39.23	39.24	6,670.96
							Oct-16	39.59	39.60	6,670.60
							Jan-17	39.39	39.40	6,670.80
							Apr-17	39.81	39.82	6,670.38
		Jul-17			40.02	40.03	6,670.17			
		Oct-17			40.38	40.39	6,669.81			
		Jan-18			40.39	40.40	6,669.80			
		Apr-18			40.50	40.51	6,669.69			
		Jul-18			40.75	40.76	6,669.44			
		Oct-18			40.79	40.80	6,669.40			
		Jan-19			41.20	41.21	6,668.99			
		Apr-19			41.19	41.20	6,669.00			
		Jul-19			40.31	41.57	6,669.88			
		Sep-19			40.24	41.50	6,669.95			
		Jan-20			40.60	41.86	6,669.59			
		Apr-20			39.72	40.98	6,670.47			
		Jul-20			40.96	42.22	6,669.23			
		Oct-20			41.19	42.45	6,669.00			

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
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Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW33	Alluvial	2.51	37.0-57.0	60.4	6,684.09	6,686.60	Jul-14	41.47	43.98	6,642.62
							Oct-14	41.56	44.07	6,642.53
							Jan-15	41.44	43.95	6,642.65
							Mar-15	41.59	44.10	6,642.50
							Jul-15	41.54	44.05	6,642.55
							Oct-15	41.75	44.26	6,642.34
							Jan-16	41.70	44.21	6,642.39
							Apr-16	41.92	44.43	6,642.17
							Jul-16	41.94	44.45	6,642.15
							Oct-16	42.12	44.63	6,641.97
							Jan-17	42.06	44.57	6,642.03
							Apr-17	42.12	44.63	6,641.97
							Jul-17	42.28	44.79	6,641.81
		Oct-17			42.54	45.05	6,641.55			
		Jan-18			42.42	44.93	6,641.67			
		Apr-18			42.46	44.97	6,641.63			
		Jul-18			42.54	45.05	6,641.55			
		Oct-18			42.41	44.92	6,641.68			
		Jan-19			42.70	45.21	6,641.39			
		Apr-19			42.77	45.28	6,641.32			
		Jul-19			42.95	45.32	6,642.13			
		Sep-19			42.88	45.25	6,642.20			
		Jan-20			43.10	45.47	6,641.98			
		Apr-20			42.99	45.36	6,642.09			
		Jul-20			43.17	45.54	6,641.91			
		Oct-20			44.30	46.67	6,640.78			
TMW34	Alluvial	2.97	37.0-57.0	57.3	6,684.32	6,687.29	Jul-14	42.95	45.92	6,641.37
							Oct-14	43.07	46.04	6,641.25
							Jan-15	42.95	45.92	6,641.37
							Mar-15	43.02	45.99	6,641.30
							Jul-15	42.98	45.95	6,641.34
							Oct-15	43.17	46.14	6,641.15
							Jan-16	43.13	46.10	6,641.19
							Apr-16	43.17	46.14	6,641.15
							Jul-16	43.26	46.23	6,641.06
							Oct-16	43.40	46.37	6,640.92
							Jan-17	43.51	46.48	6,640.81
							Apr-17	43.41	46.38	6,640.91
							Jul-17	43.47	46.44	6,640.85
							Oct-17	43.39	46.36	6,640.93
							Jan-18	43.37	46.34	6,640.95
							Apr-18	43.32	46.29	6,641.00
							Jul-18	43.49	46.46	6,640.83
							Oct-18	43.52	46.49	6,640.80
							Jan-19	43.53	46.50	6,640.79
							Apr-19	43.60	46.57	6,640.72
		Jul-19			44.05	46.66	6,641.70			
		Sep-19			44.09	46.70	6,641.66			
		Jan-20			44.30	46.91	6,641.45			
		Apr-20			44.30	46.91	6,641.45			
		Jul-20			44.29	46.90	6,641.46			
		Oct-20			44.37	46.98	6,641.38			
		2.61			6,685.75	6,688.36				

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW35	Alluvial	2.38	35.0-55.0	55.0	6,684.14	6,686.52	Jul-14	41.70	44.08	6,642.44
							Oct-14	41.81	44.19	6,642.33
							Jan-15	41.75	44.13	6,642.39
							Mar-15	41.87	44.25	6,642.27
							Jul-15	41.82	44.20	6,642.32
							Oct-15	42.01	44.39	6,642.13
							Jan-16	41.98	44.36	6,642.16
							Apr-16	42.14	44.52	6,642.00
							Jul-16	42.19	44.57	6,641.95
							Oct-16	42.35	44.73	6,641.79
							Jan-17	42.42	44.80	6,641.72
							Apr-17	42.38	44.76	6,641.76
							Jul-17	42.48	44.86	6,641.66
							Oct-17	42.64	45.02	6,641.50
							Jan-18	42.65	45.03	6,641.49
							Apr-18	42.63	45.01	6,641.51
		2.30			6,685.52	6,687.82	Jul-18	42.64	45.02	6,641.50
							Oct-18	42.74	45.12	6,641.40
							Jan-19	42.87	45.25	6,641.27
							Apr-19	42.91	45.29	6,641.23
							Jul-19	43.05	45.35	6,642.47
							Sep-19	43.09	45.39	6,642.43
							Jan-20	43.21	45.51	6,642.31
							Apr-20	43.38	45.68	6,642.14
							Jul-20	43.28	45.58	6,642.24
							Oct-20	43.42	45.72	6,642.10
TMW39S	Alluvial	2.08	32.5-52.5	53.0	6,706.53	6,708.61	Jul-14	33.62	35.70	6,672.91
							Oct-14	33.80	35.88	6,672.73
							Jan-15	33.87	35.95	6,672.66
							Mar-15	33.99	36.07	6,672.54
							Jul-15	34.15	36.23	6,672.38
							Oct-15	34.29	36.37	6,672.24
							Jan-16	34.32	36.40	6,672.21
							Apr-16	34.43	36.51	6,672.10
							Jul-16	34.62	36.70	6,671.91
							Oct-16	34.83	36.91	6,671.70
							Jan-17	34.81	36.89	6,671.72
							Apr-17	35.00	37.08	6,671.53
							Jul-17	35.17	37.25	6,671.36
							Oct-17	35.39	37.47	6,671.14
		1.56			6,706.69	6,708.25	Jan-18	35.46	37.54	6,671.07
							Apr-18	35.44	37.52	6,671.09
							Jul-18	35.88	37.96	6,670.65
							Oct-18	35.95	38.03	6,670.58
							Jan-19	36.23	38.31	6,670.30
							Apr-19	36.14	38.22	6,670.39
							Jul-19	37.11	38.67	6,669.58
							Sep-19	37.23	38.79	6,669.46
							Jan-20	37.26	38.82	6,669.43
							Apr-20	37.46	39.02	6,669.23
							Jul-20	37.83	39.39	6,668.86
							Oct-20	38.05	39.61	6,668.64

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW40S	Alluvial	2.59	50.0-60.0	60.5	6,703.81	6,706.40	Jul-14	57.74	60.33	6,646.07
							Oct-14	57.81	60.40	6,646.00
							Jan-15	57.79	60.38	6,646.02
							Mar-15	57.83	60.42	6,645.98
							Jul-15	57.85	60.44	6,645.96
							Oct-15	57.91	60.50	6,645.90
							Jan-16	57.90	60.49	6,645.91
							Apr-16	57.99	60.58	6,645.82
							Jul-16	57.98	60.57	6,645.83
							Oct-16	Dry	Dry	Dry
							Jan-17	Dry	Dry	Dry
							Apr-17	58.09	60.68	6,645.72
							Jul-17	58.11	60.70	6,645.70
							Oct-17	58.21	60.80	6,645.60
							Jan-18	58.21	60.80	6,645.60
							Apr-18	58.24	60.83	6,645.57
							Jul-18	58.26	60.85	6,645.55
							Oct-18	58.27	60.86	6,645.54
							Jan-19	58.38	60.97	6,645.43
							Apr-19	58.40	60.99	6,645.41
		2.61			6,704.37	6,706.98	Jul-19	58.47	61.08	6,645.90
							Sep-19	58.44	61.05	6,645.93
							Jan-20	58.53	61.14	6,645.84
							Apr-20	58.57	61.18	6,645.80
							Jul-20	58.59	61.20	6,645.78
							Oct-20	58.69	61.30	6,645.68
TMW41	Alluvial	1.73	55.5-65.5	66.0	6,703.48	6,705.21	Jul-14	39.26	40.99	6,664.22
							Oct-14	39.37	41.10	6,664.11
							Jan-15	39.27	41.00	6,664.21
							Mar-15	39.55	41.28	6,663.93
							Jul-15	39.62	41.35	6,663.86
							Oct-15	39.75	41.48	6,663.73
							Jan-16	39.53	41.26	6,663.95
							Apr-16	40.01	41.74	6,663.47
							Jul-16	40.03	41.76	6,663.45
							Oct-16	40.27	42.00	6,663.21
							Jan-17	39.82	41.55	6,663.66
							Apr-17	40.29	42.02	6,663.19
							Jul-17	40.55	42.28	6,662.93
							Oct-17	40.74	42.47	6,662.74
							Jan-18	40.70	42.43	6,662.78
							Apr-18	40.87	42.60	6,662.61
							Jul-18	41.08	42.81	6,662.40
							Oct-18	40.80	42.53	6,662.68
							Jan-19	41.10	42.83	6,662.38
							Apr-19	41.07	42.80	6,662.41
		1.59			6,704.15	6,705.74	Jul-19	41.55	43.14	6,662.60
							Sep-19	41.28	42.87	6,662.87
							Jan-20	41.63	43.22	6,662.52
							Apr-20	40.78	42.37	6,663.37
							Jul-20	41.86	43.45	6,662.29
							Oct-20	42.09	43.68	6,662.06

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW43	Alluvial	3.00	58.0-78.0	78.5	6,695.63	6,698.63	Jul-14	50.51	53.51	6,645.12
							Oct-14	50.59	53.59	6,645.04
							Jan-15	50.50	53.50	6,645.13
							Mar-15	50.59	53.59	6,645.04
							Jul-15	50.58	53.58	6,645.05
							Oct-15	50.63	53.63	6,645.00
							Jan-16	50.59	53.59	6,645.04
							Apr-16	50.79	53.79	6,644.84
							Jul-16	50.79	53.79	6,644.84
							Oct-16	50.84	53.84	6,644.79
							Jan-17	50.67	53.67	6,644.96
							Apr-17	50.86	53.86	6,644.77
							Jul-17	50.92	53.92	6,644.71
							Oct-17	51.00	54.00	6,644.63
							Jan-18	51.06	54.06	6,644.57
		Apr-18		51.05	54.05	6,644.58				
		3.11		78.5	6,696.21	6,699.32	Jul-18	51.14	54.14	6,644.49
							Oct-18	51.11	54.11	6,644.52
							Jan-19	51.17	54.17	6,644.46
							Apr-19	51.12	54.12	6,644.51
							Jul-19	51.75	54.86	6,644.46
							Sep-19	51.09	54.20	6,645.12
							Jan-20	51.26	54.37	6,644.95
							Apr-20	51.24	54.35	6,644.97
							Jul-20	51.30	54.41	6,644.91
							Oct-20	51.45	54.56	6,644.76
TMW44	Alluvial		2.50				43.5-63.5	64.0	6,694.81	6,697.31
		Oct-14		50.26	52.76	6,644.55				
		Jan-15		50.12	52.62	6,644.69				
		Mar-15		50.32	52.82	6,644.49				
		Jul-15		50.28	52.78	6,644.53				
		Oct-15		50.36	52.86	6,644.45				
		Jan-16		50.16	52.66	6,644.65				
		Apr-16		50.53	53.03	6,644.28				
		Jul-16		50.46	52.96	6,644.35				
		Oct-16		50.52	53.02	6,644.29				
		Jan-17		50.18	52.68	6,644.63				
		Apr-17		50.54	53.04	6,644.27				
		Jul-17		50.62	53.12	6,644.19				
		Oct-17		50.77	53.27	6,644.04				
		Jan-18		50.67	53.17	6,644.14				
		Apr-18	50.70	53.20	6,644.11					
		2.50	64.0	6,695.49	6,697.99	Jul-18		50.78	53.28	6,644.03
						Oct-18		50.50	53.00	6,644.31
						Jan-19		50.88	53.38	6,643.93
						Apr-19		50.89	53.39	6,643.92
						Jul-19		50.97	53.47	6,644.52
						Sep-19		50.73	53.23	6,644.76
						Jan-20		50.94	53.44	6,644.55
						Apr-20		50.60	53.10	6,644.89
						Jul-20		50.93	53.43	6,644.56
						Oct-20		50.97	53.47	6,644.52

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW45	Alluvial	2.50	38.5-58.5	59.0	6,686.50	6,689.00	Jul-14	44.93	47.43	6,641.57
							Oct-14	44.99	47.49	6,641.51
							Jan-15	44.81	47.31	6,641.69
							Mar-15	44.89	47.39	6,641.61
							Jul-15	44.73	47.23	6,641.77
							Oct-15	44.80	47.30	6,641.70
							Jan-16	44.55	47.05	6,641.95
							Apr-16	44.80	47.30	6,641.70
							Jul-16	44.85	47.35	6,641.65
							Oct-16	44.79	47.29	6,641.71
							Jan-17	44.38	46.88	6,642.12
							Apr-17	44.68	47.18	6,641.82
							Jul-17	44.71	47.21	6,641.79
							Oct-17	44.83	47.33	6,641.67
							Jan-18	44.77	47.27	6,641.73
							Apr-18	44.66	47.16	6,641.84
							Jul-18	44.68	47.18	6,641.82
							Oct-18	44.58	47.08	6,641.92
							Jan-19	44.91	47.41	6,641.59
							Apr-19	44.70	47.20	6,641.80
		2.46			6,687.14	6,689.60	Jul-19	44.79	47.25	6,642.35
							Sep-19	44.68	47.14	6,642.46
							Jan-20	44.70	47.16	6,642.44
							Apr-20	44.64	47.10	6,642.50
							Jul-20	44.77	47.23	6,642.37
							Oct-20	44.92	47.38	6,642.22
TMW46	Alluvial	2.29	38.5-58.5	59.0	6,678.69	6,680.98	Jul-14	41.88	44.17	6,636.81
							Oct-14	42.12	44.41	6,636.57
							Jan-15	41.81	44.10	6,636.88
							Mar-15	41.76	44.05	6,636.93
							Jul-15	41.81	44.10	6,636.88
							Oct-15	42.10	44.39	6,636.59
							Jan-16	41.89	44.18	6,636.80
							Apr-16	41.95	44.24	6,636.74
							Jul-16	42.30	44.59	6,636.39
							Oct-16	42.28	44.57	6,636.41
							Jan-17	42.27	44.56	6,636.42
							Apr-17	42.05	44.34	6,636.64
							Jul-17	42.19	44.48	6,636.50
							Oct-17	42.68	44.97	6,636.01
							Jan-18	42.57	44.86	6,636.12
							Apr-18	42.27	44.56	6,636.42
							Jul-18	42.70	44.99	6,635.99
							Oct-18	42.96	45.25	6,635.73
							Jan-19	43.02	45.31	6,635.67
							Apr-19	42.81	45.10	6,635.88
		1.94			6,679.41	6,681.34	Jul-19	43.22	45.16	6,636.18
							Sep-19	43.41	45.35	6,635.99
							Jan-20	43.23	45.17	6,636.17
							Apr-20	43.16	45.10	6,636.24
							Jul-20	43.66	45.60	6,635.74
							Oct-20	43.88	45.82	6,635.52

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE

2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW47	Alluvial	2.56	82.5-102.5	103.0	6,699.32	6,701.88	Jul-14	43.84	46.40	6,655.48
							Oct-14	43.85	46.41	6,655.47
							Jan-15	43.77	46.33	6,655.55
							Mar-15	43.76	46.32	6,655.56
							Jul-15	44.03	46.59	6,655.29
							Oct-15	44.05	46.61	6,655.27
							Jan-16	44.01	46.57	6,655.31
							Apr-16	44.13	46.69	6,655.19
							Jul-16	44.28	46.84	6,655.04
							Oct-16	44.32	46.88	6,655.00
							Jan-17	44.23	46.79	6,655.09
							Apr-17	44.31	46.87	6,655.01
		Jul-17			44.52	47.08	6,654.80			
		Oct-17			44.54	47.10	6,654.78			
		Jan-18			44.64	47.20	6,654.68			
		Apr-18			44.76	47.32	6,654.56			
		Jul-18			44.79	47.35	6,654.53			
		Oct-18			44.74	47.30	6,654.58			
		Jan-19			44.78	47.34	6,654.54			
		Apr-19			44.69	47.25	6,654.63			
		Jul-19			44.89	47.49	6,654.98			
		Sep-19			44.92	47.52	6,654.95			
		Jan-20			44.95	47.55	6,654.92			
		Apr-20			44.97	47.57	6,654.90			
		Jul-20			45.17	47.77	6,654.70			
		Oct-20			45.20	47.80	6,654.67			
TMW54	Alluvial	2.46	21.4-41.4	41.4	6,708.77	6,711.23	Nov-19	Dry	Dry	Dry
							Apr-20	41.34	43.80	6,667.43
							Jul-20	Dry	Dry	Dry
							Oct-20	Dry	Dry	Dry
TMW56	Alluvial	2.88	30-50	50.0	6,705.44	6,708.32	Nov-19	49.42	52.30	6,656.02
							Apr-20	48.16	51.04	6,657.28
							Jul-20	48.55	51.43	6,656.89
							Oct-20	48.13	51.01	6,657.31
TMW57	Alluvial	2.43	60-70	70.0	6,710.76	6,713.19	Nov-19	63.60	66.03	6,647.16
							Apr-20	63.67	66.10	6,647.09
							Jul-20	63.80	66.23	6,646.96
							Oct-20	63.89	66.32	6,646.87
TMW59	Alluvial	2.53	42-62	62.0	6,690.38	6,692.90	Nov-19	46.65	49.18	6,643.72
							Apr-20	46.57	49.10	6,643.80
							Jul-20	46.69	49.22	6,643.68
							Oct-20	46.80	49.33	6,643.57
TMW60	Alluvial	2.50	46-66	66.0	6,694.17	6,696.66	Nov-19	65.85	68.35	6,628.31
							Apr-20	65.78	68.28	6,628.38
							Jul-20	65.75	68.25	6,628.41
							Oct-20	65.78	68.28	6,628.38
TMW61	Alluvial	2.55	41-61	61.0	6,684.51	6,687.07	Nov-19	42.08	44.63	6,642.44
							Apr-20	41.86	44.41	6,642.66
							Jul-20	41.95	44.50	6,642.57
							Oct-20	42.15	44.70	6,642.37
TMW62	Alluvial	2.56	40-60	60.0	6,691.39	6,693.95	Nov-19	47.70	50.26	6,643.69
							Apr-20	47.74	50.30	6,643.65
							Jul-20	47.74	50.30	6,643.65
							Oct-20	47.83	50.39	6,643.56

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
PZ01	Alluvial	2.58	23.1-43.1	43.1	6,674.71	6,677.29	Jul-14	24.54	27.12	6,650.17
							Oct-14	24.32	26.90	6,650.39
							Jan-15	24.06	26.64	6,650.65
							Mar-15	24.22	26.80	6,650.49
							Jul-15	24.22	26.80	6,650.49
							Oct-15	24.34	26.92	6,650.37
							Jan-16	24.32	26.90	6,650.39
							Apr-16	24.66	27.24	6,650.05
							Jul-16	24.71	27.29	6,650.00
							Oct-16	25.02	27.60	6,649.69
							Jan-17	24.79	27.37	6,649.92
							Apr-17	25.03	27.61	6,649.68
		2.57			6,675.61	6,678.18	Jul-17	25.22	27.80	6,649.49
							Oct-17	25.45	28.03	6,649.26
							Jan-18	25.44	28.02	6,649.27
							Apr-18	25.50	28.08	6,649.21
							Jul-18	25.59	28.17	6,649.12
							Oct-18	25.53	28.11	6,649.18
							Jan-19	25.90	28.48	6,648.81
							Apr-19	25.97	28.55	6,648.74
							Jul-19	26.11	28.68	6,649.50
							Sep-19	25.86	28.43	6,649.75
							Jan-20	26.11	28.68	6,649.50
							Apr-20	26.13	28.70	6,649.48
							Jul-20	26.15	28.72	6,649.46
							Oct-20	26.39	28.96	6,649.22
PZ02	Alluvial	2.45	30.3-50.3	50.7	6,672.50	6,674.95	Jul-14	20.77	23.22	6,651.73
							Oct-14	20.81	23.26	6,651.69
							Jan-15	20.86	23.31	6,651.64
							Mar-15	20.80	23.25	6,651.70
							Jul-15	20.83	23.28	6,651.67
							Oct-15	21.21	23.66	6,651.29
							Jan-16	21.12	23.57	6,651.38
							Apr-16	21.25	23.70	6,651.25
							Jul-16	21.25	23.70	6,651.25
							Oct-16	21.82	24.27	6,650.68
							Jan-17	21.39	23.84	6,651.11
							Apr-17	21.57	24.02	6,650.93
		2.41			6,673.57	6,675.99	Jul-17	21.76	24.21	6,650.74
							Oct-17	22.15	24.60	6,650.35
							Jan-18	21.96	24.41	6,650.54
							Apr-18	21.98	24.43	6,650.52
							Jul-18	22.24	24.69	6,650.26
							Oct-18	22.21	24.66	6,650.29
							Jan-19	22.53	24.98	6,649.97
							Apr-19	22.51	24.96	6,649.99
							Jul-19	22.40	24.81	6,651.18
							Sep-19	22.44	24.85	6,651.14
							Jan-20	22.64	25.05	6,650.94
							Apr-20	22.54	24.95	6,651.04
							Jul-20	22.87	25.28	6,650.71
							Oct-20	23.20	25.61	6,650.38

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
PZ03	Alluvial	2.58	26.7-46.7	46.9	6,676.86	6,679.44	Jul-14	23.84	26.42	6,653.02
							Oct-14	23.70	26.28	6,653.16
							Jan-15	23.62	26.20	6,653.24
							Mar-15	23.62	26.20	6,653.24
							Jul-15	23.55	26.13	6,653.31
							Oct-15	23.90	26.48	6,652.96
							Jan-16	24.03	26.61	6,652.83
							Apr-16	23.86	26.44	6,653.00
							Jul-16	24.00	26.58	6,652.86
							Oct-16	24.44	27.02	6,652.42
							Jan-17	24.07	26.65	6,652.79
							Apr-17	24.05	26.63	6,652.81
							Jul-17	24.28	26.86	6,652.58
							Oct-17	24.02	26.60	6,652.84
							Jan-18	24.17	26.75	6,652.69
		2.54			6,677.91	6,680.45	Apr-18	25.03	27.61	6,651.83
							Jul-18	24.16	26.74	6,652.70
							Oct-18	24.17	26.75	6,652.69
							Jan-19	24.49	27.07	6,652.37
							Apr-19	24.30	26.88	6,652.56
							Jul-19	26.62	29.16	6,651.29
							Sep-19	26.28	28.82	6,651.63
							Jan-20	24.51	27.05	6,653.40
							Apr-20	24.40	26.94	6,653.51
							Jul-20	26.27	28.81	6,651.64
							Oct-20	25.04	27.58	6,652.87
PZ04	Alluvial	2.51	26.8-46.8	47.0	6,674.17	6,676.68	Jul-14	25.89	28.40	6,648.28
							Oct-14	25.51	28.02	6,648.66
							Jan-15	25.64	28.15	6,648.53
							Mar-15	25.73	28.24	6,648.44
							Jul-15	25.75	28.26	6,648.42
							Oct-15	25.94	28.45	6,648.23
							Jan-16	25.89	28.40	6,648.28
							Apr-16	26.19	28.70	6,647.98
							Jul-16	26.19	28.70	6,647.98
							Oct-16	26.56	29.07	6,647.61
							Jan-17	#VALUE!	NM	NM
							Apr-17	26.52	29.03	6,647.65
							Jul-17	26.74	29.25	6,647.43
							Oct-17	27.19	29.70	6,646.98
							Jan-18	26.87	29.38	6,647.30
							Apr-18	28.53	31.04	6,645.64
		2.54			6,675.26	6,677.80	Jul-18	29.52	32.03	6,644.65
							Oct-18	30.29	32.80	6,643.88
							Jan-19	27.92	30.43	6,646.25
							Apr-19	29.80	32.31	6,644.37
							Jul-19	31.91	34.45	6,643.35
							Sep-19	30.64	33.18	6,644.62
							Jan-20	27.57	30.11	6,647.69
							Apr-20	29.51	32.05	6,645.75
							Jul-20	28.09	30.63	6,647.17
							Oct-20	27.88	30.42	6,647.38

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
PZ05	Alluvial	2.62	26.0-46.0	46.3	6,671.53	6,674.15	Jul-14	18.43	21.05	6,653.10
							Oct-14	17.99	20.61	6,653.54
							Jan-15	17.80	20.42	6,653.73
							Mar-15	17.65	20.27	6,653.88
							Jul-15	18.14	20.76	6,653.39
							Oct-15	18.79	21.41	6,652.74
							Jan-16	18.09	20.71	6,653.44
							Apr-16	18.08	20.70	6,653.45
							Jul-16	18.91	21.53	6,652.62
							Oct-16	19.44	22.06	6,652.09
							Jan-17	18.38	21.00	6,653.15
							Apr-17	18.35	20.97	6,653.18
							Jul-17	19.07	21.69	6,652.46
							Oct-17	19.87	22.49	6,651.66
							Jan-18	18.92	21.54	6,652.61
		Apr-18			18.56	21.18	6,652.97			
		2.67			6,672.50	6,675.17	Jul-18	19.61	22.23	6,651.92
							Oct-18	19.82	22.44	6,651.71
							Jan-19	19.13	21.75	6,652.40
							Apr-19	19.12	21.74	6,652.41
							Jul-19	19.38	22.05	6,653.12
							Sep-19	19.91	22.58	6,652.59
							Jan-20	19.34	22.01	6,653.16
							Apr-20	18.91	21.58	6,653.59
							Jul-20	20.13	22.80	6,652.37
							Oct-20	20.73	23.40	6,651.77
PZ06	Alluvial		2.75	26.5-46.5			46.7	6,673.29	6,676.04	Jul-14
		Oct-14			16.41	19.16				6,656.88
		Jan-15			16.01	18.76				6,657.28
		Mar-15			15.71	18.46				6,657.58
		Jul-15			17.27	20.02				6,656.02
		Oct-15			17.65	20.40				6,655.64
		Jan-16			16.41	19.16				6,656.88
		Apr-16			16.20	18.95				6,657.09
		Jul-16			18.00	20.75				6,655.29
		Oct-16			18.38	21.13				6,654.91
		Jan-17			16.68	19.43				6,656.61
		Apr-17			16.23	18.98				6,657.06
		Jul-17			18.39	21.14				6,654.90
		Oct-17			18.65	21.40				6,654.64
		Jan-18			17.08	19.83				6,656.21
		Apr-18	16.54		19.29	6,656.75				
		2.73	6,674.47		6,677.19	Jul-18		19.03	21.78	6,654.26
						Oct-18		18.96	21.71	6,654.33
						Jan-19		17.31	20.06	6,655.98
						Apr-19		16.89	19.64	6,656.40
						Jul-19		19.08	21.81	6,655.38
						Sep-19		19.65	22.38	6,654.81
						Jan-20		17.70	20.43	6,656.76
						Apr-20		17.02	19.75	6,657.44
						Jul-20		19.92	22.65	6,654.54
						Oct-20		20.45	23.18	6,654.01

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
PZ07	Alluvial	2.15	10.6-30.6	30.5	6,682.38	6,684.53	Jul-14	14.01	16.16	6,668.37
							Oct-14	9.87	12.02	6,672.51
							Jan-15	12.85	15.00	6,669.53
							Mar-15	11.99	14.14	6,670.39
							Jul-15	13.30	15.45	6,669.08
							Oct-15	14.15	16.30	6,668.23
							Jan-16	13.68	15.83	6,668.70
							Apr-16	13.56	15.71	6,668.82
							Jul-16	13.42	15.57	6,668.96
							Oct-16	13.84	15.99	6,668.54
							Jan-17	8.19	10.34	6,674.19
							Apr-17	9.68	11.83	6,672.70
							Jul-17	12.31	14.46	6,670.07
							Oct-17	14.06	16.21	6,668.32
							Jan-18	14.72	16.87	6,667.66
							Apr-18	14.66	16.81	6,667.72
		2.46			6,683.24	6,685.70	Jul-18	15.46	17.61	6,666.92
							Oct-18	15.54	17.69	6,666.84
							Jan-19	15.23	17.38	6,667.15
							Apr-19	7.04	9.19	6,675.34
							Jul-19	11.26	13.72	6,671.98
							Sep-19	14.28	16.74	6,668.96
							Jan-20	14.70	17.16	6,668.54
							Apr-20	14.55	17.01	6,668.69
							Jul-20	15.66	18.12	6,667.58
							Oct-20	16.30	18.76	6,666.94
PZ08	Alluvial	2.70	26.3-46.3	46.6	6,684.11	6,686.81	Jul-14	17.16	19.86	6,666.95
							Oct-14	12.40	15.10	6,671.71
							Jan-15	15.55	18.25	6,668.56
							Mar-15	14.44	17.14	6,669.67
							Jul-15	16.18	18.88	6,667.93
							Oct-15	16.92	19.62	6,667.19
							Jan-16	16.39	19.09	6,667.72
							Apr-16	16.36	19.06	6,667.75
							Jul-16	16.33	19.03	6,667.78
							Oct-16	16.79	19.49	6,667.32
							Jan-17	17.08	19.78	6,667.03
							Apr-17	11.79	14.49	6,672.32
							Jul-17	15.31	18.01	6,668.80
							Oct-17	17.10	19.80	6,667.01
							Jan-18	17.62	20.32	6,666.49
							Apr-18	17.47	20.17	6,666.64
		2.91			6,685.03	6,687.93	Jul-18	18.56	21.26	6,665.55
							Oct-18	18.58	21.28	6,665.53
							Jan-19	18.12	20.82	6,665.99
							Apr-19	9.74	12.44	6,674.37
							Jul-19	14.67	17.58	6,670.35
							Sep-19	17.77	20.68	6,667.25
							Jan-20	17.64	20.55	6,667.38
							Apr-20	17.39	20.30	6,667.63
							Jul-20	18.90	21.81	6,666.12
							Oct-20	19.48	22.39	6,665.54

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
PZ09	Alluvial	2.49	18.1-33.1	33.5	6,651.12	6,653.61	Jul-14	13.88	16.37	6,637.24
							Oct-14	12.85	15.34	6,638.27
							Jan-15	12.90	15.39	6,638.22
							Mar-15	12.43	14.92	6,638.69
							Jul-15	13.13	15.62	6,637.99
							Oct-15	13.73	16.22	6,637.39
							Jan-16	12.90	15.39	6,638.22
							Apr-16	12.86	15.35	6,638.26
							Jul-16	13.74	16.23	6,637.38
							Oct-16	14.33	16.82	6,636.79
							Jan-17	13.38	15.87	6,637.74
							Apr-17	12.77	15.26	6,638.35
		Jul-17			13.97	16.46	6,637.15			
		Oct-17			14.72	17.21	6,636.40			
		Jan-18			13.95	16.44	6,637.17			
		Apr-18			13.37	15.86	6,637.75			
		Jul-18			14.69	17.18	6,636.43			
		Oct-18			15.03	17.52	6,636.09			
		Jan-19			14.46	16.95	6,636.66			
		Apr-19			13.64	16.13	6,637.48			
		Jul-19			13.79	16.09	6,638.57			
		Sep-19			15.30	17.60	6,637.06			
		Jan-20			14.79	17.09	6,637.57			
		Apr-20			14.22	16.52	6,638.14			
		Jul-20			15.58	17.88	6,636.78			
		Oct-20			16.13	18.43	6,636.23			
PZ10	Alluvial	2.44	31.0-46.0	46.3	6,654.83	6,657.27	Jul-14	17.79	20.23	6,637.04
							Oct-14	16.75	19.19	6,638.08
							Jan-15	16.77	19.21	6,638.06
							Mar-15	16.32	18.76	6,638.51
							Jul-15	17.05	19.49	6,637.78
							Oct-15	17.59	20.03	6,637.24
							Jan-16	16.74	19.18	6,638.09
							Apr-16	16.70	19.14	6,638.13
							Jul-16	17.66	20.10	6,637.17
							Oct-16	18.20	20.64	6,636.63
							Jan-17	17.23	19.67	6,637.60
							Apr-17	16.62	19.06	6,638.21
		Jul-17			17.90	20.34	6,636.93			
		Oct-17			18.59	21.03	6,636.24			
		Jan-18			17.76	20.20	6,637.07			
		Apr-18			17.22	19.66	6,637.61			
		Jul-18			18.59	21.03	6,636.24			
		Oct-18			18.91	21.35	6,635.92			
		Jan-19			18.28	20.72	6,636.55			
		Apr-19			17.51	19.95	6,637.32			
		Jul-19			18.39	20.78	6,637.53			
		Sep-19			19.04	21.43	6,636.88			
		Jan-20			18.49	20.88	6,637.43			
		Apr-20			17.91	20.30	6,638.01			
		Jul-20			19.34	21.73	6,636.58			
		Oct-20			19.84	22.23	6,636.08			

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE

2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
Northern Area Groundwater Elevations (Wells Screened in Bedrock)										
BGMW07	Bedrock	0.00	215.0-255.0	256.0	6,691.63	6,691.63	Apr-18	36.01	36.01	6,655.62
							Jul-18	18.02	18.02	6,673.61
							Oct-18	17.57	17.57	6,674.06
							Jan-19	17.77	17.77	6,673.86
							Apr-19	17.48	17.48	6,674.15
					6,689.77	6,692.03	Jul-19	18.06	18.06	6,673.97
							Sep-19	17.98	17.98	6,674.05
							Jan-20	17.72	17.72	6,674.31
							Apr-20	17.49	17.49	6,674.54
							Jul-20	17.90	17.90	6,674.13
							Oct-20	17.77	17.77	6,674.26
							BGMW08	Bedrock	0.00	165.0-185.0
Jul-18	170.16	170.16	6,514.86							
Oct-18	168.64	168.64	6,516.38							
Jan-19	23.46	23.46	6,661.56							
Apr-19	145.77	145.77	6,539.25							
1.71	6,681.72	6,683.42	Jul-19	165.84	167.55	6,515.87				
			Sep-19	144.31	146.02	6,537.40				
			Jan-20	157.74	159.45	6,523.97				
			Apr-20	124.39	126.10	6,557.32				
			Jul-20	161.49	163.20	6,520.22				
			Oct-20	137.70	139.41	6,544.01				
			BGMW09	Bedrock	0.00	106.0-136.0			173.0	
Jul-18	53.84	53.84					6,638.43			
Jul-18	47.24	47.24					6,645.03			
Jan-19	49.37	49.37					6,642.90			
Apr-19	46.88	46.88					6,645.39			
2.18	6,689.83	6,692.01			Jul-19		46.39	48.57		6,643.44
					Sep-19		44.92	47.10		6,644.91
					Jan-20		45.64	47.82		6,644.19
					Apr-20		44.59	46.77		6,645.24
					Jul-20		46.34	48.52		6,643.49
					Oct-20		45.00	47.18		6,644.83
					BGMW10		Bedrock	0.00		106.0-136.0
Jul-18	30.69	30.69	6,670.80							
Oct-18	30.79	30.79	6,670.70							
Jan-19	31.07	31.07	6,670.42							
Apr-19	31.15	31.15	6,670.34							
2.33	6,699.50	6,701.83	Jul-19	29.09		31.42		6,670.41		
			Sep-19	29.25		31.58		6,670.25		
			Jan-20	29.46		31.79		6,670.04		
			Apr-20	29.62		31.95		6,669.88		
			Jul-20	29.87		32.20		6,669.63		
			Oct-20	30.03		32.36		6,669.47		

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW14A	Bedrock	2.46	94.3-109.3	110.0	6,721.08	6,723.54	Jul-14	62.41	64.87	6,658.67
							Oct-14	62.48	64.94	6,658.60
							Jan-15	62.61	65.07	6,658.47
							Mar-15	62.54	65.00	6,658.54
							Jul-15	62.68	65.14	6,658.40
							Oct-15	62.71	65.17	6,658.37
							Jan-16	62.73	65.19	6,658.35
							Apr-16	62.74	65.20	6,658.34
							Jul-16	63.05	65.51	6,658.03
							Oct-16	63.04	65.50	6,658.04
		Jan-17			63.22	65.68	6,657.86			
		Apr-17			63.53	65.99	6,657.55			
		Jul-17			63.31	65.77	6,657.77			
		Oct-17			63.49	65.95	6,657.59			
		Jan-18			63.85	66.31	6,657.23			
		Apr-18			64.01	66.47	6,657.07			
		Jul-18			64.22	66.68	6,656.86			
		Oct-18			63.96	66.42	6,657.12			
		Jan-19			64.32	66.78	6,656.76			
		Apr-19			64.32	66.78	6,656.76			
		Jul-19			65.78	67.98	6,656.75			
		Sep-19			64.65	66.85	6,657.88			
		Jan-20			64.89	67.09	6,657.64			
		Apr-20			65.11	67.31	6,657.42			
		Jul-20			65.15	67.35	6,657.38			
		Oct-20			65.24	67.44	6,657.29			
TMW16	Bedrock	2.50	123.0-138.0	142.0	6,711.65	6,714.15	Jul-14	54.08	56.58	6,657.57
							Oct-14	54.16	56.66	6,657.49
							Jan-15	54.18	56.68	6,657.47
							Mar-15	54.24	56.74	6,657.41
							Jul-15	54.27	56.77	6,657.38
							Oct-15	54.53	57.03	6,657.12
							Jan-16	54.54	57.04	6,657.11
							Apr-16	54.71	57.21	6,656.94
							Jul-16	54.89	57.39	6,656.76
							Oct-16	55.06	57.56	6,656.59
							Jan-17	54.92	57.42	6,656.73
							Apr-17	55.05	57.55	6,656.60
							Jul-17	55.25	57.75	6,656.40
							Oct-17	55.60	58.10	6,656.05
							Jan-18	55.70	58.20	6,655.95
							Apr-18	55.75	58.25	6,655.90
							Jul-18	56.32	58.82	6,655.33
							Oct-18	55.85	58.35	6,655.80
							Jan-19	55.42	57.92	6,656.23
							Apr-19	56.11	58.61	6,655.54
		Jul-19			55.98	58.46	6,656.75			
		Sep-19			53.27	55.75	6,659.46			
		Jan-20			56.28	58.76	6,656.45			
		Apr-20			56.30	58.78	6,656.43			
		Jul-20			56.70	59.18	6,656.03			
		Oct-20			56.57	59.05	6,656.16			

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW17	Bedrock	2.49	112.0-127.0	152.0	6,717.40	6,719.89	Jul-14	60.73	63.22	6,656.67
							Oct-14	60.84	63.33	6,656.56
							Jan-15	60.83	63.32	6,656.57
							Mar-15	60.94	63.43	6,656.46
							Jul-15	61.16	63.65	6,656.24
							Oct-15	61.21	63.70	6,656.19
							Jan-16	61.20	63.69	6,656.20
							Apr-16	61.41	63.90	6,655.99
							Jul-16	61.54	64.03	6,655.86
							Oct-16	61.65	64.14	6,655.75
							Jan-17	61.72	64.21	6,655.68
							Apr-17	61.70	64.19	6,655.70
							Jul-17	62.50	64.99	6,654.90
		Oct-17			62.51	65.00	6,654.89			
		Jan-18			62.64	65.13	6,654.76			
		Apr-18			62.62	65.11	6,654.78			
		Jul-18			62.63	65.12	6,654.77			
		Oct-18			62.61	65.10	6,654.79			
		Jan-19			62.61	65.10	6,654.79			
		Apr-19			62.63	65.12	6,654.77			
		Jul-19			62.64	65.19	6,655.88			
		Sep-19			62.62	65.17	6,655.90			
		Jan-20			62.66	65.21	6,655.86			
		Apr-20			62.70	65.25	6,655.82			
		Jul-20			62.73	65.28	6,655.79			
		Oct-20			62.73	65.28	6,655.79			
TMW18	Bedrock	3.35	150.0-160.0	220.0	6,710.14	6,713.49	Jul-14	52.09	55.44	6,658.05
							Oct-14	52.18	55.53	6,657.96
							Jan-15	52.21	55.56	6,657.93
							Mar-15	52.20	55.55	6,657.94
							Jul-15	52.45	55.80	6,657.69
							Oct-15	52.50	55.85	6,657.64
							Jan-16	52.52	55.87	6,657.62
							Apr-16	52.67	56.02	6,657.47
							Jul-16	52.85	56.20	6,657.29
							Oct-16	52.95	56.30	6,657.19
							Jan-17	52.94	56.29	6,657.20
							Apr-17	52.99	56.34	6,657.15
							Jul-17	53.03	56.38	6,657.11
		Oct-17			53.35	56.70	6,656.79			
		Jan-18			53.60	56.95	6,656.54			
		Apr-18			53.80	57.15	6,656.34			
		Jul-18			53.93	57.28	6,656.21			
		Oct-18			53.76	57.11	6,656.38			
		Jan-19			54.15	57.50	6,655.99			
		Apr-19			54.23	57.58	6,655.91			
		Jul-19			54.25	57.33	6,657.23			
		Sep-19			54.60	57.68	6,656.88			
		Jan-20			54.00	57.08	6,657.48			
		Apr-20			54.53	57.61	6,656.95			
		Jul-20			51.16	54.24	6,660.32			
		Oct-20			54.87	57.95	6,656.61			

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)		
TMW19	Bedrock	2.95	169.0-184.0	187.0	6,697.57	6,700.52	Jul-14	40.21	43.16	6,657.36		
							Oct-14	40.25	43.20	6,657.32		
							Jan-15	40.19	43.14	6,657.38		
							Mar-15	40.25	43.20	6,657.32		
							Jul-15	40.30	43.25	6,657.27		
							Oct-15	40.59	43.54	6,656.98		
							Jan-16	40.51	43.46	6,657.06		
							Apr-16	40.78	43.73	6,656.79		
							Jul-16	40.98	43.93	6,656.59		
							Oct-16	41.08	44.03	6,656.49		
							Jan-17	40.94	43.89	6,656.63		
							Apr-17	40.95	43.90	6,656.62		
							Jul-17	41.42	44.37	6,656.15		
							Oct-17	41.53	44.48	6,656.04		
							Jan-18	41.60	44.55	6,655.97		
							Apr-18	41.92	44.87	6,655.65		
							Jul-18	42.27	45.22	6,655.30		
							Oct-18	41.90	44.85	6,655.67		
							Jan-19	43.40	46.35	6,654.17		
							Apr-19	42.06	45.01	6,655.51		
		2.74			6,698.93	6,701.67	Jul-19	42.52	45.26	6,656.41		
							Sep-19	44.48	47.22	6,654.45		
							Jan-20	42.93	45.67	6,656.00		
							Apr-20	43.64	46.38	6,655.29		
							Jul-20	43.84	46.58	6,655.09		
							Oct-20	43.32	46.06	6,655.61		
TMW30	Bedrock	2.24	35.0-45.0	51.5	6,712.35	6,714.59	Jul-14	38.36	40.60	6,673.99		
							Oct-14	38.31	40.55	6,674.04		
							Jan-15	38.32	40.56	6,674.03		
							Mar-15	37.71	39.95	6,674.64		
							Jul-15	38.14	40.38	6,674.21		
							Oct-15	38.14	40.38	6,674.21		
							Jan-16	38.19	40.43	6,674.16		
							Apr-16	38.34	40.58	6,674.01		
							Jul-16	38.30	40.54	6,674.05		
							Oct-16	38.34	40.58	6,674.01		
							Jan-17	38.32	40.56	6,674.03		
							Apr-17	38.35	40.59	6,674.00		
							Jul-17	38.28	40.52	6,674.07		
							Oct-17	38.36	40.60	6,673.99		
							Jan-18	38.34	40.58	6,674.01		
							Apr-18	38.38	40.62	6,673.97		
							Jul-18	38.53	40.77	6,673.82		
							Oct-18	38.47	40.71	6,673.88		
							Jan-19	38.42	40.66	6,673.93		
							Apr-19	38.51	40.75	6,673.84		
							6,713.42	6,715.66	Jul-19	38.38	40.62	6,675.04
									Sep-19	38.28	40.52	6,675.14
									Jan-20	38.36	40.60	6,675.06
									Apr-20	38.42	40.66	6,675.00
									Jul-20	38.55	40.79	6,674.87
									Oct-20	38.49	40.73	6,674.93

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
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Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW31D	Bedrock	1.91	77.0-107.0	111.5	6,708.53	6,710.44	Jul-14	36.23	38.14	6,672.30
							Oct-14	36.50	38.41	6,672.03
							Jan-15	36.54	38.45	6,671.99
							Mar-15	36.74	38.65	6,671.79
							Jul-15	36.90	38.81	6,671.63
							Oct-15	37.14	39.05	6,671.39
							Jan-16	37.15	39.06	6,671.38
							Apr-16	37.46	39.37	6,671.07
							Jul-16	37.66	39.57	6,670.87
							Oct-16	37.95	39.86	6,670.58
							Jan-17	38.43	40.34	6,670.10
							Apr-17	38.18	40.09	6,670.35
		Jul-17			38.29	40.20	6,670.24			
		Oct-17			38.74	40.65	6,669.79			
		Jan-18			38.77	40.68	6,669.76			
		Apr-18			38.87	40.78	6,669.66			
		Jul-18			39.15	41.06	6,669.38			
		Oct-18			39.24	41.15	6,669.29			
		Jan-19			39.58	41.49	6,668.95			
		Apr-19			39.59	41.50	6,668.94			
		Jul-19			40.03	41.83	6,670.16			
		Sep-19			40.12	41.92	6,670.07			
		Jan-20			40.37	42.17	6,669.82			
		Apr-20			40.21	42.01	6,669.98			
		Jul-20			40.76	42.56	6,669.43			
		Oct-20			40.75	42.55	6,669.44			
TMW32	Bedrock	2.22	117.0-137.0	139.1	6,707.09	6,709.31	Jul-14	38.07	40.29	6,669.02
							Oct-14	38.27	40.49	6,668.82
							Jan-15	38.31	40.53	6,668.78
							Mar-15	38.47	40.69	6,668.62
							Jul-15	38.70	40.92	6,668.39
							Oct-15	38.86	41.08	6,668.23
							Jan-16	38.91	41.13	6,668.18
							Apr-16	39.13	41.35	6,667.96
							Jul-16	39.35	41.57	6,667.74
							Oct-16	39.57	41.79	6,667.52
							Jan-17	39.54	41.76	6,667.55
							Apr-17	39.79	42.01	6,667.30
		Jul-17			39.93	42.15	6,667.16			
		Oct-17			39.92	42.14	6,667.17			
		Jan-18			40.28	42.50	6,666.81			
		Apr-18			40.43	42.65	6,666.66			
		Jul-18			40.77	42.99	6,666.32			
		Oct-18			40.84	43.06	6,666.25			
		Jan-19			40.68	42.90	6,666.41			
		Apr-19			40.31	42.53	6,666.78			
		Jul-19			41.47	43.32	6,667.56			
		Sep-19			40.50	42.35	6,668.53			
		Jan-20			41.83	43.68	6,667.20			
		Apr-20			42.17	44.02	6,666.86			
		Jul-20			42.19	44.04	6,666.84			
		Oct-20			41.45	43.30	6,667.58			

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
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Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW36	Bedrock	1.71	132.0-152.0	157.0	6,697.33	6,699.04	Jul-14	26.47	28.18	6,670.86
							Oct-14	26.55	28.26	6,670.78
							Jan-15	26.69	28.40	6,670.64
							Mar-15	26.78	28.49	6,670.55
							Jul-15	26.99	28.70	6,670.34
							Oct-15	27.27	28.98	6,670.06
							Jan-16	27.33	29.04	6,670.00
							Apr-16	27.55	29.26	6,669.78
							Jul-16	27.88	29.59	6,669.45
							Oct-16	28.07	29.78	6,669.26
							Jan-17	28.06	29.77	6,669.27
							Apr-17	28.30	30.01	6,669.03
		1.66			6,700.57	6,702.23	Jul-17	28.52	30.23	6,668.81
							Oct-17	28.96	30.67	6,668.37
							Jan-18	28.88	30.59	6,668.45
							Apr-18	29.21	30.92	6,668.12
							Jul-18	29.37	31.08	6,667.96
							Oct-18	29.72	31.43	6,667.61
							Jan-19	29.67	31.38	6,667.66
							Apr-19	29.92	31.63	6,667.41
							Jul-19	30.20	31.86	6,670.37
							Sep-19	30.28	31.94	6,670.29
							Jan-20	30.41	32.07	6,670.16
							Apr-20	33.85	35.51	6,666.72
							Jul-20	30.90	32.56	6,669.67
							Oct-20	31.31	32.97	6,669.26
TMW37	Bedrock	2.58	88.0-108.0	111.0	6,710.51	6,713.09	Jul-14	43.83	46.41	6,666.68
							Oct-14	43.93	46.51	6,666.58
							Jan-15	44.03	46.61	6,666.48
							Mar-15	44.17	46.75	6,666.34
							Jul-15	44.07	46.65	6,666.44
							Oct-15	44.24	46.82	6,666.27
							Jan-16	44.22	46.80	6,666.29
							Apr-16	44.54	47.12	6,665.97
							Jul-16	44.67	47.25	6,665.84
							Oct-16	44.93	47.51	6,665.58
							Jan-17	46.87	49.45	6,663.64
							Apr-17	45.11	47.69	6,665.40
		2.09			6,712.15	6,714.25	Jul-17	45.26	47.84	6,665.25
							Oct-17	45.67	48.25	6,664.84
							Jan-18	45.78	48.36	6,664.73
							Apr-18	45.77	48.35	6,664.74
							Jul-18	46.28	48.86	6,664.23
							Oct-18	46.39	48.97	6,664.12
							Jan-19	46.28	48.86	6,664.23
							Apr-19	46.09	48.67	6,664.42
							Jul-19	47.01	49.10	6,665.15
							Sep-19	47.00	49.09	6,665.16
							Jan-20	47.12	49.21	6,665.04
							Apr-20	47.25	49.34	6,664.91
							Jul-20	47.53	49.62	6,664.63
							Oct-20	47.74	49.83	6,664.42

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
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Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW38	Bedrock	2.38	118.9-158.9	159.5	6,704.41	6,706.79	Jul-14	45.06	47.44	6,659.35
							Oct-14	45.13	47.51	6,659.28
							Jan-15	45.08	47.46	6,659.33
							Mar-15	45.17	47.55	6,659.24
							Jul-15	45.48	47.86	6,658.93
							Oct-15	45.53	47.91	6,658.88
							Jan-16	45.52	47.90	6,658.89
							Apr-16	45.74	48.12	6,658.67
							Jul-16	45.90	48.28	6,658.51
							Oct-16	46.02	48.40	6,658.39
							Jan-17	45.86	48.24	6,658.55
							Apr-17	46.04	48.42	6,658.37
							Jul-17	46.25	48.63	6,658.16
							Oct-17	46.33	48.71	6,658.08
							Jan-18	46.38	48.76	6,658.03
							Apr-18	46.41	48.79	6,658.00
							Jul-18	46.16	48.54	6,658.25
							Oct-18	47.31	49.69	6,657.10
							Jan-19	47.30	49.68	6,657.11
							Apr-19	47.10	49.48	6,657.31
		2.59			6,705.03	6,707.62	Jul-19	46.91	49.50	6,658.12
							Sep-19	46.75	49.34	6,658.28
							Jan-20	46.95	49.54	6,658.08
							Apr-20	47.02	49.61	6,658.01
							Jul-20	47.28	49.87	6,657.75
							Oct-20	47.43	50.02	6,657.60
TMW39D	Bedrock	2.08	70.0-100.0	100.5	6,706.53	6,708.61	Jul-14	33.32	35.40	6,673.21
							Oct-14	33.60	35.68	6,672.93
							Jan-15	33.64	35.72	6,672.89
							Mar-15	33.84	35.92	6,672.69
							Jul-15	33.98	36.06	6,672.55
							Oct-15	34.23	36.31	6,672.30
							Jan-16	34.23	36.31	6,672.30
							Apr-16	34.54	36.62	6,671.99
							Jul-16	34.75	36.83	6,671.78
							Oct-16	35.03	37.11	6,671.50
							Jan-17	34.94	37.02	6,671.59
							Apr-17	35.29	37.37	6,671.24
							Jul-17	35.42	37.50	6,671.11
							Oct-17	35.75	37.83	6,670.78
							Jan-18	35.82	37.90	6,670.71
							Apr-18	35.95	38.03	6,670.58
							Jul-18	36.22	38.30	6,670.31
							Oct-18	36.31	38.39	6,670.22
							Jan-19	36.63	38.71	6,669.90
							Apr-19	36.68	38.76	6,669.85
		2.06			6,707.08	6,709.14	Jul-19	37.02	39.08	6,670.06
							Sep-19	37.10	39.16	6,669.98
							Jan-20	37.36	39.42	6,669.72
							Apr-20	37.53	39.59	6,669.55
							Jul-20	37.72	39.78	6,669.36
							Oct-20	37.93	39.99	6,669.15

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE
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Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW40D	Bedrock	2.34	135.0-155.0	155.5	6,703.81	6,706.15	Jul-14	30.75	33.09	6,673.06
							Oct-14	31.01	33.35	6,672.80
							Jan-15	31.05	33.39	6,672.76
							Mar-15	31.24	33.58	6,672.57
							Jul-15	31.42	33.76	6,672.39
							Oct-15	31.67	34.01	6,672.14
							Jan-16	31.68	34.02	6,672.13
							Apr-16	31.97	34.31	6,671.84
							Jul-16	32.16	34.50	6,671.65
							Oct-16	32.47	34.81	6,671.34
							Jan-17	32.40	34.74	6,671.41
							Apr-17	32.70	35.04	6,671.11
							Jul-17	32.85	35.19	6,670.96
							Oct-17	33.15	35.49	6,670.66
							Jan-18	33.21	35.55	6,670.60
		2.37			6,704.37	6,706.74	Apr-18	33.41	35.75	6,670.40
							Jul-18	33.61	35.95	6,670.20
							Oct-18	33.76	36.10	6,670.05
							Jan-19	33.99	36.33	6,669.82
							Apr-19	33.88	36.22	6,669.93
							Jul-19	34.35	36.72	6,670.02
							Sep-19	35.38	37.75	6,668.99
							Jan-20	34.68	37.05	6,669.69
							Apr-20	34.93	37.30	6,669.44
							Jul-20	35.11	37.48	6,669.26
							Oct-20	35.34	37.71	6,669.03
TMW48	Bedrock	2.04	71.0-91.0	91.5	6,707.80	6,709.84	Jul-14	34.57	36.61	6,673.23
							Oct-14	34.85	36.89	6,672.95
							Jan-15	34.93	36.97	6,672.87
							Mar-15	35.06	37.10	6,672.74
							Jul-15	35.24	37.28	6,672.56
							Oct-15	35.49	37.53	6,672.31
							Jan-16	35.53	37.57	6,672.27
							Apr-16	35.77	37.81	6,672.03
							Jul-16	35.94	37.98	6,671.86
							Oct-16	36.27	38.31	6,671.53
							Jan-17	36.24	38.28	6,671.56
							Apr-17	36.54	38.58	6,671.26
							Jul-17	36.65	38.69	6,671.15
		2.08			6,708.29	6,710.37	Oct-17	36.93	38.97	6,670.87
							Jan-18	37.07	39.11	6,670.73
							Apr-18	37.20	39.24	6,670.60
							Jul-18	37.46	39.50	6,670.34
							Oct-18	37.61	39.65	6,670.19
							Jan-19	37.90	39.94	6,669.90
							Apr-19	37.93	39.97	6,669.87
							Jul-19	38.22	40.30	6,670.07
							Sep-19	38.28	40.36	6,670.01
							Jan-20	38.56	40.64	6,669.73
							Apr-20	38.72	40.80	6,669.57
							Jul-20	38.96	41.04	6,669.33
							Oct-20	39.27	41.35	6,669.02

TABLE 3-1: NORTHERN AREA WATER LEVEL MEASUREMENTS BY GROUNDWATER ZONE

2023 Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	GW Zone	Casing Stick Up Length (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Well Ground Elevation (NAVD 88)	Well TOC Elevation (NAVD 88)	Water Level Measurement Date	Depth to Water (feet bgs)	Depth to Water (feet btoc)	Groundwater Elevation (NAVD 88)
TMW49	Bedrock	2.51	40.0-60.0	60.5	6,712.20	6,714.71	Jul-14	42.18	44.69	6,670.02
							Oct-14	42.46	44.97	6,669.74
							Jan-15	42.54	45.05	6,669.66
							Mar-15	42.71	45.22	6,669.49
							Jul-15	42.83	45.34	6,669.37
							Oct-15	43.07	45.58	6,669.13
							Jan-16	43.12	45.63	6,669.08
							Apr-16	43.42	45.93	6,668.78
							Jul-16	43.63	46.14	6,668.57
							Oct-16	43.84	46.35	6,668.36
							Jan-17	43.84	46.35	6,668.36
							Apr-17	44.17	46.68	6,668.03
							Jul-17	44.27	46.78	6,667.93
		Oct-17			44.58	47.09	6,667.62			
		Jan-18			44.69	47.20	6,667.51			
		Apr-18			44.82	47.33	6,667.38			
		Jul-18			45.09	47.60	6,667.11			
		Oct-18			45.09	47.60	6,667.11			
		Jan-19			45.48	47.99	6,666.72			
		Apr-19			45.57	48.08	6,666.63			
		Jul-19			45.83	48.34	6,670.38			
		Sep-19			45.77	48.28	6,670.44			
		Jan-20			46.13	48.64	6,670.08			
		Apr-20			46.49	49.00	6,669.72			
		Jul-20			46.46	48.97	6,669.75			
		Oct-20			46.66	49.17	6,669.55			
TMW50	Bedrock	2.55	55-75	75.0	6,712.47	6,715.02	Nov-19	44.14	46.69	6,668.33
							Apr-20	43.59	46.14	6,668.88
							Jul-20	43.86	46.41	6,668.61
							Oct-20	44.03	46.58	6,668.44
TMW51	Bedrock	2.59	105-125	125.0	6,704.11	6,706.70	Nov-19	34.43	37.02	6,669.68
							Apr-20	34.66	37.25	6,669.45
							Jul-20	34.91	37.50	6,669.20
							Oct-20	35.14	37.73	6,668.97
TMW52	Bedrock	2.66	95-115	115.0	6,701.71	6,704.36	Nov-19	63.34	66.00	6,638.36
							Apr-20	55.81	58.47	6,645.89
							Jul-20	56.36	59.02	6,645.34
							Oct-20	55.75	58.41	6,645.95
TMW53	Bedrock	2.57	107-117	117.0	6,699.77	6,702.34	Nov-19	52.30	54.87	6,647.47
							Apr-20	52.09	54.66	6,647.68
							Jul-20	52.28	54.85	6,647.49
							Oct-20	52.31	54.88	6,647.46
TMW55	Bedrock	2.70	101-121	121.0	6,711.13	6,713.82	Nov-19	49.92	52.62	6,661.20
							Apr-20	50.01	52.71	6,661.11
							Jul-20	50.18	52.88	6,660.94
							Oct-20	50.35	53.05	6,660.77
TMW58	Bedrock	2.75	145-185	185.0	6,700.79	6,703.54	Nov-19	36.70	39.45	6,664.09
							Apr-20	35.59	38.34	6,665.20
							Jul-20	35.91	38.66	6,664.88
							Oct-20	36.04	38.79	6,664.75
TMW63	Bedrock	2.75	140-180	180.0	6,699.83	6,702.58	Nov-19	30.05	32.80	6,669.78
							Apr-20	30.16	32.91	6,669.67
							Jul-20	30.45	33.20	6,669.38
							Oct-20	30.66	33.41	6,669.17
TMW64	Bedrock	2.70	80-100	100.0	6,705.50	6,708.20	Nov-19	35.80	38.50	6,669.70
							Apr-20	35.97	38.67	6,669.53
							Jul-20	36.19	38.89	6,669.31
							Oct-20	36.42	39.12	6,669.08

NOTES: Elevations are recorded in U.S. feet above North America Vertical Datum of 1988 (NAVD88).

ABBREVIATIONS & ACRONYMS:
bgs = below ground surface
btoc = below top of casing
ID = identification
NM = no measurement

TABLE 4-1: NORTHERN AREA GROUNDWATER PURGE METHOD
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Well ID	Casing Diameter (in)	Well Depth (ft bgs)	Screened Interval (ft bgs)	Screen Length (ft)	Dedicated Pump?	Low Flow?	Purge Method
BGMW01	2.5	33.0	12.5 – 32.5	20	Yes	Yes	Traditional Low Flow
BGMW02	2.5	34.0	13.5 – 33.5	20	Yes	Yes	Traditional Low Flow
BGMW03	2.5	29.0	8.5 – 28.5	20	No	No	Submersible Pump
BGMW07	2.0	300.0	215 – 255	40	No	No	Reclamation Pump
BGMW08	2.0	275.0	165 – 185	20	No	No	Submersible Pump
BGMW09	2.0	220.0	106 – 136	30	No	No	Submersible Pump
BGMW10	2.0	150.0	106 – 136	30	No	No	Submersible Pump
BGMW11	2.0	40.0	20 – 40	20	No	No	Submersible Pump
BGMW12	2.0	32.0	12 – 32	20	No	No	Submersible Pump
FW31	4.0	50.0	10 – 50	40	No	No	Hand Bail
FW35	4.0	30.0	10 – 30	20	Dry		Hand Bail
MW01	2.0	55.0	33.6 – 53.6	20	No	No	Hand Bail
MW02	2.0	48.0	37 – 47	10	No	No	Hand Bail
MW03	2.0	53.0	43 – 53	10	Yes	Yes	Traditional Low Flow
MW13S	2.0	69.0	49 – 69	20	No	No	Submersible Pump
MW13D	2.0	104.0	84 – 104	20	No	No	Submersible Pump
MW18D	2.0	59.9	47 – 57	10	No	No	Submersible Pump
MW18S	2.0	39.0	27 – 37	10	Dry		Submersible Pump
MW20	2.0	59.4	47 – 57	10	Yes	Yes	Traditional Low Flow
MW22D	2.0	58.6	47 – 57	10	Yes	Yes	Traditional Low Flow
MW22S	2.0	43.5	31 – 41	10	Dry		Traditional Low Flow
MW23	2.5	134.0	63.5 – 133.5	70	No	No	Bennett Pump
MW24	2.5	66.5	16 – 66	50	No	No	Bennett Pump
MW25	2.0	65.5	45.5 – 65.5	20	No	No	Submersible Pump
MW26	2.0	60.0	40 – 60	20	No	No	Submersible Pump
MW27	2.0	63.0	43 – 63	20	No	No	Submersible Pump
MW28	2.0	60.0	40 – 60	20	No	No	Submersible Pump
MW29	2.0	57.0	37 – 57	20	No	No	Submersible Pump
MW30	2.0	60.0	40 – 60	20	No	No	Submersible Pump
MW31	2.0	53.0	23 – 53	20	No	No	Submersible Pump
MW32	2.0	60.0	40 – 60	20	No	No	Submersible Pump
MW33	2.0	57.0	37 – 57	20	No	No	Hand Bail
MW34	2.0	60.0	40 – 60	20	No	No	Submersible Pump
MW35	2.0	61.0	41 – 61	20	No	No	Submersible Pump
MW36S	2.0	50.0	30 – 50	20	No	No	Submersible Pump
MW36D	2.0	75.0	55 – 75	20	No	No	Submersible Pump
MW37	2.0	45.0	25 – 45	20	No	No	Submersible Pump
MW38	2.0	50.0	30 – 50	20	No	No	Submersible Pump
MW39	2.0	50.0	30 – 50	20	No	No	Submersible Pump
SMW01	2.0	50.2	29.9 – 49.9	20	Yes	Yes	Traditional Low Flow
TMW01	2.0	60.0	44 – 59	15	Yes	Yes	Traditional Low Flow
TMW02	2.0	85.0	67.9 – 81.9	14	Yes	Yes	Traditional Low Flow
TMW03	2.0	70.1	49.8 – 69.8	20	Yes	Yes	Traditional Low Flow

TABLE 4-1: NORTHERN AREA GROUNDWATER PURGE METHOD
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Well ID	Casing Diameter (in)	Well Depth (ft bgs)	Screened Interval (ft bgs)	Screen Length (ft)	Dedicated Pump?	Low Flow?	Purge Method
TMW04	2.0	70.5	50 – 70	20	Yes	Yes	Traditional Low Flow
TMW06	2.0	57.0	45 – 55	10	Yes	Yes	Traditional Low Flow
TMW07	2.0	76.0	65 – 75	10	No	No	Submersible Pump
TMW08	2.0	62.0	30 – 60	30	Yes	Yes	Traditional Low Flow
TMW10	2.0	65.0	28 – 58	30	Yes	Yes	Traditional Low Flow
TMW11	2.0	82.0	55 – 80	25	No	No	Hand Bail
TMW13	2.0	72.5	60.7 – 70.7	10	Yes	Yes	Traditional Low Flow
TMW14A	2.0	110.0	94.25 – 109.25	15	Yes	Yes	ZIST Low Flow
TMW15	2.0	82.0	56 – 71	15	Yes	Yes	Traditional Low Flow
TMW16	2.0	142.0	123 – 138	15	No	No	Bennett Pump
TMW17	2.0	152.0	112 – 127	15	Yes	Yes	ZIST Low Flow
TMW18	2.0	220.0	150 – 160	10	No	No	Bennett Pump
TMW19	2.0	187.0	169 – 184	15	No	No	Bennett Pump
TMW21	2.0	72.0	48 – 58	10	No	No	Submersible Pump
TMW22	2.0	77.0	52 – 62	10	No	No	Submersible Pump
TMW23	2.0	72.0	46 – 56	10	No	No	Submersible Pump
TMW24	2.0	75.0	44 – 54	10	Yes	Yes	Traditional Low Flow
TMW25	2.0	74.0	42.5 – 52.5	10	No	No	Submersible Pump
TMW26	2.0	64.8	45 – 55	10	Yes	Yes	Traditional Low Flow
TMW27	2.0	102.2	60 – 70	10	Yes	Yes	Traditional Low Flow
TMW28	2.0	72.5	37 – 47	10	Yes	Yes	Traditional Low Flow
TMW29	2.0	69.0	49 – 59	10	No	No	Hand Bail
TMW30	2.0	51.5	35 – 45	10	No	No	Hand Bail
TMW31D	2.0	111.5	77 – 107	30	Yes	Yes	Traditional Low Flow
TMW31S	2.0	61.0	50 – 60	10	No	No	Submersible Pump
TMW32	2.0	139.1	117 – 137	20	Yes	Yes	Traditional Low Flow
TMW33	2.0	60.4	37 – 57	20	No	No	Submersible Pump
TMW34	2.0	57.3	37 – 57	20	Yes	Yes	Traditional Low Flow
TMW35	2.0	55.0	35 – 55	20	Yes	Yes	Traditional Low Flow
TMW36	2.0	157.0	132 – 152	20	No	No	Bennett Pump
TMW37	2.0	111.0	88 – 108	20	No	No	Bennett Pump
TMW38	2.5	159.5	118.9 – 158.9	40	Yes	Yes	Traditional Low Flow
TMW39S	2.5	53.0	32.5 – 52.5	20	No	No	Submersible Pump
TMW39D	2.5	100.5	70 – 100	30	Yes	Yes	Traditional Low Flow
TMW40D	2.5	155.5	135 – 155	20	Yes	Yes	Traditional Low Flow
TMW40S	2.5	60.5	50 – 60	10	No	No	Hand Bail
TMW41	2.5	66.0	55.5 – 65.5	10	No	No	Submersible Pump
TMW43	2.5	78.5	58 – 78	20	Yes	Yes	Traditional Low Flow
TMW44	2.5	64.0	43.5 – 63.5	20	No	No	Submersible Pump
TMW45	2.5	59.0	38.5 – 58.5	20	Yes	Yes	Traditional Low Flow
TMW46	2.5	59.0	38.5 – 58.5	20	No	No	Submersible Pump
TMW47	2.5	103.0	82.5 – 102.5	20	Yes	Yes	Traditional Low Flow
TMW48	2.5	91.5	71 – 91	20	Yes	Yes	Traditional Low Flow

TABLE 4-1: NORTHERN AREA GROUNDWATER PURGE METHOD
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Well ID	Casing Diameter (in)	Well Depth (ft bgs)	Screened Interval (ft bgs)	Screen Length (ft)	Dedicated Pump?	Low Flow?	Purge Method
TMW49	2.5	60.0	40 – 60	20	Yes	Yes	Traditional Low Flow
TMW50	2.0	75.0	55 – 75	20	No	No	Submersible Pump
TMW51	2.0	125.0	105 – 125	20	No	No	Submersible Pump
TMW52	2.0	115.0	95 – 115	20	No	No	Submersible Pump
TMW53	2.0	117.0	107 – 117	10	No	No	Submersible Pump
TMW54	2.0	41.4	21.4 – 41.4	20	Dry	No	Hand Bail
TMW55	2.0	121.0	101 – 121	20	No	No	Submersible Pump
TMW56	2.0	50.0	30 – 50	20	Dry	No	Hand Bail
TMW57	2.0	70.0	60 – 70	10	No	No	Submersible Pump
TMW58	2.0	185.0	145 – 185	40	No	No	Reclamation Pump
TMW59	2.0	62.0	42 – 62	20	No	No	Submersible Pump
TMW60	2.0	66.0	46 – 66	20	Dry	No	Submersible Pump
TMW61	2.0	61.0	41 – 61	20	No	No	Hand Bail
TMW62	2.0	60.0	40 – 60	20	No	No	Submersible Pump
TMW63	2.0	180.0	140 – 180	40	No	No	Reclamation Pump
TMW64	2.0	100.0	80 – 100	20	No	No	Submersible Pump

ABBREVIATIONS & ACRONYMS:

ft bgs = feet below ground surface

ID = identification

in = inches

ZIST = zone isolation sampling technology

TABLE 4-2: FIELD EQUIPMENT AND MATERIALS
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Equipment and Materials	Elevation Survey	Traditional Low-Flow	ZIST Low-Flow	Hand Bail	Submersible Pump	Bennett Pump
Electronic water level meter, capable of measuring to 0.01 feet accuracy	X	X	X	X	X	X
Power source (generator, portable rechargeable battery, and connectors) ^a		X	X		X	
Nitrogen Tanks with airline hoses and pressure regulator		X	X			X
Reusable submersible pump setup (control boxes, flow regulator, pump assembly, pump cable, power supply)					X	
Power Inverter		X	X			
Indicator field parameter monitoring instruments		X	X	X	X	X
Flow measurement supplies (graduated container and stopwatch)		X	X	X	X	X
Extra tubing		X	X		X	X
Bailers and bailing string				X	X	
Clamp or connector		X	X	X	X	X
Reusable buckets or storage containers for purge water		X	X	X	X	X
Reusable large portable water tanks (250 gallon or greater)					X	X
Decontamination supplies (including non -phosphate detergent, distilled water, brushes, and dedicated decontamination buckets)	X	X	X	X	X	X
Plastic sheeting, absorbent pads, or shallow tubs to catch spills	X	X	X	X	X	X
Personal Protective Equipment	X	X	X	X	X	X
Trash bags	X	X	X	X	X	X
Sample bottles and sample labels		X	X	X	X	X
Shipping supplies (including coolers, resealable bags, tape, cushioning material , shipping forms)		X	X	X	X	X
Logbook and sampling forms	X	X	X	X	X	X
Well construction data, location map, field data from last sampling event.	X	X	X	X	X	X
Well keys	X	X	X	X	X	X

NOTES:

^a If a gasoline generator is used, it will be located downwind and at least 15 feet from the well so that the exhaust fumes do not contaminate the samples.

ZIST = zone isolation sampling technology

TABLE 4-3: SAMPLE CONTAINERS, PRESERVATION, AND HOLDING TIME BY ANALYTICAL METHOD
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

Analytical Group	Analytical Method	Container (Number Size, and Type)	MS/MSD Container (Number, Size, and Type)	Preservation	Holding Time
TCL VOCs	SW8260C	(3) - 40 mL VOC glass vials	(9) - 40 mL VOC glass vials	No headspace; Cool < 6°C, HCL to pH < 2	14 days preserved
TCL SVOCs	SW8270D	(2) - 1 L amber bottle	(8) - 1 L amber bottle	Cool < 6°C	7 days to extraction, 40 days to analysis
TPH-GRO	SW8015D	(3) - 40 mL VOC glass vials	(9) - 40 mL VOC glass vials	No headspace; Cool < 6°C, HCL to pH < 2	14 days preserved
PCBs	SW8082A	(2) - 1 L amber bottle	(6) - 1 L amber bottle	Cool < 6°C	7 days to extraction, 40 days to analysis
TCL Pesticides	SW8081B	(2) - 1 L amber bottle	(6) - 1 L amber bottle	Cool < 6°C	7 days to extraction, 40 days to analysis
TPH-DRO	SW8015D	(2) - 1 L amber bottle	(6) - 1 L amber bottle	Cool < 6°C	7 days to extraction, 40 days to analysis
Explosives	SW8330B/8332	(2) - 250 mL amber bottles	(6) - 250 mL amber bottles	Cool < 6°C	7 days to extraction, 40 days to analysis
Major Anions	SW9056A	(1) - 250 mL poly	(3) - 250 mL poly	Cool < 6°C	48 hours
Herbicides	SW8151A	(2) - 1 L amber bottle	(6) - 1 L amber bottle	Cool < 6°C	7 days to extraction, 40 days to analysis
Perchlorate (filtered)	SW6850	(1) - 60 mL poly bottle, field filtered	(3) - 60 mL poly bottle, field filtered	One third bottle headspace; Cool < 6°C	28 days
TAL Total Metals and Mercury (unfiltered)	SW6020A	(1) - 250 mL poly bottle	(3) - 250 mL poly bottle	Cool < 6°C, HNO3 to pH < 2	28 days
TAL Dissolved Metals and Mercury (filtered)	SW6020A	(1) - 250 mL poly bottle, field filtered	(3) - 250 mL poly bottle, field filtered	Cool < 6°C, HNO3 to pH < 2	28 days

ABBREVIATIONS AND ACRONYMS:

°C	= degrees Celsius	poly	= polyethylene
DRO	= diesel range organics	SIM	= Selected Ion Monitoring
GRO	= gasoline range organics	SVOC	= semivolatile organic compound
HCL	= hydrochloric acid	TAL	= target analyte list
HNO3	= nitric acid	TCL	= target compound list
L	= liter	TPH	= total petroleum hydrocarbons
mL	= milliliter	VOC	= volatile organic compound

TABLE 5-1: GROUNDWATER SCREENING LEVELS, DETECTION LIMITS, AND CONTROL LIMITS
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

METHOD	ANALYTE	CAS	UNITS	Nov. 2021 EPA MCL ¹	Dec. 21, 2018 20.6.2 NM MAC NM WQCC ²	Nov. 2021 EPA RSL CANCER TAP WATER (target excess cancer risk level of 10 ⁻⁶)	Nov. 2021 EPA RSL CANCER TAP WATER (target excess cancer risk level of 10 ⁻⁶)	Nov. 2021 EPA RSL NONCANCER TAP WATER	FINAL SELECTED SL ³	FINAL SELECTED SL REFERENCE	RISK ENDPOINT c/n	SELECTED SL < LOQ ⁴	SELECTED SL < LOD ⁴	EMAX LAB LOQ	EMAX LAB LOD	EMAX LAB DL	LCS, MS/MSD LOWER CONTROL LIMITS	LCS, MS/MSD UPPER CONTROL LIMITS	%RPD	NOTES
6020A	Aluminum	7429-90-5	µg/L		5,000			20,000	5,000	WQCC				100	50	20	84	117	20	
6020A	Calcium ⁶	7440-70-2	µg/L						NA					200	100	50	87	118	20	
6020A	Iron	7439-89-6	µg/L		1,000			14,000	1,000	WQCC				200	50	25	87	118	20	
6020A	Magnesium ⁶	7439-95-4	µg/L						NA					100	50	20	83	118	20	
6020A	Potassium ⁶	7440-09-7	µg/L						NA					200	100	50	87	115	20	
6020A	Sodium ⁶	7440-23-5	µg/L						NA					200	100	50	85	117	20	
6020A	Antimony	7440-36-0	µg/L	6	6			7.8	6	WQCC				1	0.5	0.25	85	117	20	
6020A	Arsenic	7440-38-2	µg/L	10	10	0.052	0.52	6	10	WQCC				1	0.25	0.125	84	116	20	
6020A	Barium	7440-39-3	µg/L	2,000	2,000			3,800	2,000	WQCC				1	0.5	0.25	86	114	20	
6020A	Beryllium	7440-41-7	µg/L	4	4			25	4	WQCC				0.5	0.2	0.1	83	121	20	
6020A	Cadmium	7440-43-9	µg/L	5	5			9.2	5	WQCC				1	0.2	0.1	87	115	20	
6020A	Chromium	7440-47-3	µg/L	100	50				50	WQCC				1	0.2	0.1	85	116	20	
6020A	Cobalt	7440-48-4	µg/L		50			6	50	WQCC				0.75	0.2	0.1	86	115	20	
6020A	Copper	7440-50-8	µg/L	1,300	1,000			800	1,000	WQCC				2	1	0.5	85	118	20	
6020A	Lead	7439-92-1	µg/L	15	15			15	15	WQCC				1	0.1	0.05	88	115	20	
6020A	Manganese	7439-96-5	µg/L		200			430	200	WQCC				1	0.5	0.25	87	115	20	
6020A	Nickel	7440-02-0	µg/L		200			390	200	WQCC				1	0.5	0.25	85	117	20	
6020A	Selenium	7782-49-2	µg/L	50	50			100	50	WQCC				1	0.3	0.15	80	120	20	
6020A	Silver	7440-22-4	µg/L		50			94	50	WQCC				1	0.2	0.1	85	116	20	
6020A	Thallium	7440-28-0	µg/L	2	2			0.2	2	WQCC				0.5	0.2	0.1	82	116	20	
6020A	Vanadium	7440-62-2	µg/L					86	86	RSL	nc			1	0.5	0.25	86	115	20	
6020A	Zinc	7440-66-6	µg/L		10,000			6,000	10,000	WQCC				20	10	5	83	119	20	
6850	Perchlorate	14797-73-0	µg/L					14	14	RSL				0.2	0.1	0.05	84	119	15	
7470A	Mercury	7439-97-6	µg/L	2	2			0.63	2	WQCC				0.5	0.2	0.1	82	119	20	
8015D	Diesel Range Organics (DRO) [C10 C28]	68334-30-5	µg/L						16.7	NMED RAG ⁵		yes	yes	500	100	50	36	132	30	
8015D	Bromobenzene (Surrogate) ⁷	108-88-1	%						NA								60	130	30	
8015D	Hexacosane (Surrogate) ⁷	630-01-3	%						NA								60	140	30	
8015D	Gasoline Range Organics (GRO) [C6 C10]	8006-61-9	µg/L						10.1	NMED RAG ⁵		yes	yes	100	20	10	78	122	30	
8015D	Bromofluorobenzene (Surrogate) ⁷	460-00-4	%						NA								69	133	30	
8260C	1,1,1,2-Tetrachloroethane	630-20-6	µg/L			0.57	5.7	480	5.7	RSL	c			1	0.2	0.1	78	124	20	
8260C	1,1,1,1-Trichloroethane	71-55-6	µg/L	200	200			8,000	200	WQCC				1	0.2	0.1	74	131	20	
8260C	1,1,2,2-Tetrachloroethane	79-34-5	µg/L		10	0.076	0.76	366	10	WQCC				1	0.2	0.1	71	121	20	
8260C	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	µg/L					10,000	10,000	RSL	nc			1	0.5	0.25	70	136	20	
8260C	1,1,2-Trichloroethane	79-00-5	µg/L	5	5	0.28	2.8	0.41	5	WQCC				1	0.2	0.1	80	119	20	
8260C	1,1-Dichloroethane	75-34-3	µg/L		25	2.8	28	3,800	25	WQCC				1	0.2	0.1	77	125	20	
8260C	1,1-Dichloroethene	75-35-4	µg/L	7	7			280	7	WQCC				1	0.2	0.1	71	131	20	
8260C	1,1-Dichloropropene (Surrogate dichloropropene, 1,3)	563-58-6	µg/L			0.47	4.7	39	4.7	RSL	c			1	0.2	0.1	79	125	20	
8260C	1,2,3-Trichlorobenzene	87-61-6	µg/L					7	7	RSL	nc			1	0.3	0.15	69	129	20	
8260C	1,2,3-Trichloropropane	96-18-4	µg/L			0.00075	0.0075	0.62	0.0075	RSL	c	yes	yes	2	0.5	0.25	73	122	20	
8260C	1,2,4-Trichlorobenzene	120-82-1	µg/L	70	70	1.2	12	4	70	WQCC				1	0.3	0.15	69	130	20	
8260C	1,2,4-Trimethylbenzene	95-63-6	µg/L					56	56	RSL	nc			1	0.5	0.25	76	124	20	
8260C	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	0.2		0.00033	0.0033		0.2	MCL		yes	yes	2	0.5	0.25	62	128	20	
8260C	1,2-Dibromoethane	106-93-4	µg/L	0.05		0.0075	0.075	17	0.05	MCL		yes	yes	1	0.2	0.1	77	121	20	
8260C	1,2-Dichlorobenzene	95-50-1	µg/L	600	600			300	600	WQCC				1	0.2	0.1	80	119	20	
8260C	1,2-Dichloroethane	107-06-2	µg/L	5	5	0.17	1.7		5	WQCC				1	0.2	0.1	73	128	20	

TABLE 5-1: GROUNDWATER SCREENING LEVELS, DETECTION LIMITS, AND CONTROL LIMITS
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

METHOD	ANALYTE	CAS	UNITS	Nov. 2021 EPA MCL ¹	Dec. 21, 2018 20.6.2 NMAC NM WQCC ²	Nov. 2021 EPA RSL CANCER TAP WATER (target excess cancer risk level of 10 ⁻⁶)	Nov. 2021 EPA RSL CANCER TAP WATER (target excess cancer risk level of 10 ⁻⁶)	Nov. 2021 EPA RSL NONCANCER TAP WATER	FINAL SELECTED SL ³	FINAL SELECTED SL REFERENCE	RISK ENDPOINT c/nc	SELECTED SL < LOQ ⁴	SELECTED SL < LOD ⁴	EMAX LAB LOQ	EMAX LAB LOD	EMAX LAB DL	LCS, MS/MSD LOWER CONTROL LIMITS	LCS, MS/MSD UPPER CONTROL LIMITS	%RPD	NOTES
8260C	1,3,5-Trimethylbenzene	108-67-8	µg/L					60	60	RSL	nc			1	0.5	0.25	75	124	20	
8260C	1,3-Dichlorobenzene (Surrogate dichlorobenzene, 1,4)	541-73-1	µg/L	75		0.48	4.8	570	75	MCL				1	0.2	0.1	80	119	20	
8260C	1,3-Dichloropropane	142-28-9	µg/L					370	370	RSL	nc			1	0.2	0.1	80	119	20	
8260C	1,4-Dichlorobenzene	106-46-7	µg/L	75	75	0.48	4.8	570	75	WQCC				1	0.2	0.1	79	118	20	
8260C	2,2-Dichloropropane (Surrogate dichloropropane, 1,2)	594-20-7	µg/L	5		0.85	8.5	8.2	5	MCL				1	0.5	0.25	60	139	20	
8260C	2-Butanone (MEK)	78-93-3	µg/L					5,600	5,600	RSL	nc			20	10	5	56	143	20	
8260C	2-Chlorotoluene	95-49-8	µg/L					240	240	RSL	nc			1	0.5	0.25	79	122	20	
8260C	2-Hexanone	591-78-6	µg/L					38	38	RSL	nc			20	10	5	57	139	20	
8260C	4-Chlorotoluene	106-43-4	µg/L					250	250	RSL	nc			1	0.5	0.25	78	122	20	
8260C	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L					6,300	6,300	RSL	nc			20	10	5	67	130	20	methyl isobutyl ketone
8260C	Acetone	67-64-1	µg/L					14,000	14,000	RSL	nc			20	10	5	39	160	20	
8260C	Benzene	71-43-2	µg/L	5	5	0.46	4.6		5	WQCC				1	0.2	0.1	79	120	20	
8260C	Bromobenzene	108-86-1	µg/L					62	62	RSL	nc			1	0.2	0.1	80	120	20	
8260C	Bromochloromethane	74-97-5	µg/L					83	83	RSL	nc			1	0.3	0.15	78	123	20	
8260C	Bromodichloromethane	75-27-4	µg/L	80		0.13	1.3		80	MCL				1	0.2	0.1	79	125	20	
8260C	Bromoform	75-25-2	µg/L	80		3.3	33		80	MCL				1	0.3	0.15	66	130	20	
8260C	Bromomethane	74-83-9	µg/L					7.5	7.5	RSL	nc			1	0.5	0.25	53	141	20	
8260C	Carbon disulfide	75-15-0	µg/L					810	810	RSL	nc			1	0.5	0.25	64	133	20	
8260C	Carbon tetrachloride	56-23-5	µg/L	5	5	0.46	4.6	49	5	WQCC				1	0.2	0.1	72	136	20	
8260C	Chlorobenzene	108-90-7	µg/L					78	78	RSL	nc			1	0.2	0.1	82	118	20	
8260C	Chloroethane	75-00-3	µg/L					21,000	21,000	RSL	nc			2	1	0.5	60	138	20	
8260C	Chloroform	67-66-3	µg/L	80	100	0.22	2.2	97	80	MCL				1	0.2	0.1	79	124	20	
8260C	Chloromethane	74-87-3	µg/L					190	190	RSL	nc			1	0.5	0.25	50	139	20	
8260C	cis-1,2-Dichloroethene	156-59-2	µg/L	70	70			36	70	WQCC				1	0.2	0.1	78	123	20	
8260C	cis-1,3-Dichloropropene (Surrogate dichloropropene, 1,3)	10061-01-5	µg/L			0.47	4.7	39	4.7	RSL	c			1	0.2	0.1	75	124	20	
8260C	Dibromochloromethane	124-48-1	µg/L	80		0.87	8.7	380	80	MCL				1	0.2	0.1	74	126	20	
8260C	Dibromomethane	74-95-3	µg/L					8.3	8.3	RSL	nc			1	0.2	0.1	79	123	20	
8260C	Dichlorodifluoromethane	75-71-8	µg/L					200	200	RSL	nc			1	0.5	0.25	32	152	20	
8260C	Ethylbenzene	100-41-4	µg/L	700	700	1.5	15	810	700	WQCC				1	0.2	0.1	79	121	20	
8260C	Hexachlorobutadiene	87-68-3	µg/L			0.14	1.4	6.5	1.4	RSL	c	yes		2	1	0.5	66	134	20	
8260C	Isopropylbenzene	98-82-8	µg/L					450	450	RSL	nc			1	0.2	0.1	72	131	20	
8260C	Methyl acetate	79-20-9	µg/L					20,000	20,000	RSL	nc			2	1	0.5	56	136	20	
8260C	Methyl tert butyl ether	1634-04-4	µg/L		100	14	140	6300	100	WQCC	c			1	0.3	0.15	71	124	20	
8260C	Methylcyclohexane (Surrogate cyclohexane)	108-87-2	µg/L					13,000	13,000	RSL	nc			2	1	0.5	72	132	20	
8260C	Methylene Chloride	75-09-2	µg/L	5	5	11	110	110	5	MCL				2	1	0.5	74	124	20	
8260C	m-Xylene & p Xylene	179601-23-1	µg/L					190	190	RSL	nc			2	0.5	0.21	80	121	20	
8260C	Naphthalene	91-20-3	µg/L		30	0.12	1.2	6.1	30	WQCC				2	1	0.5	61	128	20	
8260C	n-Butylbenzene	104-51-8	µg/L					1000	1000	RSL	nc			1	0.5	0.25	75	128	20	
8260C	N-Propylbenzene	103-65-1	µg/L					660	660	RSL	nc			1	0.5	0.25	76	126	20	
8260C	o-Xylene	95-47-6	µg/L					190	190	RSL	nc			1	0.2	0.1	78	122	20	
8260C	p-Isopropyltoluene (Surrogate cumene)	99-87-6	µg/L					450	450	RSL	nc			1	0.5	0.25	77	127	20	
8260C	sec-Butylbenzene	135-98-8	µg/L					2,000	2,000	RSL	nc			1	0.5	0.25	77	126	20	
8260C	Styrene	100-42-5	µg/L	100	100			1,200	100	WQCC				1	0.5	0.25	78	123	20	
8260C	tert-Butylbenzene	98-06-6	µg/L					690	690	RSL	nc			1	0.5	0.25	78	124	20	
8260C	Toluene	108-88-3	µg/L	1,000	1,000			1,100	1,000	WQCC				1	0.2	0.1	80	121	20	
8260C	trans-1,2-Dichloroethene	156-60-5	µg/L	100	100			360	100	WQCC				1	0.2	0.1	75	124	20	
8260C	trans-1,3-Dichloropropene (Surrogate dichloropropene, 1,3)	10061-02-6	µg/L			0.47	4.7	39	4.7	RSL	c			1	0.5	0.25	73	127	20	
8260C	Trichloroethene	79-01-6	µg/L	5	5	0.49	4.9	2.8	5	WQCC				1	0.2	0.1	79	123	20	

TABLE 5-1: GROUNDWATER SCREENING LEVELS, DETECTION LIMITS, AND CONTROL LIMITS
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

METHOD	ANALYTE	CAS	UNITS	Nov. 2021 EPA MCL ¹	Dec. 21, 2018 20.6.2 NMAC NM WQCC ²	Nov. 2021 EPA RSL CANCER TAP WATER (target excess cancer risk level of 10 ⁻⁶)	Nov. 2021 EPA RSL CANCER TAP WATER (target excess cancer risk level of 10 ⁻⁶)	Nov. 2021 EPA RSL NONCANCER TAP WATER	FINAL SELECTED SL ³	FINAL SELECTED SL REFERENCE	RISK ENDPOINT c/nc	SELECTED SL < LOQ ⁴	SELECTED SL < LOD ⁴	EMAX LAB LOQ	EMAX LAB LOD	EMAX LAB DL	LCS, MS/MSD LOWER CONTROL LIMITS	LCS, MS/MSD UPPER CONTROL LIMITS	%RPD	NOTES
8260C	Trichlorofluoromethane	75-69-4	µg/L					5,200	5,200	RSL	nc			1	0.5	0.25	65	141	20	
8260C	Vinyl chloride	75-01-4	µg/L	2	2	0.019	0.19	44	2	WQCC				1	0.3	0.11	58	137	20	
8260C	1,2-Dichloroethane-d4 (Surrogate) ⁷	17060-07-0	%						NA								81	118	20	
8260C	Toluene d8 (Surrogate) ⁷	2037-26-5	%						NA								89	112	20	
8260C	Dibromofluoromethane (Surrogate) ⁷	1868-53-7	%						NA								80	119	20	
8260C	4 Bromofluorobenzene (Surrogate) ⁷	460-00-4	%						NA								85	114	20	
8270D	1,2,4,5-Tetrachlorobenzene	95-94-3	µg/L					1.7	1.7	RSL	nc			10	5	2.5	35	121	20	
8270D	1,2,4-Trichlorobenzene	120-82-1	µg/L	70	70	1.2	12	4	70	WQCC				20	10	5	29	116	20	
8270D	1,2-Dichlorobenzene	95-50-1	µg/L	600	600			300	600	WQCC				10	5	2.5	32	111	20	
8270D	1,2-Diphenylhydrazine	122-66-7	µg/L			0.078	0.78		0.78	RSL	c	yes	yes	10	5	2.5	49	122	20	
8270D	1,3-Dichlorobenzene (Surrogate dichlorobenzene, 1,4)	541-73-1	µg/L	75	75	0.48	4.8	570	75	WQCC				10	5	2.5	28	110	20	
8270D	1,4-Dichlorobenzene	106-46-7	µg/L	75	75	0.48	4.8	570	75	WQCC				10	5	2.5	29	112	20	
8270D	2,2-Oxybis(1-chloropropane)	108-60-1	µg/L					710	710	RSL	nc			10	5	2.5	37	130	20	bis-(2-chloroisopropyl) ether
8270D	2,3,4,6-Tetrachlorophenol	58-90-2	µg/L					240	240	RSL	nc			10	5	2.5	50	128	20	
8270D	2,4,5-Trichlorophenol	95-95-4	µg/L					1,200	1,200	RSL	nc			10	5	2.5	53	123	20	
8270D	2,4,6-Trichlorophenol	88-06-2	µg/L			4.1	41	12	12	RSL	nc			10	5	2.5	50	125	20	
8270D	2,4-Dichlorophenol	120-83-2	µg/L					46	46	RSL	nc			10	5	2.5	47	121	20	
8270D	2,4-Dimethylphenol	105-67-9	µg/L					360	360	RSL	nc			10	5	2.5	31	124	20	
8270D	2,4-Dinitrophenol	51-28-5	µg/L					39	39	RSL	nc			20	5	2.5	23	143	20	
8270D	2,4-Dinitrotoluene	121-14-2	µg/L			0.24	2.4	38	2.4	RSL	c	yes	yes	10	5	2.5	57	128	20	
8270D	2,6-Dichlorophenol (Surrogate dichlorophenol, 2,4)	87-65-0	µg/L					46	46	RSL	nc			10	5	2.5	50	118	20	
8270D	2,6-Dinitrotoluene	606-20-2	µg/L			0.049	0.49	5.7	0.49	RSL	c	yes	yes	10	5	2.5	57	124	20	
8270D	2-Chloronaphthalene	91-58-7	µg/L					750	750	RSL	nc			10	5	2.5	40	116	20	
8270D	2-Chlorophenol	95-57-8	µg/L					91	91	RSL	nc			10	5	2.5	38	117	20	
8270D	2-Methylnaphthalene	91-57-6	µg/L		30			36	30	WQCC				10	5	2.5	40	121	20	
8270D	2-Methylphenol	95-48-7	µg/L					930	930	RSL	nc			10	5	2.5	30	117	20	
8270D	2-Nitroaniline	88-74-4	µg/L					190	190	RSL	nc			10	5	2.5	55	127	20	
8270D	2-Nitrophenol	88-75-5	µg/L					91	91	RSL	nc			10	5	2.5	47	123	20	
8270D	3- & 4-Methylphenol	106-44-5	µg/L					1,900	1,900	RSL	nc			10	5	2.5	29	110	20	4-methylphenol (**)
8270D	3,3-Dichlorobenzidine	91-94-1	µg/L			0.13	1.3		1.3	RSL	c	yes	yes	10	5	2.5	27	129	20	
8270D	3-Nitroaniline (Surrogate 4-nitroaniline)	99-09-2	µg/L			3.8	38	78	38	RSL	c			10	5	2.5	41	128	20	
8270D	4,6-Dinitro-2-methylphenol	534-52-1	µg/L					1.5	1.5	RSL	nc	yes	yes	20	5	2.5	44	137	20	
8270D	4-Bromophenyl phenyl ether	101-55-3	µg/L						NS					10	5	2.5	55	124	20	
8270D	4-Chloro-3-methylphenol	59-50-7	µg/L					1,400	1,400	RSL	nc			10	5	2.5	52	119	20	
8270D	4-Chloroaniline	106-47-8	µg/L			0.37	3.7	76	3.7	RSL	c	yes	yes	20	10	5	33	117	20	
8270D	4-Chlorophenyl phenyl ether	7005-72-3	µg/L						NS					10	5	2.5	53	121	20	
8270D	4-Nitroaniline	100-01-6	µg/L			3.8	38	78	38	RSL	c			10	5	2.5	60	130	20	
8270D	4-Nitrophenol (Surrogate 2-chlorophenol)	100-02-7	µg/L					91	91	RSL	nc			20	5	2.5	40	140	20	
8270D	Acenaphthene	83-32-9	µg/L					530	530	RSL	nc			10	5	2.5	47	122	20	
8270D	Acenaphthylene	208-96-8	µg/L						NS					10	5	2.5	41	130	20	
8270D	Anthracene	120-12-7	µg/L					1,800	1,800	RSL	nc			10	5	2.5	57	123	20	
8270D	Benzaldehyde	100-52-7	µg/L			19	190	1,900	190	RSL	c			20	10	5	30	160	20	
8270D	Benzidine	92-87-5	µg/L			0.00011	0.0011	59	0.0011	RSL	c	yes	yes	40	20	10	30	160	20	
8270D	Benzo[a]anthracene	56-55-3	µg/L			0.03	0.3		0.3	RSL	c	yes	yes	10	5	2.5	58	125	20	
8270D	Benzo[a]pyrene	50-32-8	µg/L	0.2	0.2	0.025	0.25	6	0.2	WQCC		yes	yes	10	5	2.5	54	128	20	
8270D	Benzo[b]fluoranthene	205-99-2	µg/L			0.25	2.5		2.5	RSL	c	yes	yes	10	5	2.5	53	131	20	
8270D	Benzo[g,h,i]perylene	191-24-2	µg/L						NS					10	5	2.5	50	134	20	
8270D	Benzo[k]fluoranthene	207-08-9	µg/L			2.5	25		25	RSL	c			10	5	2.5	57	129	20	

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Fort Wingate Depot Activity, New Mexico

METHOD	ANALYTE	CAS	UNITS	Nov. 2021 EPA MCL ¹	Dec. 21, 2018 20.6.2 NMCC ²	Nov. 2021 EPA RSL CANCER TAP WATER (target excess cancer risk level of 10 ⁻⁵)	Nov. 2021 EPA RSL CANCER TAP WATER (target excess cancer risk level of 10 ⁻⁵)	Nov. 2021 EPA RSL NONCANCER TAP WATER	FINAL SELECTED SL ³	FINAL SELECTED SL REFERENCE	RISK ENDPOINT c/nc	SELECTED SL < LOQ ⁴	SELECTED SL < LOD ⁴	EMAX LAB LOQ	EMAX LAB LOD	EMAX LAB DL	LCS, MS/MSD LOWER CONTROL LIMITS	LCS, MS/MSD UPPER CONTROL LIMITS	%RPD	NOTES
8270D	Benzoic acid	65-85-0	µg/L					75,000	75,000	RSL	nc			100	40	20	50	130	20	
8270D	Benzyl alcohol	100-51-6	µg/L					2,000	2,000	RSL	nc			10	5	2.5	31	112	20	
8270D	bis-(2-Chloroethoxy)methane	111-91-1	µg/L					59	59	RSL	nc			10	5	2.5	48	120	20	
8270D	bis-(2-Chloroethyl)ether	111-44-4	µg/L			0.014	0.14		0.14	RSL	c	yes	yes	10	5	2.5	43	118	20	
8270D	bis-(2-Ethylhexyl)phthalate	117-81-7	µg/L	6		5.6	56	400	6	MCL		yes	yes	20	10	5	55	135	20	
8270D	Butyl benzyl phthalate	85-68-7	µg/L			16	160	1,700	160	RSL	c			10	5	2.5	53	134	20	
8270D	Caprolactam	105-60-2	µg/L					9,900	9,900	RSL	nc			20	10	5	30	160	20	
8270D	Carbazole (Surrogate fluorene)	86-74-8	µg/L					290	290	RSL	nc			10	5	2.5	60	122	20	
8270D	Chrysene	218-01-9	µg/L			25	250		250	RSL	c			10	5	2.5	59	123	20	
8270D	Dibenz(a,h)anthracene	53-70-3	µg/L			0.025	0.25		0.25	RSL	c	yes	yes	10	5	2.5	51	134	20	
8270D	Dibenzofuran	132-64-9	µg/L					7.9	7.9	RSL	nc	yes		10	5	2.5	53	118	20	
8270D	Diethyl phthalate	84-66-2	µg/L					15,000	15,000	RSL	nc			10	5	2.5	56	125	20	
8270D	Dimethyl phthalate	131-11-3	µg/L					15,000	15,000	RSL	nc			10	5	2.5	45	127	20	
8270D	Di-n-butyl phthalate	84-74-2	µg/L					900	900	RSL	nc			10	5	2.5	59	127	20	
8270D	Di-n-octyl phthalate	117-84-0	µg/L					200	200	RSL	nc			10	5	2.5	51	140	20	
8270D	Fluoranthene	206-44-0	µg/L					800	800	RSL	nc			10	5	2.5	57	128	20	
8270D	Fluorene	86-73-7	µg/L					290	290	RSL	nc			10	5	2.5	52	124	20	
8270D	Hexachlorobenzene	118-74-1	µg/L	1		0.0098	0.098	16	1	MCL		yes	yes	10	5	2.5	53	125	20	
8270D	Hexachlorobutadiene	87-68-3	µg/L			0.14	1.4	6.5	1.4	RSL	c	yes	yes	10	5	2.5	22	124	20	
8270D	Hexachlorocyclopentadiene	77-47-4	µg/L	50				0.41	50	MCL				10	5	2.5	10	130	20	
8270D	Hexachloroethane	67-72-1	µg/L			0.33	3.3	6.2	3.3	RSL	c	yes	yes	10	5	2.5	21	115	20	
8270D	Indeno(1,2,3-cd)pyrene	193-39-5	µg/L			0.25	2.5		2.5	RSL	c	yes	yes	10	5	2.5	52	134	20	
8270D	Isophorone	78-59-1	µg/L			78	780	3,800	780	RSL	c			10	5	2.5	42	124	20	
8270D	Naphthalene	91-20-3	µg/L		30	0.12	1.2	6.1	30	WQCC				10	5	2.5	40	121	20	
8270D	Nitrobenzene	98-95-3	µg/L			0.14	1.4	13	1.4	RSL	c	yes	yes	10	5	2.5	45	121	20	
8270D	N-Nitrosodimethylamine	62-75-9	µg/L			0.00011	0.0011	0.055	0.0011	RSL	c	yes	yes	10	5	2.5	40	130	20	
8270D	N-Nitrosodi-n-propylamine	621-64-7	µg/L			0.011	0.11		0.11	RSL	c	yes	yes	10	5	2.5	49	119	20	
8270D	N-Nitrosodiphenylamine	86-30-6	µg/L			12	120		120	RSL	c			10	5	2.5	51	123	20	
8270D	Pentachlorophenol	87-86-5	µg/L	1	1	0.041	0.41	23	1	WQCC		yes	yes	20	5	2.5	35	138	20	
8270D	Phenanthrene	85-01-8	µg/L						170	NMED RAG ⁵				10	5	2.5	59	120	20	
8270D	Phenol	108-95-2	µg/L		5			5,800	5	WQCC		yes		10	5	2.5	50	130	20	
8270D	Pyrene	129-00-0	µg/L					120	120	WQCC	nc			10	5	2.5	57	126	20	
8270D	2,4,6-Tribromophenol (Surrogate) ⁷	118-79-6	%						NA								43	140	20	
8270D	2-Fluorobiphenyl (Surrogate) ⁷	321-60-8	%						NA								44	119	20	
8270D	2-Fluorophenol (Surrogate) ⁷	367-12-4	%						NA								19	119	20	
8270D	Nitrobenzene-d5 (Surrogate) ⁷	4165-60-0	%						NA								44	120	20	
8270D	Terphenyl-d14 (Surrogate) ⁷	1718-51-0	%						NA								50	134	20	
8270D	Phenol-d5 (Surrogate) ⁷	4165-62-2	%						NA								40	130	20	
8270-SIM	1,4-Dioxane	123-91-1	µg/L			0.46	4.6		4.6	RSL	c			2	1	0.5	40	140	20	
8330B	1,3,5-Trinitrobenzene	99-35-4	µg/L					590	590	RSL	nc			1	0.2	0.1	73	125	30	1,3,5-TNB
8330B	1,3-Dinitrobenzene	99-65-0	µg/L					2	2	RSL	nc			1	0.2	0.1	78	120	30	1,3-DNB
8330B	2,4,6-Trinitrotoluene	118-96-7	µg/L			2.5	25	9.8	9.8	RSL	nc			1	0.2	0.1	71	123	30	2,4-DNT
8330B	2,4-Dinitrotoluene	121-14-2	µg/L			0.24	2.4	38	2.4	RSL	c			1	0.2	0.1	78	120	30	2,6-DNT
8330B	2,6-Dinitrotoluene	606-20-2	µg/L			0.049	0.49	5.7	0.49	RSL	c	yes	yes	1	0.2	0.1	77	127	30	
8330B	2-Amino-4,6-dinitrotoluene	35572-78-2	µg/L					1.9	1.9	RSL	nc			1	0.2	0.1	79	120	30	2-AM-4,6-DNT
8330B	3,5-Dinitroaniline (Surrogate 4-nitroaniline)	618-87-1	µg/L			3.8	38	78	38	RSL	c			0.4	0.2	0.1	71	117	30	
8330B	4-Amino-2,6-dinitrotoluene	19406-51-0	µg/L					1.9	1.9	RSL	nc			1	0.2	0.1	76	125	30	4-AM-2,6-DNT
8330B	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0	µg/L					1,000	1,000	RSL	nc			1	0.2	0.1	65	135	30	

TABLE 5-1: GROUNDWATER SCREENING LEVELS, DETECTION LIMITS, AND CONTROL LIMITS
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

METHOD	ANALYTE	CAS	UNITS	Nov. 2021 EPA MCL ¹	Dec. 21, 2018 20.6.2 NM MAC NM WQCC ²	Nov. 2021 EPA RSL CANCER TAP WATER (target excess cancer risk level of 10 ⁻⁶)	Nov. 2021 EPA RSL CANCER TAP WATER (target excess cancer risk level of 10 ⁻⁶)	Nov. 2021 EPA RSL NONCANCER TAP WATER	FINAL SELECTED SL ³	FINAL SELECTED SL REFERENCE	RISK ENDPOINT c/nc	SELECTED SL < LOQ ⁴	SELECTED SL < LOD ⁴	EMAX LAB LOQ	EMAX LAB LOD	EMAX LAB DL	LCS, MS/MSD LOWER CONTROL LIMITS	LCS, MS/MSD UPPER CONTROL LIMITS	%RPD	NOTES
8330B	m-Nitrotoluene	99-08-01	µg/L					1.7	1.7	RSL	nc			1	0.2	0.1	73	125	30	3-nitrotoluene
8330B	Nitrobenzene	98-95-3	µg/L			0.14	1.4	13	1.4	RSL	c			1	0.2	0.1	65	134	30	Nitrobenzene
8330B	Nitroglycerin	55-63-0	µg/L			4.5	45	2	2	RSL	nc	yes	yes	125	62.5	31.25	74	127	30	
8330B	o-Nitrotoluene	88-72-2	µg/L			0.31	3.1	16	3.1	RSL	c			1	0.2	0.1	70	127	30	2-nitrotoluene
8330B	Pentaerythritol tetranitrate (PETN)	78-11-5	µg/L			19	190	39	39	RSL	nc	yes	yes	125	62.5	31.25	73	127	30	
8330B	p-Nitrotoluene	99-99-0	µg/L			4.3	43	71	43	RSL	c			1	0.2	0.1	71	127	30	4-nitrotoluene
8330B	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	µg/L			0.97	9.7	80	9.7	RSL	c			1	0.2	0.1	68	130	30	
8330B	Trinitrophenylmethylnitramine (Tetryl)	479-45-8	µg/L					39	39	RSL	nc			1	0.2	0.1	64	128	30	
8330B	3,4-Dinitrotoluene (Surrogate) ⁷	610-39-9	%						NA								60	140	30	
9056A	Nitrate as N	14797-55-8	mg/L	10	10			32	10	WQCC				0.1	0.06	0.03	88	111	15	
9056A	Nitrite as N	14797-65-0	mg/L	1	1			2	1	MCL				0.1	0.06	0.03	87	111	15	
9056A	Fluoride	16984-48-8	mg/L	2	1.6				1.6	WQCC				0.1	0.05	0.025	88	112	15	
9056A	Chloride	16887-00-6	mg/L	250	250				250	WQCC				0.2	0.1	0.05	87	111	15	
9056A	Sulfate	14808-79-8	mg/L	250	600				600	WQCC				0.5	0.25	0.13	87	112	15	
9056A	Phosphate	14265-44-2	mg/L											0.5	0.25	0.13	80	116	15	
9056A	Bromide	24959-67-9	mg/L											0.1	0.02	0.01	91	110	15	
8081B	4,4-DDD	72-54-8	µg/L			0.032	0.32	0.063	0.32	RSL	c			0.1	0.04	0.02	56	143	30	
8081B	4,4-DDE	72-55-9	µg/L			0.046	0.46	6	0.46	RSL	c			0.1	0.04	0.02	57	135	30	
8081B	4,4-DDT	50-29-3	µg/L			0.23	2.3	10	2.3	RSL	c			0.1	0.04	0.02	51	143	30	
8081B	Aldrin	309-00-2	µg/L			0.00092	0.0092	0.6	0.0092	RSL	c	yes	yes	0.1	0.04	0.02	45	134	30	
8081B	alpha-BHC	319-84-6	µg/L			0.0072	0.072	97	0.072	RSL	c	yes		0.1	0.04	0.02	54	138	30	
8081B	alpha-Chlordane	5103-71-9	µg/L	2		0.02	0.2	0.74	2	MCL				0.1	0.04	0.02	60	129	30	
8081B	beta-BHC	319-85-7	µg/L			0.025	0.25		0.25	RSL	c			0.1	0.04	0.02	56	136	30	
8081B	delta-BHC	319-86-8	µg/L			0.025	0.25		0.25	RSL	c			0.1	0.04	0.02	52	142	30	
8081B	Dieldrin	60-57-1	µg/L			0.0018	0.018	0.38	0.018	RSL	c	yes	yes	0.1	0.04	0.02	60	136	30	
8081B	Endosulfan I	959-98-8	µg/L					100	100	RSL	nc			0.1	0.04	0.02	62	126	30	
8081B	Endosulfan II	33213-65-9	µg/L					100	100	RSL	nc			0.1	0.04	0.02	52	135	30	
8081B	Endosulfan sulfate	1031-07-8	µg/L					110	110	RSL	nc			0.1	0.04	0.02	62	133	30	
8081B	Endrin	72-20-8	µg/L	2				2.3	2	MCL				0.1	0.04	0.02	60	138	30	
8081B	Endrin aldehyde (Surrogate Endrin)	7421-93-4	µg/L	2				2.3	2	MCL				0.1	0.04	0.02	51	132	30	
8081B	Endrin ketone (Surrogate Endrin)	53494-70-5	µg/L	2				2.3	2	MCL				0.1	0.04	0.02	58	134	30	
8081B	gamma-BHC (Lindane)	58-89-9	µg/L	0.2		0.042	0.42	3.6	0.2	MCL				0.1	0.04	0.02	59	134	30	
8081B	gamma-Chlordane	5566-34-7	µg/L	2		0.02	0.2	0.74	2	MCL				0.1	0.04	0.02	56	136	30	
8081B	Heptachlor	76-44-8	µg/L	0.4		0.0014	0.014	1.3	0.4	MCL				0.1	0.04	0.02	54	130	30	
8081B	Heptachlor epoxide	1024-57-3	µg/L	0.2		0.0014	0.014	0.12	0.2	MCL				0.1	0.04	0.02	61	133	30	
8081B	Methoxychlor	72-43-5	µg/L	40				37	40	MCL				1	0.2	0.1	54	145	30	
8081B	Toxaphene	8001-35-2	µg/L	3		0.071	0.71	1.8	3	MCL				2	0.5	0.25	33	134	30	
8081B	Tetrachloro-m-Xylene (Surrogate) ⁷	877-09-8	µg/L						NA								44	124	30	
8081B	Decachlorobiphenyl (Surrogate) ⁷	2051-24-3	µg/L						NA								30	135	30	
8082	PCBs, Total	1336-36-3	µg/L	0.5	0.5				0.5	WQCC										
8082	PCB-1016	12674-11-2	µg/L			0.22	2.2	1.4	1.4	RSL	nc			1	0.5	0.25	46	129	30	
8082	PCB-1221	11104-28-2	µg/L			0.0047	0.047		0.047	RSL	c	yes	yes	1	0.5	0.25				
8082	PCB-1232	11141-16-5	µg/L			0.0047	0.047		0.047	RSL	c	yes	yes	1	0.5	0.25				
8082	PCB-1242	53469-21-9	µg/L			0.0078	0.078		0.078	RSL	c	yes	yes	1	0.5	0.25				
8082	PCB-1248	12672-29-6	µg/L			0.0078	0.078		0.078	RSL	c	yes	yes	1	0.5	0.25				
8082	PCB-1254	11097-69-1	µg/L			0.0078	0.078	0.4	0.078	RSL	c	yes	yes	1	0.5	0.25				
8082	PCB-1260	11096-82-5	µg/L			0.0078	0.078		0.078	RSL	c	yes	yes	1	0.5	0.25	45	134	30	

TABLE 5-1: GROUNDWATER SCREENING LEVELS, DETECTION LIMITS, AND CONTROL LIMITS
2023 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
Fort Wingate Depot Activity, New Mexico

METHOD	ANALYTE	CAS	UNITS	Nov. 2021 EPA MCL ¹	Dec. 21, 2018 20.6.2 NMCC ²	Nov. 2021 EPA RSL CANCER TAP WATER (target excess cancer risk level of 10 ⁻⁶)	Nov. 2021 EPA RSL CANCER TAP WATER (target excess cancer risk level of 10 ⁻⁵)	Nov. 2021 EPA RSL NONCANCER TAP WATER	FINAL SELECTED SL ³	FINAL SELECTED SL REFERENCE	RISK ENDPOINT c/nc	SELECTED SL < LOQ ⁴	SELECTED SL < LOD ⁴	EMAX LAB LOQ	EMAX LAB LOD	EMAX LAB DL	LCS, MS/MSD LOWER CONTROL LIMITS	LCS, MS/MSD UPPER CONTROL LIMITS	%RPD	NOTES
8082	Decachlorobiphenyl (Surrogate) ⁷	2051-24-3	µg/L						NA								40	135	30	
8151A	2,4-D	94-75-7	µg/L	70				170	70	MCL				1	0.2	0.1	45	152	30	
8151A	2,4-DB	94-82-6	µg/L					450	450	RSL	nc			1	0.2	0.1	35	153	30	
8151A	2,4,5-T	93-76-5	µg/L					160	160	RSL	nc			1	0.2	0.1	42	147	30	
8151A	2,4,5-TP (Silvex)	93-72-1	µg/L	50				110	50	MCL				1	0.2	0.1	51	134	30	
8151A	Dalapon	75-99-0	µg/L	200				600	200	MCL				1	0.2	0.1	19	139	30	
8151A	Dicamba	1918-00-9	µg/L					570	570	RSL	nc			1	0.2	0.1	50	141	30	
8151A	Dichloroprop	120-36-5	µg/L						NS					1	0.2	0.1	46	159	30	
8151A	Dinoseb	88-85-7	µg/L	7				15	7	MCL				1	0.2	0.1	20	100	30	
8151A	MCPA	94-74-6	µg/L					7.5	7.5	RSL	nc	yes	yes	40	20	10	35	144	30	
8151A	2,4-Dichlorophenylacetic Acid (Surrogate) ⁷	94-75-7	µg/L						NA								32	138	30	

NOTES:

¹ Fort Wingate Depot Activity (FWDA) Cleanup Standard by U.S. Environmental Protection Agency (EPA), Drinking Water Primary Maximum Contaminant Level (MCL) per 40 Code of Federal Regulations Sections 141 and 143.

² FWDA Cleanup Standard by New Mexico Water Quality Control Commission (NM WQCC) standards per 20 New Mexico Administrative Code § 6.2.4103.

³ Final selected screening level was based on the lowest of the NM WQCC and the EPA R6 SSL MCL. If none, then EPA RSL Tap Water was selected. If the analyte does not have a published NM WQCC or MCL but has RSLs listed for both carcinogenic risks and non-carcinogenic hazards, the lower value between the adjusted carcinogenic RSL (target excess cancer risk level of 1 x 10⁻⁵) and the non-carcinogenic RSL (with a target hazard index of 1.0) is selected.

⁴ Target exceeds the screening level objective for one method but will meet the screening level objective for another. For example, nitrobenzene by SW8270D exceeds but passes objectives by SW8330B. Both methods will be used, and both methods will report the target.

⁵ Screening level based on New Mexico Environment Department (NMED) Risk Assessment Guidance for Site Investigations and Remediation, Vol 1, Feb 2019 (Revision 2, 6-19-19).

⁶ Analyte is considered an essential nutrient and risk in groundwater is not evaluated.

⁷ Analyte is a laboratory surrogate used in analytical procedures and risk in groundwater is not evaluated.

ABBREVIATIONS & ACRONYMS:

%	= percent	MS	= matrix spike
c	= carcinogenic risk endpoint	MSD	= matrix spike duplicate
CAS	= Chemical Abstract Service registry number	nc	= non-carcinogenic risk endpoint
DL	= detection limit	NA	= not applicable (essential nutrients and laboratory surrogates)
LOD	= limit of detection	NMED RAG	= New Mexico Environment Department Risk Assessment Guidance
LOQ	= limit of quantitation	NS	= no standard
LCL	= lower confidence limit	RPD	= relative percent difference
µg/L	= micrograms per liter	RSL	= U.S. Environmental Protection Agency Regional Screening Level - Tap water screening level with cancer risk adjusted to 1x10 ⁻⁶
MCL	= U.S. Environmental Protection Agency Maximum Contaminant Level (Primary or Secondary)	SL	= Screening Level
mg/L	= milligrams per liter	UCL	= upper confidence limit
		WQCC	= New Mexico Water Quality Control Commission standard

TABLE 5-2 NORTHERN AREA GROUNDWATER SAMPLING MATRIX
Fort Wingate Depot Activity, New Mexico

Well ID	PROPOSED REVISED ANALYTICAL PROGRAM													Notes
	TCL VOC	Total Explosives	Major Anions	TAL Total Metals	TAL Dissolved Metals	Perchlorate	TCL SVOC ¹	1,4-Dioxane ¹	TCL Pesticides	TPH GRO	TPH DRO	PCB	Herbicides	
	8260C	8330B/8332	9056A	6020A	6020A	6850	8270D	8270-SIM	8081B	8015D	8015D	8082A	8151A	
Alluvial Monitoring Wells														
BGMW01	x		x	x	x	x		—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: No change, recent analyte detections. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
BGMW02	x		x	x	x	x		—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: No change, recent analyte detections. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
BGMW03	x		x	x	x	x		—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: No change, recent analyte detections. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
BGMW11	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
BGMW12	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
BGMW13D	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
BGMW13S	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
FW31	x		x	x	x	—		—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: No change, not analyzed. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
FW35	x	x	x	x	x	—	x	—	—	—	—	—	—	No changes, well is dry.
MW01	x		x	x	x			—		x	x	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: Do not analyze, non-detect for analytes. SVOCs: No change, not analyzed. Pesticides: Do not analyze, non-detect for analytes. TPH: No change, well is within plume.
MW02	x		x	x	x			—		x	x	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes. TPH: No change, well is within plume.
MW03	x		x	x	x			—	—	x	x	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: Do not analyze, non-detect for analytes.
MW18D	x		x	x	x			—	—	x	x	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: Do not analyze, non-detect for analytes.
MW18S	x	—	—	x	x	—	—	—	—	—	—	—	—	TPH: No change, well is within plume.

TABLE 5-2 NORTHERN AREA GROUNDWATER SAMPLING MATRIX
Fort Wingate Depot Activity, New Mexico

Well ID	PROPOSED REVISED ANALYTICAL PROGRAM													Notes
	TCL VOC	Total Explosives	Major Anions	TAL Total Metals	TAL Dissolved Metals	Perchlorate	TCL SVOC ¹	1,4-Dioxane ¹	TCL Pesticides	TPH GRO	TPH DRO	PCB	Herbicides	
	8260C	8330B/8332	9056A	6020A	6020A	6850	8270D	8270-SIM	8081B	8015D	8015D	8082A	8151A	
MW20	x		x	x	x	x		—		x	x	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, well is within plume. Perchlorate: No change, recent analyte detections. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes. TPH: No change, well is within plume.
MW22S	x	x	x	x	x	x	x	—	x	x	x	—	—	No changes, well is dry.
MW22D	x		x	x	x	x		—		x	x	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, well is within plume. Perchlorate: No change, recent analyte detections. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes. TPH: No change, well is within plume.
MW23	x			x	x	x		—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: Do not analyze, non-detect for nitrate/nitrite. Perchlorate: No change, recent analyte detections. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
MW24	x			x	x			—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: Do not analyze, non-detect for nitrate/nitrite. Perchlorate: Do not analyze, non-detect for analytes. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
MW25	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
MW26	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
MW27	x	x	x ²	x	x	x	x	x	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
MW28	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
MW29	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
MW30	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
MW31	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
MW32	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
MW33	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
MW34	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
MW35	x	x	x ²	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
MW36D	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
MW36S	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
MW37	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
MW38	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
MW39	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.

TABLE 5-2 NORTHERN AREA GROUNDWATER SAMPLING MATRIX
Fort Wingate Depot Activity, New Mexico

Well ID	PROPOSED REVISED ANALYTICAL PROGRAM													Notes
	TCL VOC	Total Explosives	Major Anions	TAL Total Metals	TAL Dissolved Metals	Perchlorate	TCL SVOC ¹	1,4-Dioxane ¹	TCL Pesticides	TPH GRO	TPH DRO	PCB	Herbicides	
	8260C	8330B/8332	9056A	6020A	6020A	6850	8270D	8270-SIM	8081B	8015D	8015D	8082A	8151A	
SMW01	x			x	x			—	—	—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: Do not analyze, non-detect for nitrate/nitrite. Perchlorate: Do not analyze, non-detect for analytes. SVOCs: Do not analyze, non-detect for analytes.
TMW01	x		x	x	x	x	—	—	—	—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: No change, well is within plume.
TMW02	x	x	x	x	x	x	—	—	—	—	—	—	—	Explosives: No change, recent analyte detections. Nitrate/Nitrite: No change, well is within plume. Perchlorate: No change, recent analyte detections.
TMW03	x	x	x	x	x	x	x	—	—	—	—	—	—	Explosives: No change, recent analyte detections. Nitrate/Nitrite: No change, well is within plume. Perchlorate: No change, recent analyte detections.
TMW04	x	x	x	x	x	x	x	—	—	—	—	—	—	Explosives: No change, recent analyte detections. Nitrate/Nitrite: No change, well is within plume. Perchlorate: No change, recent analyte detections.
TMW06	x	x	x	x	x	—	x	—	—	x	x	—	—	Explosives: No change, retain as 'sentinel' well. Nitrate/Nitrite: No change, well is within plume.
TMW07	x		x	x	x	—	x	—	—	x	x	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. SVOCs: No change, recent analyte detections. TPH: No change, do not analyze if non-detects continue.
TMW08	x	—	x	x	x		—	—		x	x	—	—	Explosives: No change, not analyzed. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes. TPH: No change, well is within plume.
TMW10	x		x	x	x		—	—	—	x	x	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: Do not analyze, non-detect for analytes. TPH: No change, do not analyze if non-detects continue.
TMW11	x	x	x	x	x	x	x	—	—	—	—	—	—	Explosives: No change, do not analyze if non-detects continue. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: No change, do not analyze if non-detects continue.
TMW13	x	—	x	x	x	x	—	—	—	—	—	—	—	Explosives: No change, not analyzed. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: No change, recent analyte detections.
TMW15	x		x	x	x			—	—	—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: Do not analyze, non-detect for analytes. SVOCs: Do not analyze, non-detect for analytes.
TMW21	x		x	x	x	x	—	—	—	x	x	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, well is within plume. Perchlorate: No change, recent analyte detections. TPH: No change, do not analyze if non-detects continue.
TMW22	x		x	x	x			—	—	—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, well is within plume. Perchlorate: Do not analyze, non-detect for analytes. SVOCs: Do not analyze, non-detect for analytes.
TMW23	x	x	x	x	x		x	—		—	—	—	—	Explosives: No change, well is within plume. Nitrate/Nitrite: No change, well is within plume. Perchlorate: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.

TABLE 5-2 NORTHERN AREA GROUNDWATER SAMPLING MATRIX
Fort Wingate Depot Activity, New Mexico

Well ID	PROPOSED REVISED ANALYTICAL PROGRAM													Notes
	TCL VOC	Total Explosives	Major Anions	TAL Total Metals	TAL Dissolved Metals	Perchlorate	TCL SVOC ¹	1,4-Dioxane ¹	TCL Pesticides	TPH GRO	TPH DRO	PCB	Herbicides	
	8260C	8330B/8332	9056A	6020A	6020A	6850	8270D	8270-SIM	8081B	8015D	8015D	8082A	8151A	
TMW24	x		x	x	x		—	—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
TMW25	x		x	x	x	—	—	—	—	—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections.
TMW26	x		x	x	x		—	—	—	—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: Do not analyze, non-detect for analytes.
TMW27	x	—	—	x	x		—	—	—	—	—	—	—	Perchlorate: Do not analyze, non-detect for analytes.
TMW28	x	—	x	x	x	—	—	—	—	—	—	—	—	Nitrate/Nitrite: No change, recent nitrate detections.
TMW29	x		x	x	x	x	—	—	—	—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: No change, recent analyte detections.
TMW31S	x		x	x	x	x		—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent nitrate detections. Perchlorate: No change, well is within plume. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
TMW33	x	—	x	x	x	—		—	—	x	x	—	—	Nitrate/Nitrite: Retain as 'sentinel' well. SVOCs: Do not analyze, non-detect for analytes. TPH: No change, well is within plume.
TMW34	x	—	x	x	x	x	—	—	—	x	x	—	—	Nitrate/Nitrite: No change, well is within the plume. Perchlorate: No change, recent analyte detections. TPH: No change, well is within plume.
TMW35	x	—	x	x	x	x		—		x	x	—	—	Nitrate/Nitrite: No change, recent analyte detections. Perchlorate: No change, recent analyte detections. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
TMW39S	x		x	x	x	x		—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent analyte detections Perchlorate: No change, well is within plume. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
TMW40S	x	x	x	x	x	x	x	—		—	—	—	—	Explosives: No change, well is within plume. Nitrate/Nitrite: No change, well is within plume. Perchlorate: No change, recent analyte detections. Pesticides: Do not analyze, non-detect for analytes.
TMW41	x	x	x	x	x	x	x	—		—	—	—	—	Explosives: No change, well is in proximity to plume. Nitrate/Nitrite: No change, recent analyte detections. Perchlorate: No change, recent analyte detections. Pesticides: Do not analyze, non-detect for analytes.
TMW43	x	x	x	x	x	x	x	—		—	—	—	—	Explosives: No change, recent analyte detections. Nitrate/Nitrite: No change, recent analyte detections Perchlorate: No change, recent analyte detections. Pesticides: Do not analyze, non-detect for analytes.
TMW44	x		x	x	x	x		—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, well is within plume. Perchlorate: No change, recent analyte detections. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.

TABLE 5-2 NORTHERN AREA GROUNDWATER SAMPLING MATRIX
Fort Wingate Depot Activity, New Mexico

Well ID	PROPOSED REVISED ANALYTICAL PROGRAM													Notes
	TCL VOC	Total Explosives	Major Anions	TAL Total Metals	TAL Dissolved Metals	Perchlorate	TCL SVOC ¹	1,4-Dioxane ¹	TCL Pesticides	TPH GRO	TPH DRO	PCB	Herbicides	
	8260C	8330B/8332	9056A	6020A	6020A	6850	8270D	8270-SIM	8081B	8015D	8015D	8082A	8151A	
TMW45	x		x	x	x			—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent analyte detections. Perchlorate: Do not analyze, non-detect for analytes. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
TMW46	x		x	x	x	x		—		x	x	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, well is within plume. Perchlorate: No change, recent analyte detections. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes. TPH: No change, do not analyze if non-detects continue.
TMW47	x	x	x	x	x		x	—		—	—	—	—	Explosives: No change, recent analyte detections. Nitrate/Nitrite: No change, recent analyte detections. Perchlorate: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
TMW54	x	x	x	x	x	x	x	—	x	x	x	x	x	No changes, well is dry.
TMW56	x	x	x	x	x	x	x	—	x	x	x	x	x	No changes, well is dry.
TMW57	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
TMW59	x	x	x ²	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
TMW60	x	x	x	x	x	x	x	—	x	x	x	x	x	No changes, well is dry.
TMW61	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
TMW62	x	x	x	x	x	x	x	—	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
Bedrock Monitoring Wells														
BGMW07	x			x	x			—		—	—		x	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: Do not analyze, non-detect for nitrate/nitrite. Perchlorate: Do not analyze, non-detect for analytes. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes. PCBs: Do not analyze, non-detect for analytes. Herbicides: No change, do not analyze if non-detects continue.
BGMW08	x		x	x	x			—		—	—		x	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent analyte detections. Perchlorate: Do not analyze, non-detect for analytes. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes. PCBs: Do not analyze, non-detect for analytes. Herbicides: No change, do not analyze if non-detects continue.
BGMW09	x		x	x	x			—		—	—		x	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent analyte detections. Perchlorate: Do not analyze, non-detect for analytes. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes. PCBs: Do not analyze, non-detect for analytes. Herbicides: No change, do not analyze if non-detects continue.

TABLE 5-2 NORTHERN AREA GROUNDWATER SAMPLING MATRIX
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Well ID	PROPOSED REVISED ANALYTICAL PROGRAM													Notes
	TCL VOC	Total Explosives	Major Anions	TAL Total Metals	TAL Dissolved Metals	Perchlorate	TCL SVOC ¹	1,4-Dioxane ¹	TCL Pesticides	TPH GRO	TPH DRO	PCB	Herbicides	
	8260C	8330B/8332	9056A	6020A	6020A	6850	8270D	8270-SIM	8081B	8015D	8015D	8082A	8151A	
BGMW10	x		x	x	x			—		—	—		x	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent analyte detections. Perchlorate: Do not analyze, non-detect for analytes. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes. PCBs: Do not analyze, non-detect for analytes. Herbicides: No change, do not analyze if non-detects continue.
TMW14A	x			x	x	—		—	—	—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: Do not analyze, non-detect for nitrate/nitrite. SVOCs: Do not analyze, non-detect for analytes.
TMW16	x		—	x	x			—	—	—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Perchlorate: Do not analyze, non-detect for analytes. SVOCs: Do not analyze, non-detect for analytes.
TMW17	x	—		x	x	x	—	—	—	—	—	—	—	Nitrate/Nitrite: Do not analyze, non-detect for nitrate/nitrite. Perchlorate: No change, recent analyte detections.
TMW18	x		x	x	x			—	—	—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent analyte detections Perchlorate: Do not analyze, non-detect for analytes. SVOCs: Do not analyze, non-detect for analytes.
TMW19	x		—	x	x			—	—	—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Perchlorate: Do not analyze, non-detect for analytes. SVOCs: Do not analyze, non-detect for analytes.
TMW30	x	x	x	x	x	x	x	—		—	—	—	—	Explosives: No change, recent analyte detections. Nitrate/Nitrite: No change, well is within plume. Perchlorate: No change, well is within plume. Pesticides: Do not analyze, non-detect for analytes.
TMW31D	x		x	x	x	x		—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, well is within plume. Perchlorate: No change, well is within plume. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
TMW32	x		x	x	x	x		—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent analyte detections. Perchlorate: No change, well is within plume. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
TMW36	x		x	x	x	x		—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent analyte detections. Perchlorate: No change, well is in proximity to plume. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
TMW37	x		x	x	x			—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent analyte detections. Perchlorate: Do not analyze, non-detect for analytes. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.
TMW38	x	x	x	x	x	x	x	—		—	—	—	—	Explosives: No change, well is within plume. Nitrate/Nitrite: No change, recent analyte detections. Perchlorate: No change, well is in proximity to plume. Pesticides: Do not analyze, non-detect for analytes.
TMW39D	x		x	x	x	x		—		—	—	—	—	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent analyte detections. Perchlorate: No change, well is within plume. SVOCs: Do not analyze, non-detect for analytes. Pesticides: Do not analyze, non-detect for analytes.

TABLE 5-2 NORTHERN AREA GROUNDWATER SAMPLING MATRIX
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Well ID	PROPOSED REVISED ANALYTICAL PROGRAM													Notes
	TCL VOC	Total Explosives	Major Anions	TAL Total Metals	TAL Dissolved Metals	Perchlorate	TCL SVOC ¹	1,4-Dioxane ¹	TCL Pesticides	TPH GRO	TPH DRO	PCB	Herbicides	
	8260C	8330B/8332	9056A	6020A	6020A	6850	8270D	8270-SIM	8081B	8015D	8015D	8082A	8151A	
TMW40D	x		x	x	x	x		–		–	–	–	–	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, recent analyte detections. Perchlorate: No change, well is within plume. SVOCs: Do not analyze, non-detect for analytes. ~~Pesticides: Do not analyze, non-detect for analytes.~~
TMW48	x		x	x	x	x		–		–	–	–	–	Explosives: Do not analyze, non-detect for analytes. Nitrate/Nitrite: No change, well is within plume. Perchlorate: No change, well is within plume. SVOCs: Do not analyze, non-detect for analytes. ~~Pesticides: Do not analyze, non-detect for analytes.~~
TMW49	x	x	x	x	x	x	x	–		–	–	–	–	Explosives: No change, recent analyte detections. Nitrate/Nitrite: No change, recent analyte detections. Perchlorate: No change, well is within plume. ~~Pesticides: Do not analyze, non-detect for analytes.~~
TMW50	x	x	x	x	x	x	x	–	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
TMW51	x	x	x	x	x	x	x	–	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
TMW52	x	x	x	x	x	x	x	–	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
TMW53	x	x	x	x	x	x	x	–	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
TMW55	x	x	x	x	x	x	x	–	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
TMW58	x	x	x	x	x	x	x	–	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
TMW63	x	x	x	x	x	x	x	–	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.
TMW64	x	x	x	x	x	x	x	–	O	x	x	O	O	Do not analyze for PCBs, herbicides, or pesticides if not detected during 2021-2022 sampling events.

ABBREVIATIONS and ACRONYMS:

– = analyte not applicable for that well

DRO = diesel range organics

GRO = gasoline range organics

ID = identification

O = sample is analyzed for the specified method if detections are reported during 2021 and 2022 sampling events, and will not be analyzed if no detections are reported.

SVOC = semivolatile organic compound

TAL = total analyte list

TCL = target compound list

TPH = total petroleum hydrocarbons

VOC = volatile organic compound

X = sample is analyzed for the specified method

Major anions analysis includes nitrate, nitrite, chloride, fluoride, sulfate, phosphate, and bromide.

Highlighted cells indicate a change from previous analytical program.

¹ Any well with a detection of a chlorinated solvent in 2021-2022 will be analyzed for 1,4-dioxane. Any well with a detection of an explosive or TPH-DRO will be analyzed for SVOCs in the subsequent sampling event.

² For wells MW27, MW35, and TMW59, duplicate samples will be collected during the April 2023 sampling event and submitted to a second laboratory for duplicate analysis for nitrite.

APPENDIX A

Response to NMED Comments to 2022 Groundwater Monitoring Plan



DEPARTMENT OF THE ARMY
OFFICE OF THE DEPUTY CHIEF OF STAFF, G-9
600 ARMY PENTAGON
WASHINGTON, DC 20310-0600

December 30, 2020

Base Realignment and Closure Operations Branch

Mr. Kevin Pierard
Chief, Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building
1 Santa Fe, New Mexico 87505-6303

RE: Revised Final 2022 Interim Northern Area Groundwater Monitoring Plan
Fort Wingate Depot Activity, McKinley County, New Mexico. EPA# NM6213820974

Dear Mr. Pierard:

This letter provides responses to the comments issued in the *Disapproval Letter – Final 2019 Interim Northern Area Groundwater Monitoring Plan* from the New Mexico Environment Department (NMED), dated July 27, 2020. The following are the Army's response to NMED comments, detailing where each comment was addressed and cross referencing the numbered NMED comments. In addition to the comment responses provided in this letter, two (2) hard copies and one (1) electronic (CD) copy of the *Revised Final 2022 Interim Northern Area Groundwater Monitoring Plan* are enclosed for your review and consideration. The electronic transmittal includes a redline-strikeout version of the abovementioned report showing where all revisions to the report were made.

If you have questions or require further information, please contact me at George.h.cushman.civ@mail.mil, 703-455-3234 (Temporary Home Office, preferred) or 703-608-2245 (Mobile).

Sincerely,

A handwritten signature in cursive script that reads "George H. Cushman IV".

George H. Cushman IV
BRAC Environmental Coordinator
Fort Wingate Depot Activity
BRAC Operations Branch
Environmental Division

Enclosures

CF:

Kevin Pierard, NMED, HWB
Dave Cobrain, NMED, HWB
Ben Wear NMED, HWB
Michiya Suzuki, NMED, HWB
Chuck Hendrickson, U.S. EPA Region 6

Ian Thomas, BRAC
Steven Smith, USACE
Saqib Khan, USACE
David Becker, USACE
Clayton Seoutewa, SW BIA
George Padilla, BIA, NRO
Sharlene Begay-Platero, Navajo Nation
Mark Harrington, Pueblo of Zuni
Admin Record, NM
Admin Record, Ohio

Attachment

GENERAL COMMENT

1. Objectives of Groundwater Monitoring Plan

NMED Comment: The Permittee submitted a groundwater monitoring plan for 2019, which should have been submitted in fiscal year 2018. The groundwater monitoring plan must discuss the upcoming groundwater monitoring activities planned for 2021. The entire Plan must be revised to propose groundwater monitoring activities for 2022. While the Permittee failed to submit several annual updates to the groundwater monitoring plan, a plan must propose future activities, not past activities or those already underway. Revise the Plan accordingly.

Permittee Response:

- a) Comment Acknowledged. Please note that there are several factors that caused the schedule delays; new contract awarded; multiple revisions to accommodate PDT/NMED comments and lengthy review times.
- b) The Army revised the plan to include 2021 and 2022 monitoring activities.

SPECIFIC COMMENTS

2. Executive Summary, line 31-34, page ES-1

Permittee Statement: “Other non-traditional sampling techniques for RCRA compliant groundwater monitoring (i.e., borehole purging) are deployed as necessary due to insufficient well yield.”

NMED Comment: Non-traditional sampling techniques must be approved prior to use. No revision required.

Permittee Response: Comment Acknowledged. The Army concurs that all non-traditional sampling techniques will be submitted to NMED for review approval prior to their application or implementation in the field.

The plan was revised to state on Page ES-1, Lines 33-35 (RLSO: Page ES-1, Lines 33-35) as follows:

“Other non-traditional sampling techniques for RCRA compliant groundwater monitoring (i.e., borehole purging) will be submitted to NMED for review prior to deployment if necessary.”

3. Executive Summary, lines 23-24, page ES-2, Section 2.2.15, Approved Final RCRA Facility Investigation Parcel 21 – 2012, Fire Training Ground (SWMU 7), lines 20-21, page 21 of 71, and Section 3.7, Fate and Transport of Contamination in Groundwater, lines 32-33, page 39 of 71

Permittee Statements: “Fire Training Ground (SWMU 7, Parcel 21) had suspected releases of DROs due to historical firefighting operations.”

and,

“Based on the sampling results, DRO concentrations exceeded cleanup criteria/project screening levels in two samples from the beneath the western (fill) end of the pipe.”

NMED Comment: Confirm whether or not firefighting foam was historically used in the fire training sites in a response letter.

Permittee Response: Comment Acknowledged. The Army confirms that firefighting foam was not used at FWDA and the Plan was revised on page ES-2, Lines 25-26 (RLSO: Page ES-2, Lines 29-30), and Page 40, Lines 2-4 (RLSO: Page 40, Lines 14-16) as follows:

“The Army has confirmed that firefighting foam was not used at the facility as part of the installation activities.”

4. Section 1.4, Data Quality Objectives, Step 7 - Develop the Sampling Plan for Obtaining the Data, lines 32-35, page 5 of 71

Permittee Statement: “Wells designated as upgradient and downgradient of a contaminant plume will be used to monitor plume boundaries and plume migration. Where no contaminant plume can be drawn, downgradient locations will be selected based on the groundwater flow direction from the point of release. Sentinel wells will monitor potential off-site migration of contaminants.”

NMED Comment: Although it is appropriate to identify dry wells, other designations such as downgradient, upgradient, or sentinel wells are unnecessary. According to the Final Groundwater Periodic Monitoring Report January through June 2019 (Report), dated March 2020, wells TMW01 and TMW31S are designated as primary downgradient wells. However, these wells are located upgradient of the TNT Leaching Beds and Workshop Area, potential source areas of nitrate in groundwater. Therefore, these wells are not considered primary downgradient wells. Such well designations can be misleading and must not be used in the future periodic monitoring reports.

Permittee Response: Concur. Well designations such as downgradient, upgradient, or sentinel will be removed from future periodic monitoring reports.

5. Section 2.2.8, Phase 1 RCRA Facility Investigation Report for Building 600 and 542 – 2002, lines 1-4, page 14 of 71

Permittee Statement: “Monitoring wells TMW14A, TMW16, TMW17, TMW18, and TMW19 were completed in the deeper, sandstone bedrock aquifer. TMW14A was also installed as a potential background well. Fluoride was detected at concentrations exceeding cleanup criteria/project screening levels.”

NMED Comment: Anions including fluoride are not included in current analytical suite according to Table 5-2, Northern Area Groundwater Sampling Matrix, although nitrate and nitrite concentrations have been monitored and reported in the periodic groundwater monitoring reports. Include nitrate and nitrite analyses in the revised table. In addition, explain why fluoride concentrations are no longer monitored or reported in the periodic groundwater monitoring reports in the revised Plan. Propose to conduct major anion analyses for groundwater samples collected from these wells in the revised Plan.

Permittee Response:

- a) Comment Acknowledged. Nitrate and nitrite are already included in Table 5-2, no revision required.
- b) Major anion testing is now proposed in this plan as described in Section 5.2.1, Page

61, Lines 11-13 (RLSO: Page 62, Lines 15-17) and Section 5.2.2, Page 63, Lines 1-2 (RLSO: Page 64, Lines 13-14):

“Starting in 2021 all wells sampled for nitrate and nitrite will also be sampled for additional major anions to include chloride, fluoride, sulfate, phosphate, and bromide.”

And in Section 7.0, Page 70, Lines 8-20 (RLSO: Page 72, Lines 8-20):

“In addition, major anion analysis will be included per the request of NMED for all wells that were previously sampled for nitrate/nitrite. The current analytical program includes the sampling and analysis of nitrate/nitrite. The current list of wells that are sampled and analyzed for nitrate and nitrite will also include major anions per NMED comment #5 and #11 in Disapproval Final 2019 Interim Northern Area Groundwater Monitoring Plan Version 11, dated July 29, 2020. Major anion analytical method limits and screening levels are presented in Table 3 and include the following:

- Nitrate/ Nitrite
- Chloride
- Fluoride
- Bromide
- Sulfate
- Phosphate.”

And updated in Tables 4-3 and 5-2.

6. Section 2.2.11, Parcel 11 RFI Report – 2011, Building 6, Gas Station (SWMU 45) and Structure 35, Former UST 7 (SWMU 50), lines 2-3, page 17 of 71

Permittee Statement: “GRO was detected in six of 21 samples from the area around Building 6; however, there are no cleanup criteria/project screening levels for GRO.”

NMED Comment: Note that screening levels for gasoline are available in NMED’s Risk Assessment Guidance for Site Investigations and Remediation (RAG), dated February 2019. Soil screening levels for gasoline are applicable to those for GRO. Apply the gasoline soil screening levels for comparison to GRO concentrations in future investigations. No revisions required.

Permittee Response: Comment Acknowledged. Gasoline screening levels from NMED RAG, dated February 2019, will be used as screening levels for comparison to GRO concentrations in future investigations. No revisions required.

7. Section 2.2.12, Parcel 22 RFI Report – 2011, Building 528 Complex (SWMU 27, AOC 121, AOC 122, 1 AOC 125, and AOC 126), lines 18-20, page 18 of 71

Permittee Statement: “[D]ue to the widespread use of bis(2-ethylhexyl) phthalate as a plasticizer, bis(2-ethylhexyl) phthalate is regarded as a common laboratory and sampling contaminant.”

NMED Comment: Detection of bis(2-ethylhexyl) phthalate in groundwater samples is a recurring issue. For example, bis(2-ethylhexyl) phthalate was detected in the groundwater sample collected from well BGMW08 during the April 2019 sampling event. Resolve the

issue (e.g., eliminate the use of materials containing bis(2-ethylhexyl) phthalate in future sampling events, demonstrate that bis(2-ethylhexyl) phthalate was detected in laboratory blanks). No revisions required.

Permittee Response: Comment Acknowledged. Please note that the tubing in several of the wells were replaced last year. The Army has discussed this issue with our new contractor's lab and has requested to assess their quality control methods and use of bis (2-ethylhexyl) phthalate. A statement was added to Section 4.6.2, Page 55, Lines 20-22 (RLSO: Page 56, Lines 23-25):

"Due to recurring detections of bis(2-ethylhexyl) phthalate, a plasticizer and a common laboratory and sampling contaminant, all use of materials containing bis(2-ethylhexyl) phthalate are to be avoided in the field and laboratory."

8. Section 2.2.16, Final RCRA Facility Investigation Parcel 6 – 2012, Feature 2 (AOC 79), lines 21-22, page 23 of 71

Permittee Statement: "NMED concurred in a Notice of Disapproval for the RFI Work Plan for Parcel 6 that AOC 79 required no further characterization."

NMED Comment: NMED concurred that AOC 79 required no further characterization; however, issued a Notice of Disapproval. The statement appears to be contradictory. Provide a reference to the Notice of Disapproval, including the page number and comment number, in the revised Plan.

Permittee Response: Concur. The sentence was removed and re-phrased per NMED letter, dated February 25, 2015, as described on Page 23, Lines 29-31 (RLSO: Page 23, Lines 32-24):

"NMED provided approval to the Class 3 Permit Modification for AOC 79, as stated in a letter dated February 25, 2015. In the letter, NMED granted corrective action without control status to SWMU 26 and AOC 79."

9. Section 2.2.16, Final RCRA Facility Investigation Parcel 6 – 2012, Feature 9 (AOC 80), Feature 11 (AOC 81), Feature 12 (AOC 84), Feature 18 (AOC 78 and AOC 82), and Feature 22 (AOC 83), lines 25-26, page 23 of 71

Permittee Statement: "The Army proposed no further action and removal from the RCRA permit."

NMED Comment: The Permittee explains what was proposed in the investigation report; however, does not provide NMED's response to the proposal. Consequently, readers will not know current status of the sites from the statement. Revise the Plan to include a brief description regarding the NMED's response to identify the current status of the sites to readers.

Permittee Response: Concur. NMED's response has been added to the description on Page 23, Lines 33-37 through Page 24, Lines 1-4 (RLSO: Page 23, Lines 36-37 through Page 24, Lines 1-7):

"The Army proposed no further action and removal from the RCRA permit (USACE, 2012b). In the Disapproval to the Final RCRA Facility Investigation Report Parcel 6, dated October 28, 2016, NMED stated that the groundwater contamination at each

SWMU and AOC is not addressed in 12 of the 14 sections related to specific sites, and the subject of potential groundwater contamination must be discussed for each site. NMED further stated that if the Army can demonstrate the SWMU or AOC did not contribute to groundwater contamination, the Army may request a Corrective Action Complete with Control status, with the controls being long-term monitoring of contaminated groundwater and restrictions on use of the groundwater.”

10. Section 2.2.26, Final Groundwater Supplemental RCRA Facility Investigation Work Plan, Revision 4 – 2016, lines 35-36, page 27 of 71

Permittee Statement: “A revised document is currently being prepared.”

NMED Comment: The statement is not accurate. NMED issued an approval for the above referenced document in September 19, 2018. The Permittee requested permission to deviate from the field procedures described in the approved document on April 22, 2020. Subsequently, NMED issued an approval for the deviation in May 6, 2020. The work plan does not require a revision at this time. All statements in the Plan must be accurate and current; otherwise, clarification must be provided for the statements in a revise the Plan.

Permittee Response:

- a) Concur. HDR has completed the work plan and has completed the field efforts. The statement, “A revised document is currently being prepared,” was removed and replaced with the statement below.
- b) The work plan description was revised in Section 2.2.26, Page 28, Lines 13-15 (RLSO: Page 28, Lines 18-20):

“The Army requested permission to deviate from the field procedures described in the approved document on April 22, 2020. Subsequently, NMED issued an approval for the deviation on May 6, 2020.”

11. Section 2.3, Semiannual RCRA Groundwater Monitoring Reports and Updated Groundwater Monitoring Plans – Ongoing, lines 4-6, page 29 of 71

Permittee Statement: “Detected concentrations of other anions (fluoride, sulfate, chloride, and phosphate) are associated with hard water and brackish groundwater conditions observed at FWDA.”

NMED Comment: The result of anion analyses except nitrate and nitrite have not been reported in the periodic groundwater monitoring reports. According to Table 2-3, Northern Area Groundwater Sampling Analyte Groups with Screening Level Exceedances, anions are included under constituents of potential concern analyzed for most wells. The results of anion analyses must be included in future periodic groundwater monitoring reports.

Permittee Response: Comment Acknowledged. Anions are not currently part of the analytical program. Major anion testing is now proposed in this plan as described in Section 5.2.1, Page 61, Lines 11-13 (RLSO: Page 62, Lines 15-17) and Section 5.2.2, Page 63, Lines 1-2 (RLSO: Page 64, Lines 13-14):

“Starting in 2021, all wells sampled for nitrate and nitrite will also be sampled for additional major anions to include chloride, fluoride, sulfate, phosphate, and bromide.”

And in Section 7.0, Page 70, Lines 8-20 (RLSO: Page 72, Lines 8-20):

“In addition, major anion analysis will be included per the request of NMED for all wells that were previously sampled for nitrate/nitrite. The current analytical program includes the sampling and analysis of nitrate/nitrite. The current list of wells that are sampled and analyzed for nitrate and nitrite will also include major anions per NMED comment #5 and #11 in Disapproval Final 2019 Interim Northern Area Groundwater Monitoring Plan Version 11, dated July 29, 2020. Major anion analytical method limits and screening levels are presented in Table 3 and include the following:

- Nitrate/ Nitrite
- Chloride
- Fluoride
- Bromide
- Sulfate
- Phosphate.”

And updated in Tables 4-3 and 5-2.

12. Section 2.3, Semiannual RCRA Groundwater Monitoring Reports and Updated Groundwater Monitoring Plans – Ongoing, lines 30-34, page 29 of 71

Permittee Statement: “To better assess the presence of 1,4-dioxane onsite, all wells will be sampled for 1,4-dioxane during the first sampling event; then for the second event, only wells that have a history of detection for chlorinated solvents in the last ten years will be sampled. The first of the two consecutive sampling events will start in April 2020, and the second will be in October 2020.”

NMED Comment: The deviation to the direction provided in NMED’s August 15, 2019 letter regarding the requirement of 1,4-dioxane analysis is hereby approved. No revision to the Plan is necessary.

Permittee Response:

- a) Comment Acknowledged. The sampling program will continue with analysis of 1,4-dioxane per NMED’s approval to the deviation from the letter, dated August 15, 2019, comment number 3.
- b) 1,4-dioxane sampling began in year 2020 for two consecutive events. No revision required.

13. Section 3.3.2, Stratigraphy, lines 18-20, page 33 of 71

Permittee Statement: “Near Fort Wingate High School (east of FWDA), alluvial deposits are approximately 75 feet thick, and in the Administration Area deposit thickness varies from 30 feet to 70 feet.”

NMED Comment: The location of the referenced building (Fort Wingate High School) was not identified. Provide a figure that presents the location in the revised Plan. Similarly, Section 3.4.2, Site-Specific Surface Water, page 34 of 71, describes the locations of the drainage systems; however, these locations are not presented in any figures. Provide a figure that presents the locations of the drainage systems in the revised Plan.

Permittee Response:

- a) Comment Acknowledged. The referenced building east of the site was removed from

the sentence as the location was beyond the existing map boundary. The sentence in Section 3.3.2, Page 33, Lines 18-20 (RLSO: Page 33, Lines 19-20) was revised as follows:

“Just east of FWDA, alluvial deposits are approximately 75 feet thick, and in the Administration Area deposit thickness varies from 30 feet to 70 feet.”

- b) Concur. The locations of the drainage systems (arroyos) are now illustrated in Figures 2-2, 2-3, 2-4, 3-1, 3-2, 3-4, 3-5, 3-6, 3-7, 3-8, 3-9, 3-10, 3-11, 3-12, 3-13, and 3-14.

14. Section 3.5, Hydrogeology, line 37, page 34 of 71, and lines 1-2, page 35 of 71

Permittee Statement: “The San Andres-Glorieta aquifer was utilized as the drinking water source for FWDA prior to the closure of the installation in 1993.”

NMED Comment: Note that Well 69, which is screened to the San Andres-Glorieta aquifer, currently produces groundwater for non-potable use at the facility. Include the statement that clarifies the current use of the aquifer in the revised Plan.

Permittee Response: Concur. Description was rephrased in Section 3.4.3, Page 35, Lines 4-5 (RLSO: Page 35, Lines 4-5) as follows:

“Currently Well 69 (screened in the San Andres-Glorieta aquifer) produces groundwater continuously; and it may be used for non-potable purposes occasionally.”

15. Section 3.5, Hydrogeology, line 32, page 35 of 71

Permittee Statement: “October 2018 quarterly water level measurements event are shown on Figure 3-1 and Figure 3-2.”

NMED Comment: Figure 3-1, Groundwater Elevations Alluvial Wells presents a sufficient number of alluvial wells to depict groundwater contours and estimate groundwater flow direction. However, the estimated bedrock groundwater flow direction presented in Figure 3-2 is not accurate. The bedrock groundwater flow direction cannot be determined from the existing well network. Revise Figure 3-2 to remove the depicted groundwater flow direction.

In addition, separating the groundwater elevations inside and outside of an inset makes the data presentation difficult to follow and is potentially misleading. The inset in Figure 3-2 presents the area bounded by wells BGMW10, TMW37, TMW38, and TME39D. However, more than half of the figure (west of well TMW19) does not depict any bedrock wells. The relevant area east of well TMW19 should be enlarged and the area west of well TMW19 should be removed to present relevant information without an inset. Revise the figure accordingly.

Permittee Response:

- a) Concur. The bedrock groundwater flow direction depicted in Figure 3-2 was removed to be consistent with previous submittals.
- b) Concur. The inset of Figure 3-2 was removed, however the area east of TMW19 was not enlarged as the information was still readable and to keep all figures on the same scale.

16. Section 3.5, Hydrogeology, lines, page 35 of 71

Permittee Statement: “Groundwater adjacent to recharge sources such as exposed bedrock uplands, or surface water drainage systems have water with lower salinity and a higher dissolved oxygen (DO) content. DO and calculated redox potential values indicate a mixture of reducing and aerobic conditions.”

NMED Comment: Previously, redox potential readings were based on field measurements rather than calculated values. Provide a clarification in the response letter. Revise the statement, as appropriate. In addition, the correlation between DO values and distances from the recharge sources may be appropriate as a general statement; however, the data do not always demonstrate a correlation at the site. For example, well TMW14A is located farthest south among bedrock wells according to Figure 2-3, FWDA Well Locations, and presumably close to the recharge source; however, the DO reading at TMW14A was less than one mg/L during the April 2019 sampling event. Revise the statement to clarify that the correlation is not always representative of site-specific conditions or remove the statement from the revised Plan.

Permittee Response:

- a) Concur. Redox potential readings are based on field readings and the word “calculated” will be removed to avoid confusion.
- b) Concur. The word “calculated” was removed in Section 3.4.3, Page 36, Line 4 (RLSO: Page 36, Line 4)
- c) Concur. The statement was revised in Section 3.4.3 Page 36 Lines 1-4 (RLSO: Page 36, Lines 1-4) to say:

“Typically, groundwater adjacent to recharge sources, such as exposed bedrock uplands or surface water drainage systems, have water with lower salinity and a higher dissolved oxygen (DO) content, indicating variable groundwater conditions.”

17. Section 3.5.1, Northern Area Alluvial Groundwater System, lines 23-25, page 36 of 71

Permittee Statement: “Although this water supply well is no longer in use, the welded casing joints are possibly deteriorating causing a leak under artesian pressure into the alluvium.”

NMED Comment: NMED was previously notified that Well 69 was still in non-potable use. Clarify the current status of Well 69 in the response letter. If Well 69 is still in use, revise the Plan to correct the statement.

Permittee Response: Concur. The description of Well 69 was modified in Section 3.4.3, Page 35, Lines 4-5 (RLSO: Page 35, Lines 4-5):

“Currently Well 69 (screened in the San Andres-Glorieta aquifer) produces groundwater occasionally for non-potable use at the facility.”

The Plan was also revised in Section 3.4.4, Page 36, Line 27 (RLSO: Page 36, Line 29) to state:

“The welded casing joints are possibly deteriorating causing a leak under artesian pressure into the alluvium.”

18. Section 3.5.2, Northern Area Bedrock Groundwater System, line 38, page 36 of 71, and lines 1-2, page 37 of 71, and Section 3.7, Fate and Transport of Contamination in Groundwater, lines 15-16, page 40 of 71

Permittee Statements: "Steep horizontal gradients from east to west (between wells TMW38 and TMW40D, and between wells TMW17 and TMW37) indicate a geologic structural feature (i.e., fault or fracture zone) impedes groundwater flow."

and,

"[S]tructural barriers, such as faulting and folding of bedrock units may greatly impede the flow of shallow groundwater from one valley to another."

NMED Comment: Comment 5 in NMED's Disapproval Final Groundwater Periodic Monitoring Report January through June 2016, dated August 7, 2017, states, "[s]ince the theory of a geologic structural feature is unconfirmed, the Permittee must revise the statement to include the fact that the groundwater flow direction has not been fully characterized in the bedrock aquifer beneath the Workshop Area." Although the Permittee addressed this comment in the Final Revision 1, Groundwater Periodic Monitoring Report January through June 2016, dated November 2017, the same statement reappeared in this submittal. Both the Permittee and NMED have collectively made significant efforts to improve the quality of submittals, particularly periodic groundwater monitoring reports and groundwater monitoring plans for the past few years; however, previous efforts, revisions, and provisions necessary for the improvement appear to have been neglected in recent submittals. The Permittee must follow the format of the previous reports and plans, including where previous comments were addressed. Failure to follow NMED direction constitutes noncompliance and may result in an enforcement action.

Permittee Response: Concur. The statement was revised in Section 3.4.5, Page 37, Lines 2-6 (RLSO: Page 37, Lines 2-7) to indicate that

"...groundwater flow direction has not been fully characterized in the bedrock aquifer beneath the Work Shop Area, groundwater flow in the shallow bedrock is generally to the north and west in the Workshop Area (Figure 3-2). Anomalously steep horizontal gradients from east to west (between wells TMW38 and TMW40D, and between wells TMW17 and TMW37) may indicate a geologic structural feature (i.e., fault or fracture zone) that impedes groundwater flow."

And removed the following statement in Section 3.6 Fate and Transport (RLSO: Page 40, Lines 36-38):

"In addition, structural barriers, such as faulting and folding of bedrock units may greatly impede the flow of shallow groundwater from one valley to another."

19. Section 3.5.2, Northern Area Bedrock Groundwater System, lines 5-7, page 37 of 71

Permittee Statement: "Two water bearing sandstone units within the Painted Desert Member of the Petrified Forest Formation are known to exist below the Workshop Area. The upper sandstone unit is evaluated by monitoring well TMW02."

NMED Comment: The groundwater elevation in well BGMW08 was more than 100 feet lower than those of other bedrock wells. Well BGMW08 may not have been screened across the same water bearing zones in comparison to the other wells. A third water bearing sandstone unit may be present at the site. Discuss the possibility of the presence of a third sandstone unit in the revised Plan.

Permittee Response: Concur: Language was included in Section 3.4.5, Page 37, Lines 12-14 (RLSO: Page 37, Lines 14-15) as follows:

“A third water bearing sandstone unit is assumed, since groundwater from well BGMW08 was measured at 100 feet lower than those of other bedrock wells”

to discuss the possibility of the presence of a third sandstone unit.

20. Section 3.5.2, Northern Area Bedrock Groundwater System, lines 12-14, page 37 of 71

Permittee Statement: “Survey errors may also affect the interpretation of bedrock aquifer groundwater flow directions since bedrock monitoring wells were installed and surveyed during several different field events, which may introduce well survey data set errors.”

NMED Comment: Comment 7 in NMED’s Approval with Modifications Final Groundwater Periodic Monitoring Report July through December 2015, dated August 16, 2018, states, “NMED provided the comment to re-survey all alluvial and bedrock monitoring wells. On the correspondence dated in November 9, 2016 (page 1), the Permittee states, “[t]he Army has plans on resurveying all wells during the Northern Area RCRA Facility Investigation field efforts, anticipated to begin in June 2017.” Explain whether the survey has already been conducted. If the survey has been conducted, incorporate the data in all future reports. If the survey has not been conducted, ensure that all alluvial and bedrock monitoring wells are re-surveyed. Provide an explanation in the next groundwater periodic monitoring report. If a re-survey was conducted, provide a table listing the original and re-surveyed elevations in future periodic monitoring reports.” Clarify whether the survey errors are still unresolved in the revised Plan.

Permittee Response:

- a) Concur: The new well survey of all the monitoring wells was performed in October 2019. The data was incorporated into the revised plan.
- b) Concur. The paragraph that indicates multiple surveys was removed, and a sentence describing the new survey was included in Section 3.4.5, Page 37, Lines 18-20 (RLSO: Page 37, Lines 23-25) to state that:

“A comprehensive survey was performed in October 2019 for all the Northern Area groundwater network monitoring wells, by DePauli Engineering and Surveying LLC, using the New Mexico State Plane West, Zone Grid NAD 83.”

- c) Concur. A new Table 2-1, listing the original and re-surveyed elevations, will be included in future periodic monitoring reports.
- d) Concur. A sentence was added in Section 3.4.5, Page 37, Lines 20-22 (RLSO: Page 37, Lines 25-27) to discuss the survey results and states:

“The new survey results did not solve the issue of interpreting bedrock aquifer flow directions. In general, most wells measured 0.7 ft to 1.1 ft higher with the new survey without changing any flow patterns.”

21. Section 3.6, Nature and Extent of Groundwater Contamination, lines 20-23 and 29-32, page 37 of 71

Permittee Statements: “Six groundwater contaminant plumes have been identified: two

nitrate plumes, one in the alluvial aquifer and one in the bedrock aquifer; two perchlorate plumes, one in the alluvial aquifer and one in the bedrock aquifer; an explosives plume in the alluvial groundwater unit; and a 1,2-dichloroethane (1,2-DCA) plume in the alluvial aquifer.”

and,

“SVOCs, DRO, and GRO are sporadically detected with occasional or historical exceedances of project screening values for SVOCs and DRO (screening levels for GRO were established in June 2019), but the number of exceedances is too limited for these contaminants to be mapped as contaminant plumes.”

NMED Comment: Comments 13 and 15 in NMED’s Disapproval Final Groundwater Periodic Monitoring Report July through December 2018, dated January 30, 2020, require evaluation of the extent of TPH-GRO and TPH-DRO contamination. A total of eight groundwater contaminant plumes must be evaluated. The Permittee addressed the comments in the Final Groundwater Periodic Monitoring Report, July through December 2018, Response to January 30, 2020 Disapproval Letter, dated April 6, 2020. Accordingly, Figure 3-10, Groundwater Monitoring Alluvial Wells – DRO, and Figure 3-11, Groundwater Monitoring Alluvial Wells – GRO were included to address the comments in the Plan. Although the latter statement states that the number of exceedances is too limited to be mapped, these figures are appropriately included in the Plan. It appears that the statement was copied from previous documents. Ensure that the text of the Plan is consistent with its content.

In addition, the screening levels for GRO were established in February 2019 rather than June 2019 (see Comment 6). Correct the typographical error in the revised Plan.

Permittee Response:

- a) Concur. The text was updated to include DRO and GRO as the 7th and 8th plume as described in Section 3.5, Page 37, Lines 27-31 (RLSO: Page 37, Lines 32-36):

“Eight groundwater contaminant plumes have been identified: two nitrate plumes, one in the alluvial aquifer and one in the bedrock aquifer; two perchlorate plumes, one in the alluvial aquifer and one in the bedrock aquifer; an explosives plume in the alluvial groundwater unit; a DRO plume in the alluvial; a GRO plume in the alluvial; and a 1,2 dichloroethane (1,2-DCA) plume in the alluvial aquifer.”

- b) Concur. The typographical error was corrected from June 2019 to February 2019.

22. Section 3.6, Nature and Extent of Groundwater Contamination, line 39, page 37 of 71, and line 1, page 38 of 71

Permittee Statement: “Figure 3-15 shows the northern area alluvial and bedrock groundwater sentinel and background monitoring wells.”

NMED Comment: Identification of sentinel (detection monitoring) wells (MW23 and MW24) is not appropriate at this time because some contaminants were already detected from these wells. Additionally, wells TMW18, TMW19, and BGMW08 are identified as background wells in Figure 3-15. NMED did not approve these wells to be designated as background wells. Remove the statement and Figure 3-15 from the revised Plan.

Permittee Response: Comment Acknowledged. The identification of wells as sentinel and background designation was removed from the text (Section 3.5) and Figures, along with the removal of Figure 3-15.

23. Section 3.6, Nature and Extent of Groundwater Contamination, lines 6-7, page 38 of 71

Permittee Statement: “The bedrock collocated perchlorate and nitrate plumes either percolate from the alluvial impacts or have a common source at the Building 528 Complex (SWMU 27).”

NMED Comment: The perchlorate plume likely originates from the Building 528 Complex and migrated from bedrock to the alluvial aquifer. The origin of nitrate plume is likely not limited to the Building 528 Complex. The nitrate plume likely migrated from the alluvial to bedrock aquifer. Revise the statement for accuracy.

Permittee Response: Concur. This statement was revised in Section 3.5, Page 38, Lines 12-13 (RLSO: Page 38, Lines 18-19) as follows:

“The bedrock nitrate plume is also present near the TNT Leaching Beds (SWMU 1) (Figure 3-12) and likely migrated from the alluvial aquifer.”

And was also revised in Section 3.5, Page 38, Lines 26-28 (RLSO: Page 38, Lines 34-37) as follows:

“Historical releases of perchlorate-containing materials at the Building 528 Complex (SWMU 27) are believed to have migrated from the bedrock unit to the alluvial aquifer.”

24. Section 3.8, Exposure Pathways for Human and Ecological Receptors, line 34, page 40 of 71

Permittee Statement: “There are no current exposure pathways for human and ecological receptors in the northern area.”

NMED Comment: Section 3.8 does not discuss risk associated with potential for migration of contaminants from soil to groundwater. Such risk currently exists and drives investigations at the facility. Include a discussion in the revised Plan.

Permittee Response: The discussion on exposure pathways was revised in Section 3.7. The statement in Section 3.7, Page 41, Lines 9-17 (RLSO: Page 41, Lines 21-29) was revised as follows:

“There are potential dermal and ingestion exposure pathways for future human receptors in the northern area. Although local groundwater resources may be used for human consumption if the property is transferred and used for residential purposes, it is unlikely to present a realistic exposure scenario. Groundwater discharged from possible future drinking water wells would be a potential hypothetical pathway for human exposure. Soil contaminants may migrate to groundwater in the upper water column, both in the alluvial and upper bedrock units. It is improbable that soil contaminants will migrate to the underlying San Andres-Glorieta aquifer. The alluvial and upper bedrock aquifers are not potable without significant treatment and low yield will limit any future use.”

25. Section 4.2.2.1 Traditional Low Flow and ZIST Low Flow Dedicated Pumps, lines 22-25, page 44 of 71

Permittee Statement: “Low hydraulic conductivity conditions exist in many monitoring locations which result in poor well yield. Bedrock wells TMW14A and TMW17 contain a zone isolation sampling technology (ZIST) model packer system manufactured by BESST, Inc., to

maintain the general low-flow methodology.”

NMED Comment: There are many monitoring wells other than wells TMW14A and TMW17 that result in a low yield (e.g., TMW40S). Purging and sampling for well TMW40S is conducted using a hand bailer according to Table 4-1, Northern Area Groundwater Purge Method, page 2 of 3. The ZIST low flow methodology was only used for wells TMW14A and TMW17. Provide a justification for using the ZIST system only for wells TMW14A and TMW17 in the revised Plan.

Permittee Response:

- a) Concur. The ZIST packers for wells TMW14A and TMW17 were installed at the time of the well construction in 2001. The justification was to isolate the bedrock unit and limit the amount of water needed for purging in low yield wells. The ZIST system helps in low flow wells that have a large water column by keeping the rest of the water column away from the screen, thus allowing stabilization before the well goes dry. TMW14A and TMW17 have 40’ and 80’ of water column, respectively. TMW40S usually only has a foot or less of water, thus bailed dry with a bailer. A ZIST system would not be suitable for wells with a limited water column and go dry regardless of pumping method.
- b) The justification for using ZIST packer system for TMW14A and TMW17 was included in Section 4.2.2.1, Page 44, Lines 25-27 (RLSO: Page 45, Lines 25-27) stating:

“Because these two wells have large standing water columns (40 feet and 80 feet respectively) and are low yield, the constant drawdown without the ZIST packer system would prevent stabilization required for traditional low flow.”

26. Section 4.2.2.1, Traditional Low Flow and ZIST Low Flow Dedicated Pumps, Traditional Low Flow, lines 34-38, page 45 of 71 and lines 1-5, page 46 of 71, and ZIST Low Flow, lines 8-17, page 47 of 71

Permittee Statement: “Stabilization has occurred when three consecutive readings are within the following limits.

- Temperature $\pm 10\%$ in degrees centigrade
- pH ± 0.5 standard units
- Specific conductivity $\pm 10\%$ in millisiemens per centimeter
- DO $\pm 10\%$ or less than 1.0 mg/L
- Turbidity $\pm 10\%$ or less than 1 nephelometric turbidity unit
- ORP ± 10 millivolt
- Water level = 0.00 to 0.33 foot (or 4 inches) or less drawdown during the stabilized water- quality readings.”

NMED Comment: There were circumstances when some water-quality parameters were not stabilized during well purging; however, sampling was conducted. For example, the last three turbidity readings prior to sampling from well BGMW07 were recorded as 0.0, 630, and 749 NTU during the April 2019 sampling event. Similarly, the last three dissolved oxygen (DO) readings prior to sampling from well BGMW08 are recorded as 11.89, 6.96, and 12.20 mg/L during the same sampling event. The DO readings indicate a problem with the instrument. Clarify whether purging is considered complete when some or all of these criteria are met in the revised Plan.

Permittee Response:

- a) Comment Acknowledged. Stabilization is typically used for traditional low flow wells only. The plan has been revised in Section 4.2.2.1, Page 46, Lines 1-2 (RLSO: Page 47, Lines 1-2) as follows:

“Stabilization for traditional low flow has occurred when three consecutive readings are within the following limits.”

- b) The last three water quality parameters collected from well BGMW07 are not considered stable because the parameters are not within 10%, but this well is also not considered a traditional low flow well. These readings were collected prior to the well going dry. The previous two readings were 0.0 NTU and 0.0 NTU; however, once the water level reached the bottom of the well casing, the water contained plenty of settled suspended solids, which caused the discrepancy in nephelometric turbidity units. The field team returned the following day to collect the formation water that had entered the well during recharge. This water sample is representative of the formation water.
- c) The water quality instruments are calibrated daily prior to field deployment, and calibration records are documented in Appendix A of the PMR.
- d) The elevated DO readings in well BGMW08 are a result of purging the well dry with a disposable hand bail. Readings are taken by pouring the water into a receiving cup and lowering the sensor into the cup, versus traditional low flow that is not exposed to the open air. This process can result in numerous air bubbles or other opportunities for user error. Field staff will be instructed to re-check the readings and calibrate or switch instruments if necessary, for future sampling events. This well was purged dry. The team returned the following day to collect formation water that had entered the well during recharge. This water sample is representative of the formation water.

27. Section 4.2.4, Alternative Groundwater Purging and Sampling Procedures, pages 48 through 51

NMED Comment: Section 4.2.4 discusses groundwater purging and sampling procedures using disposable bailers, reusable submersible pumps, and dedicated Bennett pumps. Table 4-2, Field Equipment and Materials also includes “Wattera Pump”. If a Wattera pump is used for purging and sampling, state whether it is a submersible or other type of pump in the revised Plan.

Permittee Response:

- a) Concur. The reference to Wattera pumps was removed from the table.
- b) Although Wattera pumps were proposed in the GWMP V.10, Rev.1, their use has not been implemented and is not being proposed at this time.

28. Section 4.2.4.1, Disposable Bailers, lines 4-5, page 49 of 71, Section 4.2.4.2, Reusable Submersible Pump, lines 4-5, page 50 of 71, and Section 4.2.4.3, Dedicated Bennett Pump, lines 2-3, page 51 of 71

Permittee Statements: “Collect no fewer than 3 groundwater parameter measurements.”

and,

“During well purging, record water levels and monitor and record a minimum of three field-parameter readings.”

and,

“Collect a minimum of three field parameters at a rate of between one per 3 minutes to one per 15 minutes depending on the purge volume.”

NMED Comment: All water quality parameters have been reported in previous periodic groundwater monitoring reports. Continue to record all water quality parameter readings and report them in the reports. Revise the statements in the revised Plan.

Permittee Response:

- a) Comment Acknowledged. The statement is regarding the minimum number of readings to be taken, not a direction to take or record only 3 readings. All recorded readings are reported in the PMR, not just 3 readings, but a minimum of 3 readings.
- b) Comment Acknowledged. All water quality parameters will continue to be recorded and documented in subsequent reports. The statements were revised in all three areas Section 4.2.4.1, Page 48, Line 15 (RLSO: Page 50, Line 14), Section 4.2.4.2, Page 49, Line 12 (RLSO: Page 50, Line 14), Section 4.2.4.3, Page 51, Line 12 (RLSO: Page 52, Line 14) to include “*record all readings*”

29. Section 4.3.3, Sample Shipping, lines 35-36, page 52 of 71

Permittee Statement: “Samples will be transported to the EMAX Laboratories, Inc. (EMAX) located at 1835 W. 205th Street, in Torrance, California for analytical testing.”

NMED Comment: NMED previously provided multiple comments regarding analytes with detection limits greater than applicable screening levels. The Permittee must provide laboratory analysis with practical quantitation limits (PQL) that are less than the applicable screening level for all COCs.

The Permittee has previously been directed to provide analyses with method detection limits, reporting detection limits, and practical quantitation limits that are less than the applicable screening level for each contaminant of concern. All data provided by analyses where the method detection limit, reporting detection limit, or practical quantitation limit exceed the screening level are considered data quality exceptions and cannot be used to demonstrate compliance. In addition, all data quality exceptions must be called out in the text, tables, or figures where the data are presented.

Ensure that the current laboratory is capable of achieving the appropriate detection and quantitation limits. No revision necessary.

Permittee Response: Comment Acknowledged. Constituents where the method of detection limit, reporting detection limit, or practical quantitation limit exceed the screening level were considered data quality exceptions and are identified as such in the text (Section 5.1, Page 57, Line 27 [RLSO: Page 58, Line 29]), Tables, and Figures where they are presented.

30. Section 5.0, Monitoring and Sampling Program, lines 2-3, page 57 of 71

Permittee Statement: “Interim groundwater monitoring at FWDA tracks contaminant plume

concentrations and migration at previously identified groundwater impact areas.”

NMED Comment: The plume figures included in this Plan and the Final Groundwater Periodic Monitoring Report January through June 2019, dated March 2020 are not appropriate because the figures include inappropriate well designations and do not depict wells that are not sampled. The analytical tables included in the report did not provide data for the three previous monitoring events as required by Section V.A.2 of the FWDA RCRA Permit.

Although inaccuracies were found, previous reports provided appropriate presentation in the figures and tables. The current presentation of data does not facilitate the tracking of contaminant plume concentrations and migration. Refer to the previous periodic monitoring reports for appropriate data presentation.

Permittee Response:

- a) Concur. Figures now include proper well designation, and all wells are included whether sampled or not.
- b) Concur. Tables were revised in periodic monitoring reports to include the previous three events of data as required by Section V.A.2 of the FWDA RCRA Permit. The plan was revised to state in Section 5.0, Page 57, Lines 6-7 (RLSO: Page 58, Lines 6-7) as follows:

“All analytical tables will include data from the three previous monitoring events as required by Section V.A.2 of the FWDA RCRA permit.”

31. Section 5.2, Monitoring Location and Frequency, lines 4-7, page 58 of 71

Permittee Statement: “Sentinel well locations are situated to monitor potential off-site contamination migration. Sample analyses for upgradient and downgradient wells were selected based on the association with COPC points of release in accordance with the DQO decision logic.”

NMED Comment: There are multiple source locations and the plumes are comingled at the facility. A well upgradient of one source may be downgradient from another. The designation as sentinel, upgradient, and downgradient wells makes reports and plans more confusing and potentially misleading. It is not appropriate to assign such designations for wells. Remove such designations from all applicable sections of the revised Plan.

Permittee Response: Comment Acknowledged. Well designations of “sentinel” were removed and some designations for “upgradient” and “downgradient” were necessary in some sections to convey plume direction.

32. Section 5.2, Monitoring Location and Frequency, lines 8-9, page 58 of 71

Permittee Statement: “Table 5-2 contains the current sampling matrix in accordance with this GWMP.”

NMED Comment: Table 5-2, Northern Area Groundwater Sampling Matrix, and the text of the Plan lack an explanation for the changes made to the Plan (e.g., inclusion or exclusion of new or existing wells and analytical suite). The revised Plan must include a section that summarizes all changes made to the previous sampling matrix. If the change was directed

by NMED, provide a reference to the direction. If the change is proposed by the Permittee, provide a basis for the proposed change. Revise the Plan accordingly.

Permittee Response: Concur. The following text was added to Section 7.0, Page 69, Line 2 to Page 70, Line 20 (RLSO: Page 71, Line 2 to Page 72, Line 20):

“The 32 wells installed in 2019 were already included into the monitoring program starting in year 2020; however, these 32 wells were only analyzed for 1,4-Dioxane for 2 consecutive events. The 3 wells installed in 2020 (MW-37, MW-38, and MW-39) have not yet been included into the monitoring program. The construction details for these additional 35 monitoring wells are provided in Table 2-1 and their locations are shown on Figure 2-3. The additional wells are: BGMW11, BGMW12, MW13S, MW13D, MW25, MW26, MW27, MW28, MW29, MW30, MW31, MW32, MW33, MW34, MW35, MW36S, MW36D, MW37, MW38, MW39, TMW50, TMW51, TMW52, TMW53, TMW54, TMW55, TMW56, TMW57, TMW58, TMW59, TMW60, TMW61, TMW62, TMW63, and TMW64. The full suite of analytical proposed for these wells is presented in Table 5-2 and are listed below:

- *Volatile organic compounds (VOCs) by EPA Method 8260*
- *Total explosives by EPA Method 8330/8332*
- *Major anions by EPA Method 9056*
 - *Nitrate/ Nitrite*
 - *Chloride*
 - *Fluoride*
 - *Bromide*
 - *Sulfate*
 - *Phosphate*
- *Total metals by EPA Method 6020*
- *Dissolved metals by EPA Method 6020*
- *Perchlorate by EPA Method 6850*
- *Semi-volatile organic compounds (SVOCs) by EPA 8270*
- *1,4-Dioxane by EPA Method 8270 selected ion monitoring (SIM) (for 2 consecutive events, and only for the 3 wells installed in 2020)*
- *Pesticides by EPA Method 8081*
- *TPH-GRO by EPA Method 8015*
- *TPH-DRO by EPA Method 8015*
- *Polychlorinated biphenols (PCBs) by EPA Method 8082*
- *Herbicides by EPA Method 8151*

Furthermore, to better define the TPH impacts, select wells near the existing TPH plume will be analyzed for TPH gas and diesel range organics per NMED comment #42 and #43 in Disapproval Final 2019 Interim Northern Area Groundwater Monitoring Plan Version 11, dated July 29, 2020. The following wells will be included into the TPH monitoring program for both TPH-DRO and TPH-GRO:

- *TMW06*
- *TMW07*
- *TMW10*
- *TMW21*
- *TMW46*

In addition, major anion analysis will be included per the request of NMED for all wells that were previously sampled for nitrate/nitrite. The current analytical program includes the sampling and analysis of nitrate/nitrite. The current list of wells that are sampled and

analyzed for nitrate and nitrite will also include major anions per NMED comment #5 and #11 in Disapproval Final 2019 Interim Northern Area Groundwater Monitoring Plan Version 11, dated July 29, 2020. Major anion analytical method limits and screening levels are presented in Table 3 and include the following:

- Nitrate/ Nitrite
- Chloride
- Fluoride
- Bromide
- Sulfate
- Phosphate”

33. Section 5.2.1, Northern Area Alluvial Groundwater Monitoring Design, Explosive Plume, lines 29-31, page 58 of 71

Permittee Statement: “The suspected points of release for the groundwater explosives plume in the northern area are SWMU 1 (TNT Leaching Beds, which have been removed) and SWMU 27 (Building 528 Complex).”

NMED Comment: Comment 14 in NMED’s Disapproval Final Groundwater Periodic Monitoring Report July through December 2018, dated January 30, 2020, states, “[t]he operation associated with the TNT Leaching Beds soil excavation was complete in October 2019 and the concentrations of explosive compounds are expected to decrease gradually. The changes in RDX concentrations must be discussed in future groundwater monitoring reports. Provide plots that depict the concentrations of RDX over time for wells TMW03, TMW04, TMW23, and TMW40S in future groundwater monitoring reports.” This comment serves as a reminder. No revision required.

Permittee Response:

- a) Comment Acknowledged. Changes in RDX concentrations will be discussed in future groundwater monitoring reports due to the interim corrective measures conducted at SWMU 1, TNT washout facility and the TNT Leaching Beds.
- b) This comment is related to the PMRs, not the GWMP. No revision required.

34. Section 5.2.1, Northern Area Alluvial Groundwater Monitoring Design, Explosive Plume, lines 31-32, page 58 of 71

Permittee Statement: “The alluvial aquifer explosives plume extends across the Workshop Area along a favored groundwater flow channel (Figure 3-5).”

NMED Comment: Figure 3-5 indicates that groundwater flows westward in the Workshop Area. However, the RDX plume appears to extend north rather than west from the source area according to Figure 3-5. Provide an explanation for why the RDX plume extends north if alluvial groundwater flows exclusively westward in the revised Plan.

Permittee Response: Comment Acknowledged. It is unknown why the RDX plume extends northward instead of west to northwest and several nearby new wells installed in 2019 and 2020 may help in delineating the plume when they are sampled in 2021. The following statement was added to Section 5.2.1, Page 61, Lines 17-19 (RLSO: Page 62, Lines 21-24):

“The alluvial aquifer explosives plume extends northward across the Workshop Area

(Figure 3-5) even though alluvial groundwater flows west to northwest. Additional wells installed in 2019 and 2020 may help delineate the alluvial aquifer explosives plume.”

35. Section 5.2.1, Northern Area Alluvial Groundwater Monitoring Design, Metals, lines 11-13, page 59 of 71

Permittee Statement: “No groundwater metals plumes have been identified at FWDA pending determination of groundwater background concentrations.”

NMED Comment: NMED is in receipt of the Final Groundwater Background Evaluation, dated December 26, 2019, and currently, the document is under review. Once background threshold values for metals presented in the evaluation report are evaluated and approved by NMED, the Permittee must provide a more thorough discussion regarding the detection of metals. No response required

Permittee Response: Concur. A brief discussion on the background metals evaluation will be included in the revised plan. No response required.

36. Section 5.2.2, Northern Area Bedrock Groundwater Monitoring Design, Perchlorate, lines 22-27, page 60 of 71

NMED Comment: In the revised Plan, clarify that the extent of perchlorate groundwater contamination in bedrock aquifer has not been fully delineated in Section 5.2.2. The Final Groundwater Supplemental RCRA Facility Investigation Work Plan Revision 4, dated March 23, 2018, proposed installation of multiple wells to address the data gap. Revise the Plan accordingly.

Permittee Response: Concur. A brief discussion on the RFI workplan included in Section 5.2.2, Page 63, Lines 9-12 (RLSO: Page 64, Lines 22-24):

“Additional wells were installed in 2019 to better delineate the perchlorate plume. These new wells are proposed to be incorporated into the full suite of analytical starting in year 2022, for four consecutive events” of the revised plan to better delineate the perchlorate contamination.

37. Section 5.2.2, Northern Area Bedrock Groundwater Monitoring Design, Other Organic COPCs Monitoring, lines 30-32, page 60 of 71

Permittee Statement: “There are no identified groundwater SVOC plumes at FWDA and no site-related SVOC concentrations exceeding cleanup levels in groundwater samples that are attributable to historical site activities.”

NMED Comment: Carbon disulfide has been detected from both alluvial and bedrock groundwater samples at the site. Section 5.2.2 does not include any discussion regarding the detection of VOCs in the bedrock aquifer. Revise Section 5.2.2 to include a discussion of VOCs detections.

Permittee Response: Comment Acknowledged. Both VOCs and SVOCs are discussed in Section 5.2.2, Page 63, Lines 20-22 (RLSO: Page 65, Lines 1-4) to state that:

“VOC detections in the bedrock aquifer have included carbon disulfide in previous monitoring events. The Army has confirmed that this compound was not used at the facility, thus introduction has been attributed to laboratory contamination.”

38. Section 5.2.2, Northern Area Bedrock Groundwater Monitoring Design, Background and Sentinel Wells, lines 3-5, page 61 of 71

Permittee Statement: “Background wells include BGMW07, BGMW08, BGMW09, and BGMW10. The groundwater flow direction in the bedrock aquifer does not indicate plume migration off site.”

NMED Comment: Well BGMW08 may not be appropriate for use as a background well. NMED is evaluating whether well BGMW08 is appropriate for use as a background well. NMED’s evaluation will be provided in response to the Permittee’s [Response to Comments]

Approval with Modifications Final Northern Area Background Well Installation & Completion Report, dated March 17, 2020.

In addition, as previously discussed, the groundwater flow direction has not been fully characterized in the bedrock aquifer beneath the Workshop Area (see Comment 19). Therefore, off-site migration of the bedrock plumes has not been determined. Remove the statement from the revised Plan.

Permittee Response: Concur. The statement identifying BGMW08 as a background well was removed along with the statement discussing bedrock groundwater flow direction since the groundwater flow direction in the bedrock aquifer beneath the Workshop Area has not been fully characterized.

39. Section 5.3.2, Analytical Data Quality Requirements, Comparability, lines 20-23, page 63 of 71

Permittee Statement: “Data will be considered in disagreement if detections are greater than two times each other. If one result is greater than three times the reporting limit, the data will be considered in disagreement, and if one result is greater than five times the DL, the data will be considered in disagreement.”

NMED Comment: The criteria provided is inappropriate and unacceptable. The data must be considered in disagreement if the difference in values exceeds criteria for relative percent difference listed in Table 5-1. Comparison of data relative to reporting and detection limits are irrelevant to the evaluation of comparability. Revise the statement to appropriately evaluate comparability of data in the revised Plan.

Permittee Response: Concur. This statement was modified in Section 5.3.2, Page 66, Lines 1-2 (RLSO: Page 67, Lines 21-25) to state:

“Data will be considered in disagreement if the difference in values exceeds criteria for relative percent difference listed in Table 5-1.”

40. Figure 2-3, FWDA Well Locations

NMED Comment: There are several issues in Figure 2-3. These issues are addressed below:

- a) The figure includes Inset 1, Northern Area Wells, which is the most relevant figure to present well locations. Inset 1 must be expanded to show the locations of wells more clearly.
- b) The locations of wells presented in Inset 1 are not accurate. For example, bedrock well

TMW30 is presented slightly northeast of bedrock well TMW49. However, northing values of wells TMW30 and TMW49 are listed as 1639957.89 and 1639979.26, respectively, according to Table 2-1, Northern Area Groundwater Well Construction Details, page 2 of 3. The northing data indicate that well TMW30 is located slightly south of well TMW49. The same error is also found in other figures (e.g., Figure 3-2, Groundwater Elevation Bedrock Wells). The locations of wells must be accurate in Figure 2-3 and all other figures.

- c) The figure includes Inset 2, OB/OD Area Wells, which is not relevant to the Plan. Remove Inset 2 and provide the designations for OB/OD wells directly on the main figure.
- d) The figure includes an inset for the Fort Wingate Area Map. However, Figure 1-2, Site Location Map, and Figure 2-1, Site Parcel Map, provide the same information. Remove the inset.

Resolve these issues in the revised Plan.

Permittee Response:

- a) Comment Acknowledged: Please note that Figure 2-4 is dedicated to this area.
- b) Respectfully disagree. Tilting the map to true north will show TMW49 to be more north of TMW30. Well locations are accurate.
- c) Concur. Inset 2 will be removed and designations for OB/OD wells will be provided on the main figure.
- d) Comment Acknowledged. Figure 2-1 does not provide site location areas, only Figure 1-2. Figure 2-3 includes this inset as it was meant to be a standalone figure that contains all relevant information on one map, thus the 22x34 size of the map.

41. Figure 3-4, Groundwater Monitoring Alluvial Wells – Nitrate

NMED Comment: There are several issues in Figure 3-4. These issues are addressed below:

- a) The nitrate concentration is not presented for each well. The concentrations must be provided for each well in the revised figure.
- b) The figure is dated as April 2020. It is not clear whether the figure was prepared or the sampling was conducted during April 2020. The figure must indicate the date when the sampling was conducted for the data presentation.
- c) The well designations “downgradient”, “sentinel”, and “upgradient” must be removed from the revised figure.
- d) Not all alluvial wells appear to be presented in the figure (e.g., TMW27). All alluvial wells whether sampled for nitrate or not must be presented in the figure.

The format of previous periodic groundwater monitoring reports must be followed in the revised figure. Resolve the issues in the revised Plan. This comment applies to all other figures where similar issues are found.

Permittee Response:

- a) Comment Acknowledged. The GWMP V.10, Rev.1 did not include concentration data in the figures, only the PMR's have done this in the past, thus this plan is following

that format.

- b) Comment Acknowledged. The sampling date is listed in the notes section, but the map edit date will be removed to avoid confusion.
- c) Concur: Well designations were removed.
- d) Concur. All alluvial wells whether sampled for nitrate or not are now presented in the figure.

42. Figure 3-10, Groundwater Monitoring Alluvial Wells – DRO

NMED Comment: The southern and northern extent of the TPH-DRO plume is not delineated according to Figure 3-10. Well TMW10 is the closest well located north of well MW22D where a TPH-DRO exceedance was observed. Groundwater samples were not collected from well TMW10 for TPH-DRO analysis. Similarly, wells TMW06, TMW07, and TMW21 are the closest wells located south of MW20 where a TPH-DRO exceedance was observed. Groundwater samples collected from these nearby wells were not analyzed for TPH-DRO according to Table 5-2, Northern Area Groundwater Sampling Matrix. In addition, according to Figure 5-11 included in the Final Groundwater Periodic Monitoring Report January through June 2019, dated March 2020, the TPH-DRO concentrations exceeded the applicable screening level in the groundwater samples collected from wells TMW33 and TMW34. The extent of TPH-DRO plume is not delineated west of well TMW34. Well TMW46 is the closest well located west of well TMW34 where a TPH-DRO exceedance was observed. Groundwater samples also were not collected from well TMW46 for TPH-DRO analysis. In order to delineate the plume, propose to collect groundwater samples from wells TMW06, TMW07, TMW10, TMW21 and TMW46 for TPH-DRO analysis in the revised Plan. Alternatively, the Permittee may propose to submit a separate work plan to install new wells to delineate the plume north of well MW22D, west of well TMW34, and south of well MW20.

Permittee Response: Comment Acknowledged. The following text was added to Section 5.2, Page 60, Lines 13-23, (RLSO: Page 61, Line 17-26) and Section 7.0, Page 69, Line 32 to Page 70, Line 7 (RLSO: Page 71, Line 32 to Page 72, Line 7):

“Furthermore, to better define the TPH impacts, select wells near the existing TPH plume will be analyzed for TPH gas and diesel range organics per NMED comment #42 and #43 in Disapproval Final 2019 Interim Northern Area Groundwater Monitoring Plan Version 11, dated July 29, 2020. The following wells will be included into the TPH monitoring program for both TPH-DRO and TPH-GRO:

- TMW06
- TMW07
- TMW10
- TMW21
- TMW46”

43. Figure 3-11, Groundwater Monitoring Alluvial Wells – GRO

NMED Comment: The TPH-GRO concentrations exceed the screening level in groundwater samples collected from wells MW18D and TMW33 according to Figure 3-11. According to Figure 5-12 included in the Final Groundwater Periodic Monitoring Report January through June 2019, dated March 2020, the TPH-GRO concentration exceeded the applicable

screening level in the groundwater sample collected from well MW20, as well. The extent of the TPH-GRO plume is not delineated south of well MW20. Wells TMW06, TMW07, and TMW21 are the closest wells located south of MW20 where a TPH-GRO exceedance was observed. Groundwater samples were not collected from these wells for TPH-GRO analysis. Propose to collect groundwater samples from wells TMW06, TMW07, and TMW21 for TPH-GRO analysis in the revised Plan. Alternatively, the Permittee may propose to submit a separate work plan to install a well to delineate the plume south of well MW20 (see Comment 42).

Permittee Response: Comment Acknowledged. The following text was added to Section 5.2, Page 60, Lines 13-23, (RLSO: Page 61, Line 17-26) and Section 7.0, Page 69, Line 32 to Page 70, Line 7 (RLSO: Page 71, Line 32 to Page 72, Line 7):

“Furthermore, to better define the TPH impacts, select wells near the existing TPH plume will be analyzed for TPH gas and diesel range organics per NMED comment #42 and #43 in Disapproval Final 2019 Interim Northern Area Groundwater Monitoring Plan Version 11, dated July 29, 2020. The following wells will be included into the TPH monitoring program for both TPH-DRO and TPH-GRO:

- TMW06
- TMW07
- TMW10
- TMW21
- TMW46”

44. Table 2-1, Northern Area Groundwater Well Construction Details

NMED Comment: The table includes well location data with northing and easting coordinates. Both northing and easting data are noted as Horizontal Coordinate System. However, Horizontal Coordinate System is only applicable to the easting coordinate.

Vertical Coordinate System is applicable to northing coordinate. Revise the table for accuracy.

Permittee Response: Respectfully disagree. Both Easting and Northing are horizontal measurements. Easting and Northing are geographic Cartesian coordinates for a point and is part of the State Plane Coordinate System in use in the USA. Easting is the eastward-measured distance (or the x-coordinate) and northing is the northward-measured distance (or the y-coordinate). Northing is not applicable to a vertical coordinate system.

45. Table 5-1, Groundwater Screening Levels, Detection Limits, and Control Limits, page 1 of 5

NMED Comment: The detection limits of TPH-DRO and TPH-GRO are higher than the applicable screening levels, although these analytes have been detected in multiple groundwater samples. It is essential to achieve detection limits for TPH-DRO and TPH-GRO that are lower than the screening levels in order to demonstrate compliance.

The Permittee has previously been directed to provide analyses with method detection limits, reporting detection limits, and practical quantitation limits that are less than the applicable screening level for each contaminant of concern. All data provided by analyses where the method detection limit, reporting detection limit, or practical quantitation limit

exceed the screening level are considered data quality exceptions and cannot be used to demonstrate compliance. In addition, all data quality exceptions must be called out in the text, tables, or figures where the data are presented.

Permittee Response: Comment Acknowledged. Constituents where the method of detection limit, reporting detection limit, or practical quantitation limit exceed the screening level were considered data quality exceptions and are identified as such in the text (Section 5.1, Pages 57-58 [RLSO: Pages 58-59]), Tables, and Figures where they are presented.



DEPARTMENT OF THE ARMY
OFFICE OF THE DEPUTY CHIEF OF STAFF, G-9
600 ARMY PENTAGON
WASHINGTON, DC 20310-0600

May 19, 2021

Base Realignment and Closure Operations Branch

Mr. Kevin Pierard
Chief, Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

RE: Final 2022 Interim Northern Area Groundwater Monitoring Plan Revision 2, Army's Responses to the Approval with Modifications dated March 8, 2021, Fort Wingate Depot Activity, McKinley County, New Mexico. EPA# NM6213820974

Dear Mr. Pierard:

This letter provides responses to the comments issued in the *Approval with Modifications – Revised Final 2022 Interim Northern Area Groundwater Monitoring Plan* from the New Mexico Environment Department (NMED), dated March 8, 2021. In addition to the comment responses provided in this letter, two (2) hard copies and one (1) electronic (CD) copy of the *Final 2022 Interim Northern Area Groundwater Monitoring Plan Revision 2* are enclosed for your review and consideration. The electronic transmittal includes a redline-strikeout version of the abovementioned report showing where all revisions to the report were made.

Comments:

SPECIFIC COMMENTS

1. Permittee's Response to NMED's Disapproval Comment 3, dated July 27, 2020

Permittee Statement: "The Army has confirmed that firefighting foam was not used at the facility as part of the installation activities."

NMED Comment: The Permittee states, "[f]ire training ground (SWMU 7, Parcel 21) had suspected releases of DROs due to historical firefighting operations." DRO were presumably released when fuel was lit for the firefighting operations. Explain what chemical fire retardants were used to extinguish fires during the operations in a response letter. Provide a list of the types of fuels (e.g., diesel, munitions constituents) and fire suppressants used at the facility fire training ground.

Permittee's Response:

- a) Comment acknowledged. Please note that the Army has no knowledge of the firefighting chemicals used at the facility as part of the installation activities. Our search of historic documentation did not reveal any information regarding fire suppressants, or the type of fuels used at the facility fire training grounds.

2. Permittee's Response to NMED's Disapproval Comment 12, dated July 27, 2020

Permittee Statement: "The sampling program will continue with analysis of 1,4-dioxane per NMED's approval to the deviation from the letter, dated August 15, 2019, comment number 3."

NMED Comment: Comment 3 in NMED's Response to April 16, 2019 Approval with Modification Letter Final Revision 1 Groundwater Periodic Monitoring Report July through December 2017, dated August 15, 2019, states, "[t]he Permittee must analyze groundwater samples collected from all monitoring wells where chlorinated solvents have been detected within the past ten years for 1,4-dioxane using EPA Method 8270 Selective Ion Monitoring (SIM). Propose to analyze for 1,4-dioxane for two consecutive events in the upcoming revision of the Interim Facility-Wide Groundwater Monitoring Plan."

The proposed deviation states, "to better assess the presence of 1,4-dioxane onsite, all wells will be sampled for 1,4-dioxane during the first sampling event; then for the second event, only wells that have a history of detection for chlorinated solvents in the last ten years will be sampled. The first of the two consecutive sampling events will start in April 2020, and the second will be in October 2020."

The Permittee's Final Groundwater Periodic Monitoring Report July through December 2019, dated December 2020, states, "monitoring activities for the new 35 wells are scheduled to begin in year 2020 by sampling the new wells for only 1,4-dioxane for two consecutive events." It appears that the intent of the approval was misunderstood. The new wells should have been sampled for the full analytical suite.

To clarify, the deviation approval does not preclude any required analyses that are listed in Table 5-2, Northern Area Groundwater Sampling Matrix. In the response letter, clarify whether only 1,4-dioxane was sampled during the April 2020 sampling event. In this case, the Permittee must conduct 1,4-dioxane analysis in addition to the analyses required for each well during the April 2021 sampling event and revise the Plan accordingly; otherwise, no revision is required.

Permittee's Response:

Comment acknowledged. Please see the clarification below:

- a) In year 2019, as part of the RFI work, 32 new groundwater monitoring wells were installed at the installation.
- b) In year 2020, all wells at FWDA were sampled for the required analysis as listed in Table 5.2, Northern Area Groundwater Sampling Matrix GWMP Version 10.
- c) In year 2020, all wells at FWDA (including the new 32 wells) were also sampled for 1,4-dioxane for two (2) consecutive events (April and October 2020).
- d) During this period, one (1) well (MW-27) had trace levels of 1,4-dioxane and will be sampled again for two consecutive events (April and October 2021).

- e) In year 2020, three (3) additional wells (MW37, MW38, and MW39) were installed as part of the RFI work.
- f) A total of four (4) wells (MW-27, MW37, MW-38, and MW39) will be sampled for 1,4-dioxane during year 2021 for two (2) consecutive events.
- g) In addition to the four (4) wells being sampled for 1,4-dioxane, all 35 newly installed wells from 2019 and 2020 will begin to be sampled for the full suite of analytical for four (4) consecutive events (April and October 2021 and 2022).
- h) To clarify that 1,4-dioxane was sampled for all wells in 2020 the following paragraph was added to Section 5.2, Page 60, Lines 16-21 (RLSO PDF: Page 62, Lines 19-24):

“In NMED’s Response to April 16, 2019 Approval with Modification Letter Final Revision 1 Groundwater Periodic Monitoring Report July through December 2017, dated August 15, 2019, NMED requested that all wells with a detection of a chlorinated solvent in the last ten years be sampled for 1,4-Dioxane using EPA Method 8270 Selective Ion Monitoring (SIM). In 2020 all existing wells were sampled for 1,4-Dioxane for two consecutive events (April 2020 and October 2020).”

3. Permittee’s Response to NMED’s Disapproval Comment 18, dated July 27, 2020

Permittee Statements: “Groundwater flow in the shallow bedrock is generally to the north and west in the Workshop Area (Figure 3-2). Anomalously steep horizontal gradients from east to west (between wells TMW38 and TMW40D, and between wells TMW17 and TMW37) may indicate a geologic structural feature (i.e., fault or fracture zone) that impedes groundwater flow.”

NMED Comment: Figure 3-2, Groundwater Elevations Bedrock Wells, does not depict groundwater flow direction as directed by NMED’s Disapproval Comment 15. In addition, the general flow direction is not conclusively to the north and west based on the bedrock groundwater elevation data presented in Figure 3-2. A. Explain the basis for stating that groundwater flow in the shallow bedrock is generally to the north and west in the Workshop Area in the response letter. B. Furthermore, the presence of a geological structural feature was not confirmed during the previous investigations. Remove the statement of “geologic structural feature” from the Plan, revise the statement, and provide replacement pages or provide the evidence that the geologic structure is present.

Permittee’s Response:

- a) Concur. The paragraph was revised to explain the basis for stating the groundwater flow direction in the shallow bedrock area in Section 3.4.5, Page 37, Lines 3-6 (RLSO PDF: Page 38, Lines 3-7):

“Groundwater flow in the shallow bedrock underneath the Workshop Area is inferred based on existing water level elevation data. Lower water level

elevations in bedrock wells in the Workshop Area generally exist in the north and west portions of the area. Therefore, the general interpretation is flow directions are to the north and west."

- b) Concur. The sentence was revised to remove mention of the inferred geologic structural feature in Section 3.4.5, Page 37, Lines 6-10 (RLSO PDF: Page 38, Lines 7-13):

"Anomalously steep horizontal gradients from east to west (between wells TMW38 and TMW40D, and between wells TMW17 and TMW37) allow groundwater to flow through the path of least resistance. Contaminant transport of perchlorate to the north, rather than to the west, indicates a flow pattern of least resistance along this subsurface traverse."

- c) Replacement pages and/or a completely new report will be provided.

4. Permittee's Response to NMED's Disapproval Comment 24, dated July 27, 2020

Permittee Statement: "It is improbable that soil contaminants will migrate to the underlying San Andres-Glorieta aquifer. The alluvial and upper bedrock aquifers are not potable without significant treatment and low yield will limit any future use."

NMED Comment: The New Mexico Water Quality Control Commission Regulations require that all groundwater that contains total dissolved solids (TDS) less than 10,000 mg/L meet cleanup standards. Whether or not the groundwater extracted from the alluvial and upper bedrock aquifers is potable, the Permittee must clean up the groundwater contaminated by the Facility's previous operations, in order to attain a corrective action complete without controls status and transfer the property to the Department of the Interior.

Permittee's Response:

- a) Comment Acknowledged. This statement was revised to remove "improbable" from the sentence in Section 3.7, Page 41, Lines 13-14 (RLSO PDF: Page 42, Lines 16-20):

"Soil contaminants may migrate to groundwater in the upper water column, both in the alluvial and upper bedrock units."

5. Permittee's Response to NMED's Disapproval Comment 26, dated July 27, 2020

Permittee Statement: "Stabilization is typically used for traditional low flow wells only."

NMED Comment: Explain whether different stabilization criteria are used for sampling methods other than traditional low flow sampling method (e.g., ZIST, hand bail, submersible and Bennett pumps) in the response letter. If different stabilization criteria are used, they must be discussed in the revised Plan. If stabilization criteria for other sampling methods are not established, they must be established and discussed in the

revised Plan to demonstrate that formation water is sampled. Include the discussion in the revised Plan and provide replacement pages.

Permittee's Response:

- a) Comment Acknowledged. Stabilization criteria, as applied to low-flow purging and sampling, follows protocols established by both USEPA and NMED by applying water quality parameter stabilization (i.e., pH, conductivity, etc.). Water quality parameter stabilization criteria are not applied to the purging and sampling protocols used in wells that are hand bailed or purged using higher flow methods. In these wells, stabilization criteria used to determine if the conditions are suitable for sample collection are based on total volume purged (3 well volumes), or the well being purged dry and allowed to recover. In these wells, water quality parameters are recorded, but are not part of the stabilization criteria.
- b) Paragraph 1 in section 4.2 Groundwater Sampling, was revised in Section 4.2, Pages 42-43, Lines 31-37 and 1-2 (RLSO PDF: Pages 43-44, Lines 34-38 and 1-4):

“Monitoring well sampling at FWDA involves a variety of purging and sampling methods, as shown in Table 4-1. A select number of wells are equipped with dedicated low-flow pumps (i.e., BESST and zone isolation sampling technology [ZIST]), or high-volume dedicated pumps (Bennett), or a submersible pump or hand bail. Each purging and sampling method is described in subsequent sections. As described below, only low-flow dedicated pumps by BESST and ZIST require water quality parameter stabilization. The other methods of purging and sampling require that three well volumes be removed prior to collecting a water sample. If well yield does not allow for three well volumes, the well will be pumped dry and sampled the following day as formation water enters the well.”

- c) Subsequent sections below Section 4.2 explain each purging and sampling method and stabilization criteria.
- d) Replacement pages and/or a completely new report will be provided.

6. Permittee's Response to NMED's Disapproval Comment 26, dated July 27, 2020

Permittee Statement: “The last three water quality parameters collected from well BGMW07 are not considered stable because the parameters are not within 10%, but this well is also not considered a traditional low flow well... The field team returned the following day to collect the formation water that had entered the well during recharge. This water sample is representative of the formation water.”

NMED Comment: The water entering the well is representative of the formation water; however, the water sample would not be representative of the formation water unless the sampling techniques are appropriate. In order to demonstrate that the sampling

technique is appropriate, different stabilization criteria or equivalent must be established (see Comment 5). Provide a discussion in the response letter.

Permittee's Response:

- a) Concur. As shown in Table 4-1, a reclamation pump is used to purge well BGMW07.
- b) Water quality parameter stabilization criteria are not applied to the purging and sampling protocols used in wells that are purged using higher flow methods (3 volume purge or pump dry). This well typically goes dry before achieving the 3 well volume protocol prior to sampling. Thus, this well is purged dry and sample the following day after recharge. Water sample collection for this well, and those purged using this criterion, will be conducted in a manner to minimize entraining settleable solids that may impact representativeness of the sample.

7. Permittee's Response to NMED's Disapproval Comment 26, dated July 27, 2020

Permittee Statement: "The elevated DO readings in well BGMW08 are a result of purging the well dry with a disposable hand bail. Readings are taken by pouring the water into a receiving cup and lowering the sensor into the cup, versus traditional low flow that is not exposed to the open air. This process can result in numerous air bubbles or other opportunities for user error. Field staff will be instructed to re-check the readings and calibrate or switch instruments if necessary, for future sampling events. This well was purged dry. The team returned the following day to collect formation water that had entered the well during recharge. This water sample is representative of the formation water."

NMED Comment: Since the Permittee has seemingly identified the possible cause of inaccurate DO readings in well BGMW08, discuss the appropriate measures that will be taken to resolve the issue in the response letter and implement the measures for future sampling events.

Permittee's Response:

- a) Concur. The field staff have received additional training on how to avoid air bubbles while collecting water quality parameters. The following measures will be taken to address inaccurate DO readings:
 - 1) water quality instruments will be calibrated and tested prior to field deployment and as necessary during field work;
 - 2) if the instrument cannot be properly calibrated, or is producing anomalous readings, a backup instrument will be calibrated and used; and
 - 3) field personnel have been trained to recognize inaccurate DO readings and will use one of the above-mentioned procedures to ensure the accuracy of DO readings.

8. Permittee's Response to NMED's Disapproval Comment 32, dated July 27, 2020

Permittee Statement: "The full suite of analytical proposed for these wells is presented in Table 5-2 and are listed below:

- Volatile organic compounds (VOCs) by EPA Method 8260
- Total explosives by EPA Method 8330/8332
- Major anions by EPA Method 9056
 - Nitrate/ Nitrite
 - Chloride
 - Fluoride
 - Bromide
 - Sulfate
 - Phosphate
- Total metals by EPA Method 6020
- Dissolved metals by EPA Method 6020
- Perchlorate by EPA Method 6850
- Semi-volatile organic compounds (SVOCs) by EPA 8270
- 1,4-Dioxane by EPA Method 8270 selected ion monitoring (SIM) (for 2 consecutive events, and only for the 3 wells installed in 2020)
- Pesticides by EPA Method 8081
- TPH-GRO by EPA Method 8015
- TPH-DRO by EPA Method 8015
- Polychlorinated biphenols (PCBs) by EPA Method 8082
- Herbicides by EPA Method 8151"

NMED Comment: The analysis of 1,4-Dioxane by EPA Method 8270 selected ion monitoring (SIM) was only proposed for new wells MW37, MW38, and MW39; however, 1,4-dioxane analysis was not proposed for other new wells and existing wells where chlorinated solvents were previously detected according to Table 5-2, Northern Area Groundwater Sampling Matrix. Although Comment 3 in NMED's Response to April 16, 2019 Approval with Modification Letter Final Revision 1 Groundwater Periodic Monitoring Report July through December 2017, dated August 15, 2019, required 1,4-dioxane using EPA Method 8270 SIM from all monitoring wells where chlorinated solvents have been detected within the past ten years for two consecutive sampling events (see Comment 2), it is not clear whether the direction was followed. Previous groundwater monitoring reports indicate that chlorinated compounds were detected from groundwater samples collected from wells MW01, MW18D, MW20, MW22D, MW23, TMW11, TMW33, TMW35, TMW40S, TMW47, TMW17, TMW31D and TMW48 at a minimum.

Clarify whether 1,4-dioxane analysis was previously conducted for two consecutive events for the above listed wells and analysis was discontinued because 1,4-dioxane was not detected. Otherwise, evaluate past ten years of VOCs and SVOCs analytical data and propose to analyze 1,4-dioxane using EPA Method 8270 SIM from all monitoring wells where chlorinated solvents have previously been detected. Revise the Plan accordingly and provide replacement pages.

Permittee's Response:

- a) Comment acknowledged. In year 2019, as part of the RFI work, 32 new groundwater monitoring wells were installed at the installation.
- b) In year 2020, all wells at FWDA (including the new 32 wells) were sampled for 1,4-dioxane for 2 events (April and October 2020).
- c) During this period, one (1) well had trace levels of 1,4-dioxane.
- d) In year 2020, three (3) additional wells (MW37, MW38, and MW39) were installed as part of the RFI work.
- e) A total of four (4) wells will be sampled for 1,4-dioxane during year 2021 for 2 consecutive events.
- f) Replacement pages and/or a completely new report will be provided.

9. Permittee's Response to NMED's Disapproval Comment 34, dated July 27, 2020

Permittee Statement: "The alluvial aquifer explosives plume extends northward across the Workshop Area (Figure 3-5) even though alluvial groundwater flows west to northwest. Additional wells installed in 2019 and 2020 may help delineate the alluvial aquifer explosives plume."

NMED Comment: The discrepancy between the groundwater flow direction and the plume as mapped must be further discussed. More specifically, present the locations of the new wells in the revised figure and explain how the new wells better delineate the extent of the plume in the response letter.

Permittee's Response:

- a) Comment Acknowledged. The perceived discrepancy in the plume configuration verses the flow direction is due to the 10-foot contour interval used for the groundwater contour map. While the overall flow direction between the 6,650 and 6,640 contours is towards the west, the gradient direction between wells TMW03, TMW44, TMW22, and TMW45 is towards the north (a total of 3 feet of drop to the north over these 4 well locations). The extension of the explosives plume across these 4 wells is consistent with the reported water level elevations.
- b) Comment Acknowledged. The new monitoring wells are presented in Figure 2-4 with a different symbol compared to existing wells, in order to demonstrate where the additional coverage of these wells is and how these areas will contribute to better resolution of plume delineation.
- c) The additional wells to the monitoring network effectively reduce the distance between data points and increases the percentage of the area covered for collecting data for both groundwater elevation and for groundwater analytical data. This increases overall resolution of the measuring network, thereby

improving the accuracy of the limits and extent of the plume.

10. Permittee's Response to NMED's Disapproval Comment 36, dated July 27, 2020

Permittee Statement: "Additional wells were installed in 2019 to better delineate the perchlorate plume."

NMED Comment: Present the location of the new wells in the revised figure and explain how the new wells better delineate the extent of the plume in the response letter.

Permittee's Response:

- a) Comment Acknowledged. The new monitoring wells are presented in Figure 2-4 with a different symbol compared to existing wells to demonstrate where the additional coverage of these wells is and how these areas will contribute to better resolution of plume delineation.
- b) The locations of the new wells are based on the approved RFI workplan.

11. Permittee's Response to NMED's Disapproval Comment 37, dated July 27, 2020

Permittee Statement: "The Army has confirmed that this compound [carbon disulfide] was not used at the facility, thus introduction has been attributed to laboratory contamination."

NMED Comment: In order to demonstrate that the detection of carbon disulfide has been attributed to laboratory contamination, provide an electronic copy of the laboratory reports that include the analytical results of equipment blanks in the response letter.

Permittee's Response:

- a) Concur. Carbon disulfide is sporadically identified in trace amounts in well TMW47 and TMW24.
- b) The sentence was revised in Section 5.2.2, Page 64, Lines 33-35 (RLSO PDF: Pages 66-67, Lines 36 and 1-2):

"The Army has confirmed that this compound was not used at the facility, but trace detections continue to be identified in well TMW47 and sporadically in well TMW24."
- c) The screening level for carbon disulfide is 810 µg/L, and all are detected below 3 µg/L.
- d) Based upon the low-level detections, the upgradient locations of the detections, and the lack of any documented use of the chemical at FWDA, it is the Army's opinion that detections are the result of naturally produced carbon disulfide gas by microorganisms (ASTDR 1996) and a lab contaminant (see attached lab result from draft RFI trip blank [see Attachment 1]). Please note that RFI Report is being reviewed by the Army prior to submittal to NMED.

12. Permittee's Response to NMED's Disapproval Comment 45, dated July 27, 2020

Permittee Statement: "Constituents where the method of detection limit, reporting detection limit, or practical quantitation limit exceed the screening level were considered data quality exceptions and are identified as such in the text."

NMED Comment: The February 1, 2021 email from Mr. Wear of NMED to Mr. Cushman of FWDA provides a clarification and direction regarding the analytes where LOQ exceeds the applicable screening levels. The email requests specific information be provided for NMED's evaluation of this recurring issue. In the response letter, provide an anticipated date when the requested information will be submitted to NMED.

Permittee's Response:

- a. Comment Acknowledged. The Army and its subcontractor have been evaluating the LOD and LOQ screening level detection limit issue and Mr. Wear's request. Mr. Wear's request is being processed and is awaiting BRAC headquarters approval and guidance.

If you have questions or require further information, please contact me at George.h.cushman.civ@mail.mil, 703-455-3234 (Temporary Home Office, preferred) or 703-608-2245 (Mobile).

Sincerely,



George H. Cushman IV
BRAC Environmental Coordinator
Fort Wingate Depot Activity
BRAC Operations Branch
Environmental Division

Enclosures

CF:

Kevin Pierard, NMED, HWB
Dave Cobrain, NMED, HWB
Ben Wear NMED, HWB
Michiya Suzuki, NMED, HWB
Lucas McKinney, U.S. EPA Region 6
Ian Thomas, BRAC
George H. Cushman IV, BRAC
Alan Soicher, USACE
Michael Falcone, USACE
Saqib Khan, USACE
David Becker, USACE

Alvin Whitehair, SW BIA
George Padilla, BIA, NRO
Sharlene Begay-Platero, Navajo Nation
Mark Harrington, Pueblo of Zuni
Admin Record, NM
Admin Record, Ohio

Attachment 1:

Excerpt from Fort Wingate, NM RFI Trip Blank Data from 11/6/2019

Attachment 1

Excerpt from Fort Wingate, NM RFI Report
Carbon disulfide Trip Blank Data from 11/06/2019

Client Sample Results

Client: HDR Inc
Project/Site: Fort Wingate, NM

Job ID: 280-130630-1

Method: 8260C DOD - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: TB13

Date Collected: 11/06/19 10:15

Date Received: 11/08/19 09:00

Lab Sample ID: 280-130630-2

Matrix: Water

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.40	U	1.0	0.13	ug/L			11/16/19 12:38	1
2,2-Dichloropropane	0.40	U	1.0	0.13	ug/L			11/16/19 12:38	1
2-Butanone (MEK)	0.80	U M	2.0	0.35	ug/L			11/16/19 12:38	1
2-Chlorotoluene	0.40	U	1.0	0.15	ug/L			11/16/19 12:38	1
2-Hexanone	0.40	U	2.0	0.17	ug/L			11/16/19 12:38	1
4-Chlorotoluene	0.40	U	1.0	0.15	ug/L			11/16/19 12:38	1
4-Methyl-2-pentanone (MIBK)	0.40	U	2.0	0.18	ug/L			11/16/19 12:38	1
Acetone	5.0	U M	10	2.1	ug/L			11/16/19 12:38	1
Benzene	0.40	U	1.0	0.13	ug/L			11/16/19 12:38	1
Bromobenzene	0.40	U	1.0	0.18	ug/L			11/16/19 12:38	1
Bromoform	0.40	U	1.0	0.10	ug/L			11/16/19 12:38	1
Bromomethane	0.80	U	1.0	0.29	ug/L			11/16/19 12:38	1
Carbon disulfide	0.24	J M	2.0	0.16	ug/L			11/16/19 12:38	1
Carbon tetrachloride	0.40	U	1.0	0.15	ug/L			11/16/19 12:38	1
Chlorobenzene	0.40	U M	1.0	0.12	ug/L			11/16/19 12:38	1
Chlorobromomethane	0.40	U	1.0	0.14	ug/L			11/16/19 12:38	1
Chlorodibromomethane	0.40	U	1.0	0.13	ug/L			11/16/19 12:38	1
Chloroethane	0.80	U	1.0	0.34	ug/L			11/16/19 12:38	1
Chloroform	0.40	U	1.0	0.12	ug/L			11/16/19 12:38	1
Chloromethane	0.80	U	1.0	0.25	ug/L			11/16/19 12:38	1
cis-1,2-Dichloroethene	0.40	U M	1.0	0.10	ug/L			11/16/19 12:38	1
cis-1,3-Dichloropropene	0.80	U	1.0	0.22	ug/L			11/16/19 12:38	1
Dibromomethane	0.80	U	1.0	0.21	ug/L			11/16/19 12:38	1
Dichlorobromomethane	0.40	U	1.0	0.14	ug/L			11/16/19 12:38	1
Dichlorodifluoromethane	0.40	U	1.0	0.16	ug/L			11/16/19 12:38	1
Ethyl methacrylate	0.20	U	2.0	0.090	ug/L			11/16/19 12:38	1
Ethylbenzene	0.40	U M	1.0	0.15	ug/L			11/16/19 12:38	1
Hexachlorobutadiene	0.80	U	1.0	0.22	ug/L			11/16/19 12:38	1
Isopropylbenzene	0.40	U	1.0	0.12	ug/L			11/16/19 12:38	1
Methyl tert-butyl ether	0.40	U	2.0	0.19	ug/L			11/16/19 12:38	1
Methylene Chloride	0.80	U	1.0	0.35	ug/L			11/16/19 12:38	1
m-Xylene & p-Xylene	0.40	U	1.0	0.18	ug/L			11/16/19 12:38	1
Naphthalene	0.40	U	1.0	0.15	ug/L			11/16/19 12:38	1
n-Butylbenzene	0.40	U	1.0	0.12	ug/L			11/16/19 12:38	1
N-Propylbenzene	0.40	U	1.0	0.15	ug/L			11/16/19 12:38	1
o-Xylene	0.40	U	1.0	0.10	ug/L			11/16/19 12:38	1
p-Isopropyltoluene	0.40	U	1.0	0.13	ug/L			11/16/19 12:38	1
sec-Butylbenzene	0.40	U	1.0	0.12	ug/L			11/16/19 12:38	1
Styrene	0.40	U M	1.0	0.15	ug/L			11/16/19 12:38	1
tert-Butylbenzene	0.40	U	1.0	0.14	ug/L			11/16/19 12:38	1
Tetrachloroethene	0.40	U	1.0	0.15	ug/L			11/16/19 12:38	1
Toluene	0.80	U M	1.0	0.25	ug/L			11/16/19 12:38	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.11	ug/L			11/16/19 12:38	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.15	ug/L			11/16/19 12:38	1
Trichloroethene	0.40	U	1.0	0.13	ug/L			11/16/19 12:38	1
Trichlorofluoromethane	0.80	U	1.0	0.23	ug/L			11/16/19 12:38	1
Vinyl chloride	0.80	U	1.0	0.22	ug/L			11/16/19 12:38	1
Xylenes, Total	1.2	U	1.5	0.18	ug/L			11/16/19 12:38	1

Eurofins TestAmerica, Denver



Certified Mail - Return Receipt Requested

August 3, 2021

George H. Cushman
Headquarters, Department of the Army
Office of the DCS, G-9
Army Environmental Office, Room 5C140
600 Army Pentagon
Washington, DC 20310-0600

**RE: FINAL 2022 INTERIM NORTHERN AREA GROUNDWATER MONITORING PLAN
REVISION 2, ARMY'S RESPONSE TO THE APPROVAL WITH MODIFICATIONS
DATED MARCH 8, 2021
FORT WINGATE DEPOT ACTIVITY
MCKINLEY COUNTY, NEW MEXICO
EPA ID# NM6213820974
HWB-FWDA-20-004**

Dear Mr. Cushman,

The New Mexico Environment Department (NMED) is in receipt of the Fort Wingate Depot Activity (Permittee) *Final 2022 Interim Northern Area Groundwater Monitoring Plan Revision 2, Army's Responses to the Approval with Modifications dated March 8, 2021* (Response), dated May 19, 2021. NMED has reviewed the Response, and hereby issues the following comments.

COMMENTS

1. Permittee's Response to NMED's Approval with Modifications Comment 1, dated March 8, 2021

Permittee Statement: "Please note that the Army has no knowledge of the firefighting chemicals used at the facility as part of the installation activities. Our search of historic documentation did not reveal any information regarding fire suppressants, or the type of fuels used at the facility fire training grounds."

NMED Comment: Since it is not known whether firefighting chemicals were used at the facility, it is possible that aqueous film foaming foam (AFFF) was used during firefighting

training. AFFF is known to yield per- and polyfluoroalkyl substances (PFAS). PFAS compounds are known to cause adverse human health effects and EPA considers PFAS to be an emerging contaminant. Requirements for the evaluation of PFAS are included in NMED's *Risk Assessment Guidance for Site Investigation and Remediation (2019)*. The groundwater in the vicinity of the training area (SWMU 7, Parcel 21) may be affected by PFAS. There are several alluvial and bedrock wells already located in the vicinity of the training area that can be evaluated for the presence of PFAS in the groundwater. Propose to conduct PFAS analysis for the groundwater samples collected from the pertinent wells in the next groundwater monitoring plan update.

2. Permittee's Response to NMED's Approval with Modifications Comment 2, dated March 8, 2021

Permittee Statement: "Please see the clarification below:

- a) In year 2019, as part of the RFI work, 32 new groundwater monitoring wells were installed at the installation.
- b) In year 2020, all wells at FWDA were sampled for the required analysis as listed in Table 5.2, Northern Area Groundwater Sampling Matrix GWMP Version 10.
- c) In year 2020, all wells at FWDA (including the new 32 wells) were also sampled for 1,4-dioxane for two (2) consecutive events (April and October 2020).
- d) During this period, one (1) well (MW-27) had trace levels of 1,4-dioxane and will be sampled again for two consecutive events (April and October 2021).
- e) In year 2020, three (3) additional wells (MW37, MW38, and MW39) were installed as part of the RFI work.
- f) A total of four (4) wells (MW-27, MW37, MW-38, and MW39) will be sampled for 1,4-dioxane during year 2021 for two (2) consecutive events.
- g) In addition to the four (4) wells being sampled for 1,4-dioxane, all 35 newly installed wells from 2019 and 2020 will begin to be sampled for the full suite of analytical for four (4) consecutive events (April and October 2021 and 2022).
- h) To clarify that 1,4-dioxane was sampled for all wells in 2020 the following paragraph was added to Section 5.2, Page 60, Lines 16-21 (RLSO PDF: Page 62, Lines 19-24):

"In NMED's Response to April 16, 2019 Approval with Modification Letter Final Revision 1 Groundwater Periodic Monitoring Report July through December 2017, dated August 15, 2019, NMED requested that all wells with a detection of a chlorinated solvent in the last ten years be sampled for 1,4-Dioxane using EPA Method 8270 Selective Ion Monitoring (SIM). In 2020 all existing wells were sampled for 1,4-Dioxane for two consecutive events (April 2020 and October 2020)."

NMED Comment: Comment 2 requests the Permittee to provide a clarification for whether only 1,4-dioxane was analyzed for during the April 2020 sampling event. Although a detailed explanation is provided, it is still not clear whether only 1,4-dioxane analysis was conducted

during the April 2020 sampling event. The Permittee states that all wells were sampled for the required analysis as listed in Table 5.2, *Northern Area Groundwater Sampling Matrix GWMP Version 10*; however, the document was submitted in 2017, which was approximately two years prior to the time when the 32 groundwater monitoring wells were installed. The statement is unclear. Provide more clear and concise explanation that directly addresses the NMED's comments in future correspondence.

In addition, Comment 2 states, "[i]n this case, the Permittee must conduct 1,4-dioxane analysis in addition to the analyses required for each well during the April 2021 sampling event." NMED presumes that the 32 new wells were only sampled for 1,4-dioxane analysis in April 2020 based on the statement. The wells should have been sampled for the full analytical suite in 2020. If chlorinated solvents are detected in 2021 and 2022, the Permittee must conduct 1,4-dioxane analysis again in 2023, even if 1,4-dioxane was already analyzed and not detected in 2020. The 1,4-dioxane data collected in 2020 for the 32 wells are not usable for any decision-making purpose.

Furthermore, the *Final Groundwater Periodic Monitoring Report January through June 2020*, dated March 2021, indicates that the screening level of 1,4-dioxane is slightly lower than its Limit of Detection (LOD). Unless this issue is resolved, the presence/absence of 1,4-dioxane remains unknown. NMED may require additional 1,4-dioxane analysis in the future unless this issue is resolved. No response required.

3. Permittee's Response to NMED's Approval with Modifications Comment 7, dated March 8, 2021

Permittee Statement: "[t]he field staff have received additional training on how to avoid air bubbles while collecting water quality parameters.

NMED Comment: The *[Response to] Approval with Modifications, Final Revision 1 Groundwater Periodic Monitoring Report, January through June 2018*, dated April 19, 2021, states that downhole probes/sondes are available to measure DO and many other in situ water quality parameters and in situ measurement is a much more effective alternative to displacing air from multiple wells." NMED agrees that in-situ DO measurement using downhole probes is more effective and accurate. Propose to use downhole probes for water quality measurements, where applicable, in future groundwater monitoring plan update. No response required.

4. Permittee's Response to NMED's Approval with Modifications Comment 8, dated March 8, 2021

NMED Comment: The Permittee provided the same response for Comment 2. However, the response is not relevant to Comment 8. The Permittee does not appear to be reading the comment thoroughly. Comment 8 states, "[p]revious groundwater monitoring reports

indicate that chlorinated compounds were detected from groundwater samples collected from wells MW01, MW18D, MW20, MW22D, MW23, TMW11, TMW33, TMW35, TMW40S, TMW47, TMW17, TMW31D and TMW48 at a minimum. Clarify whether 1,4-dioxane analysis was previously conducted for two consecutive events for the above listed wells and analysis was discontinued because 1,4-dioxane was not detected. Otherwise, evaluate the past ten years of VOCs and SVOCs analytical data and propose to analyze 1,4-dioxane using EPA Method 8270 SIM from all monitoring wells where chlorinated solvents have previously been detected." Since this comment was not addressed in the Response, the Permittee must propose to analyze for 1,4-dioxane using EPA Method 8270 SIM in samples collected from all monitoring wells where chlorinated solvents have been detected past ten years in the next groundwater monitoring plan update. Failure to follow NMED direction constitutes noncompliance and may result in an enforcement action.

5. Permittee's Response to NMED's Approval with Modifications Comment 9, dated March 8, 2021

Permittee Statements: "The perceived discrepancy in the plume configuration verses the flow direction is due to the 10-foot contour interval used for the groundwater contour map. While the overall flow direction between the 6,650 and 6,640 contours is towards the west, the gradient direction between wells TMW03, TMW44, TMW22, and TMW45 is towards the north (a total of 3 feet of drop to the north over these 4 well locations)." and, "The additional wells to the monitoring network effectively reduce the distance between data points and increases the percentage of the area covered for collecting data for both groundwater elevation and for groundwater analytical data."

NMED Comment: In order to resolve the discrepancy between the groundwater flow direction and the plume as mapped, the groundwater elevation maps must be revised with an appropriate contour interval in future groundwater monitoring reports. Address this comment in future groundwater periodic monitoring reports.

6. Permittee's Responses to NMED's Approval with Modifications Comments 9 and 10, dated March 8, 2021

Permittee Statement: "The new monitoring wells are presented in Figure 2-4 with a different symbol compared to existing wells, in order to demonstrate where the additional coverage of these wells is and how these areas will contribute to better resolution of plume delineation."

NMED Comment: Comments 9 and 10 request the Permittee to explain how the new wells better delineate the extent of the plumes. Although Figure 2-4 depicts the location of new monitoring wells, it does not explain how these wells better delineate the extent of the plumes. Figures that show both new monitoring wells and the extent of the plumes should have been prepared to explain how the new wells better delineate the extent of the

plumes. Address this comment in future groundwater periodic monitoring reports. Failure to follow NMED direction constitutes noncompliance and may result in an enforcement action.

7. Permittee's Response to NMED's Approval with Modifications Comment 12, dated March 8, 2021

Permittee Statement: "The Army and its subcontractor have been evaluating the LOD and LOQ screening level detection limit issue and Mr. Wear's request. Mr. Wear's request is being processed and is awaiting BRAC headquarters approval and guidance."

NMED Comment: Comment 12 requests the Permittee to provide an anticipated date when the requested information will be submitted to NMED. The response does not provide the information NMED requested. Provide a more clear and concise explanation that directly addresses the NMED's comments in future correspondence.

Should you have any questions, please contact Michiya Suzuki of my staff at (505) 690-6930.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ricardo Maestas" followed by a stylized flourish.

Ricardo Maestas, Acting Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
B. Wear, NMED HWB
M. Suzuki, NMED HWB
L. McKinney, EPA Region 6 (6LCRRC)
L. Rodgers, Navajo Nation
S. Begay-Platero, Navajo Nation
M. Harrington, Pueblo of Zuni
C. Seoutewa, Southwest Region BIA
A. Whitehair, Southwest Region BIA
G. Padilla, Navajo BIA
J. Wilson, BIA
B. Howerton, BIA
R. White, BIA
C. Esler, Sundance Consulting, Inc.
M. Falcone, USACE

File: FWDA 2021 and Reading

APPENDIX B

Summary of Analytical Results of Previous Investigations

(Tables B-1 through B-7)

Access Database provided on CD.

TABLE B-1: SUMMARY OF NITRATE-N AND NITRITE-N ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Nitrate as Nitrogen	Nitrite as Nitrogen
			mg/L	
SL			10	1
ALLUVIAL WELLS				
BGMW01	BGMW01102020	09/30/2020	2.8	<0.30
	BGMW01042020	04/22/2020	2.2	<0.06
	BGMW01102019	10/02/2019	1.2	<0.06
	BGMW01042019	04/13/2019	0.28	<0.15
BGMW02	BGMW02102020	09/30/2020	13.9	<0.30
	BGMW02042020	04/28/2020	13.1	<0.06
	BGMW02102019	10/06/2019	22.8	<0.06
	BGMW02042019	04/13/2019	10.8	<0.45
BGMW03	BGMW03102020	10/05/2020	1.6	<0.12
	BGMW03042020	04/21/2020	0.33	<0.06
	BGMW03102019	09/30/2019	1.0	<0.03
	BGMW03042019	04/24/2019	1.0	<0.30
	BGMW03042019DUP	04/24/2019	1.1	<0.30
FW31	FW31102020	10/05/2020	0.068 J	<0.06
	FW31102020DUP	10/05/2020	0.069 J	<0.06
	FW31042020	04/24/2020	<0.03	<0.03
	FW31102019	10/04/2019	<0.03	<0.03
	FW31042019	04/13/2019	<0.03	<0.03
MW01	MW01102020	09/29/2020	4.5	<0.06
	MW01042020	04/22/2020	4.0	<0.06
	MW01102019	10/01/2019	4.1	<0.03
	MW01042019	04/11/2019	5.3	<0.15
MW02	MW02102020	09/29/2020	2.0	<0.06
	MW02042020	04/22/2020	2.0	<0.03
	MW02102019	10/02/2019	2.2	<0.03
	MW02042019	04/18/2019	2.2	<0.03
MW03	MW03102020	10/01/2020	6.3	<0.12
	MW03042020	04/23/2020	5.3	<0.06
	MW03102019	10/03/2019	6.3	<0.06
	MW03042019	04/13/2019	6.0	<0.15

TABLE B-1: SUMMARY OF NITRATE-N AND NITRITE-N ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Nitrate as Nitrogen	Nitrite as Nitrogen
			mg/L	
SL			10	1
MW18D	MW18D102020	10/06/2020	<0.12	<0.30
	MW18D042020	04/30/2020	25.2	<0.15
	MW18D102019	10/07/2019	<0.06	<0.15
	MW18D042019	04/27/2019	<0.24	<0.24
MW20	MW20102020	10/05/2020	7.8	<1.2
	MW20042020	04/28/2020	10.9	<0.60
	MW20102019	10/06/2019	8.2	<0.30
	MW20042019	04/19/2019	12.7	<0.60
MW22D	MW22D102020	10/07/2020	19.2	<0.30
	MW22D042020	05/01/2020	20	<0.15
	MW22D102019	10/10/2019	35.6	<0.06
	MW22D042019	04/17/2019	24.3	<0.15
MW23	MW23102020	10/05/2020	<0.06	<0.06
	MW23042020	04/21/2020	<0.06	<0.06
	MW23102019	09/30/2019	<0.06	<0.06
	MW23042019	04/18/2019	<0.12	<0.12
MW24	MW24102020	09/29/2020	<0.06	<0.12
	MW24042020	04/20/2020	<0.06	<0.06
	MW24042020DUP	04/20/2020	<0.06	<0.06
	MW24102019	09/30/2019	<0.06	<0.06
	MW24042019	04/19/2019	<0.06	<0.06
SMW01	SMW01102020	09/29/2020	<0.12	<0.60
	SMW01042020	04/21/2020	<0.06	<0.15
	SMW01102019	10/01/2019	<0.15	<0.15
	SMW01042019	04/13/2019	<0.30	<0.30
TMW01	TMW01102020	10/01/2020	9.4	<0.30
	TMW01042020	04/24/2020	8.5	<0.06
	TMW01102019	10/08/2019	8.8	<0.06
	TMW01042019	04/19/2019	9.4	<0.30

TABLE B-1: SUMMARY OF NITRATE-N AND NITRITE-N ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Nitrate as Nitrogen	Nitrite as Nitrogen
			mg/L	
SL			10	1
TMW02	TMW02102020	10/02/2020	82.3	<0.30
	TMW02102020DUP	10/02/2020	81.1	<0.30
	TMW02042020	04/24/2020	72.5	<0.15
	TMW02042020DUP	04/24/2020	75.6	<0.15
	TMW02102019	10/08/2019	76.1	<0.15
	TMW02042019	04/19/2019	90	<0.30
	TMW02042019DUP	04/19/2019	89.2	<0.30
TMW03	TMW03102020	10/07/2020	115	<0.30
	TMW03042020	05/01/2020	127	<0.15
	TMW03102019	10/09/2019	116	0.088 J
	TMW03102019DUP	10/09/2019	117	0.097 J
	TMW03042019	04/20/2019	120	0.48
TMW04	TMW04102020	10/02/2020	39.8	<0.30
	TMW04042020	04/27/2020	40.7	<0.06
	TMW04102019	10/09/2019	38.1	<0.06
	TMW04042019	04/20/2019	41.8	<0.03
TMW06	TMW06102020	10/06/2020	11.8	<0.12
	TMW06042020	04/28/2020	31.7	<0.03
	TMW06102019	10/06/2019	11	<0.06
	TMW06102019DUP	10/06/2019	11.7	<0.06
	TMW06042019	04/16/2019	12	<0.15
TMW07	TMW07102020	10/01/2020	<0.06	<0.30
	TMW07102020DUP	10/01/2020	<0.06	<0.30
	TMW07042020	04/21/2020	0.27	<0.06
	TMW07102019	10/08/2019	0.19	<0.06
	TMW07042019	04/24/2019	0.13	<0.30
TMW08	TMW08102020	09/30/2020	5.8	<1.2
	TMW08042020	04/23/2020	4.3	<0.30
	TMW08102019	10/03/2019	4.5	<0.30
	TMW08042019	04/16/2019	4.3	<0.30

TABLE B-1: SUMMARY OF NITRATE-N AND NITRITE-N ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Nitrate as Nitrogen	Nitrite as Nitrogen
			mg/L	
SL			10	1
TMW10	TMW10102020	10/01/2020	<0.06	<0.60
	TMW10042020	04/23/2020	<0.06	<0.15
	TMW10102019	10/03/2019	0.22	<0.15
	TMW10042019	04/23/2019	<0.30	<0.30
TMW11	TMW11042020	04/20/2020	5.2	<0.12
	TMW11102019	10/02/2019	3.2	<0.03
	TMW11042019	04/20/2019	2.7	<0.09
TMW13	TMW13102020	10/06/2020	4.5	<0.12
	TMW13102020DUP	10/06/2020	4.4	<0.12
	TMW13042020	04/28/2020	4.9	<0.03
	TMW13042020DUP	04/28/2020	5.2	<0.03
	TMW13102019	10/06/2019	5.0	<0.06
	TMW13102019DUP	10/06/2019	5.0	<0.06
	TMW13042019	04/18/2019	5.4	<0.15
TMW15	TMW15102020	10/05/2020	2.3	<0.12
	TMW15102020DUP	10/05/2020	2.3	<0.12
	TMW15042020	04/27/2020	2.6	<0.03
	TMW15042020DUP	04/27/2020	2.6	<0.03
	TMW15102019	10/04/2019	2.9	<0.06
	TMW15042019	04/18/2019	3.1	<0.15
TMW21	TMW21102020	10/07/2020	9.5	<0.30
	TMW21042020	04/27/2020	9.4	<0.03
	TMW21102019	10/08/2019	9.8	<0.03
	TMW21102019DUP	10/08/2019	10.1	<0.03
	TMW21042019	04/24/2019	9.3	<0.03
TMW22	TMW22102020	10/01/2020	12	<0.30
	TMW22042020	04/23/2020	11.2	<0.06
	TMW22102019	10/04/2019	11.9	<0.15
	TMW22042019	04/26/2019	13.7	<0.06

TABLE B-1: SUMMARY OF NITRATE-N AND NITRITE-N ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Nitrate as Nitrogen	Nitrite as Nitrogen
			mg/L	
SL			10	1
TMW23	TMW23102020	10/01/2020	20	<0.12
	TMW23042020	04/23/2020	19.9	<0.06
	TMW23102019	10/03/2019	21	<0.06
	TMW23042019	04/26/2019	23.9	<0.30
TMW24	TMW24102020	10/01/2020	0.17 J	<0.60
	TMW24042020	04/22/2020	<0.06	<0.15
	TMW24102019	10/02/2019	<0.06	<0.15
	TMW24042019	04/12/2019	0.49 J	<0.15
TMW25	TMW25102020	10/07/2020	0.29	<0.12
	TMW25042020	05/01/2020	0.31	<0.06
	TMW25102019	10/07/2019	0.36	<0.06
	TMW25042019	04/27/2019	0.26 J	<0.12
TMW26	TMW26102020	09/30/2020	3.9	<0.30
	TMW26042020	04/21/2020	<0.06	<0.15
	TMW26042020DUP	04/21/2020	<0.06	<0.06
	TMW26102019	10/01/2019	<0.06	<0.06
	TMW26042019	04/11/2019	<0.24	<0.24
TMW27	TMW27042020	04/24/2020	<0.06	<0.12
TMW28	TMW28102020	10/02/2020	0.075 J	<0.12
	TMW28042020	04/24/2020	0.081 J	<0.06
	TMW28102019	10/03/2019	0.13 J	<0.06
	TMW28042019	04/17/2019	<0.03	<0.15
TMW29	TMW29102020	10/01/2020	3.4	<0.12
	TMW29042020	04/22/2020	3.4	<0.06
	TMW29102019	10/03/2019	3.4	<0.06
	TMW29102019DUP	10/03/2019	3.5	<0.06
	TMW29042019	04/12/2019	2.8	<0.15
TMW31S	TMW31S102020	10/01/2020	6.7	<0.12
	TMW31S042020	04/23/2020	6.3	<0.06
	TMW31S102019	10/08/2019	6.8	<0.06
	TMW31S042019	04/29/2019	8.5	<0.03

TABLE B-1: SUMMARY OF NITRATE-N AND NITRITE-N ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Nitrate as Nitrogen	Nitrite as Nitrogen
			mg/L	
SL			10	1
TMW33	TMW33102020	10/01/2020	<0.06	<0.60
	TMW33042020	04/22/2020	<0.06	<0.15
	TMW33102019	10/02/2019	<0.06	<0.15
	TMW33042019	04/26/2019	<0.12	<0.30
TMW34	TMW34102020	10/05/2020	66.9	<0.30
	TMW34042020	04/24/2020	61	<0.15
	TMW34042020DUP	04/24/2020	60.2	<0.15
	TMW34102019	10/04/2019	64.5	<0.06
	TMW34102019DUP	10/04/2019	63.8	<0.06
	TMW34042019	04/26/2019	34.4	<0.06
TMW35	TMW35102020	10/06/2020	7.4	<0.30
	TMW35042020	04/29/2020	8.1	<0.06
	TMW35102019	10/08/2019	8.2	<0.15
	TMW35042019	04/17/2019	7.8	<0.30
TMW39S	TMW39S102020	10/01/2020	8.1	<0.30
	TMW39S042020	04/24/2020	9.0	<0.15
	TMW39S102019	10/08/2019	8.6	<0.06
	TMW39S042019	04/29/2019	9.3	<0.06
TMW40S	TMW40S042020	04/20/2020	147	<0.06
	TMW40S102019	10/02/2019	157	<0.06
	TMW40S042019	04/24/2019	160	<0.30
TMW41	TMW41102020	10/01/2020	4.8	<0.30
	TMW41042020	04/23/2020	4.6	<0.06
	TMW41102019	10/04/2019	5.5	<0.06
	TMW41042019	04/18/2019	5.5	<0.15
TMW43	TMW43102020	10/02/2020	5.8	<0.12
	TMW43042020	04/28/2020	6.7	<0.03
	TMW43102019	10/08/2019	6.0	<0.03
	TMW43042019	04/19/2019	7.5	<0.30

TABLE B-1: SUMMARY OF NITRATE-N AND NITRITE-N ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Nitrate as Nitrogen	Nitrite as Nitrogen
			mg/L	
SL			10	1
TMW44	TMW44102020	09/29/2020	45.5	<0.12
	TMW44042020	04/22/2020	47.8	<0.06
	TMW44102019	10/02/2019	48.1	<0.06
	TMW44042019	04/19/2019	54.3	<0.15
TMW45	TMW45102020	10/05/2020	1.1	<0.30
	TMW45042020	04/27/2020	1.2	<0.06
	TMW45102019	10/04/2019	1.2	<0.15
	TMW45042019	04/18/2019	1.3	<0.15
TMW46	TMW46102020	09/29/2020	73.2	<0.30
	TMW46042020	04/22/2020	73.9	<0.06
	TMW46102019	10/02/2019	76.8	<0.06
	TMW46102019DUP	10/02/2019	78.2	<0.06
	TMW46042019	04/27/2019	97.7	<0.30
TMW47	TMW47102020	10/07/2020	<0.06	<0.06
	TMW47042020	04/24/2020	<0.03	<0.03
	TMW47102019	10/04/2019	0.064 J	<0.06
	TMW47042019	04/16/2019	0.14	<0.15
BEDROCK WELLS				
BGMW07	BGMW07102020	10/05/2020	<0.30	<2.5
	BGMW07042020	04/20/2020	<0.15	<0.60
	BGMW07102019	10/01/2019	<0.15	<0.30
	BGMW07042019	05/03/2019	<0.30	<0.60
BGMW08	BGMW08102020	10/05/2020	0.35	<2.5
	BGMW08042020	04/20/2020	<0.15	<0.30
	BGMW08102019	09/30/2019	<0.15	<0.30
	BGMW08042019	05/02/2019	<0.30	<0.30
BGMW09	BGMW09102020	09/29/2020	0.35	<0.30
	BGMW09042020	04/21/2020	0.26	<0.15
	BGMW09102019	10/04/2019	0.079 J	<0.06
	BGMW09042019	04/29/2019	<0.06	<0.15

TABLE B-1: SUMMARY OF NITRATE-N AND NITRITE-N ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Nitrate as Nitrogen	Nitrite as Nitrogen
			mg/L	
SL			10	1
BGMW10	BGMW10102020	09/29/2020	<0.06	<0.06
	BGMW10042020	04/23/2020	6.0	<0.03
	BGMW10102019	10/04/2019	<0.03	<0.03
	BGMW10042019	04/29/2019	<0.03	<0.03
TMW14A	TMW14A102020	10/02/2020	<0.06	<0.12
	TMW14A042020	04/30/2020	<0.03	<0.06
	TMW14A102019	10/07/2019	<0.03	<0.03
	TMW14A042019	04/16/2019	0.099 J	<0.15
TMW17	TMW17102020	10/02/2020	0.23	<0.12
	TMW17042020	04/30/2020	<0.03	<0.06
	TMW17102019	10/07/2019	<0.03	<0.03
	TMW17042019	04/13/2019	<0.03	<0.15
TMW18	TMW18102020	10/05/2020	0.094 J	<0.12
	TMW18042020	04/20/2020	0.16	<0.03
	TMW18102019	10/01/2019	0.28	<0.03
	TMW18042019	04/18/2019	0.22	<0.15
TMW30	TMW30102020	09/30/2020	14.1	<0.12
	TMW30042020	04/24/2020	12.4	<0.03
	TMW30102019	10/08/2019	13.8	<0.03
	TMW30042019	04/26/2019	15.1	<0.03
TMW31D	TMW31D102020	10/02/2020	11.2	<0.30
	TMW31D042020	04/27/2020	11.4	<0.03
	TMW31D102019	10/09/2019	12.1	<0.06
	TMW31D042019	04/25/2019	13.6	<0.03
	TMW31D042019DUP	04/25/2019	13.4	<0.03
TMW32	TMW32102020	10/07/2020	2.3	<0.12
	TMW32042020	04/29/2020	5.2	<0.06
	TMW32102019	10/08/2019	2.2	<0.06
	TMW32042019	04/19/2019	3.5	<0.30

TABLE B-1: SUMMARY OF NITRATE-N AND NITRITE-N ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Nitrate as Nitrogen	Nitrite as Nitrogen
			mg/L	
SL			10	1
TMW36	TMW36102020	10/05/2020	0.11	<0.12
	TMW36042020	04/20/2020	0.059 J	<0.03
	TMW36102019	09/30/2019	<0.03	<0.03
	TMW36042019	04/17/2019	0.96	<0.15
TMW37	TMW37102020	09/29/2020	0.048 J	<0.30
	TMW37042020	04/20/2020	<0.03	<0.06
	TMW37102019	09/30/2019	<0.03	<0.03
	TMW37042019	04/17/2019	0.078 J	<0.15
	TMW37042019DUP	04/17/2019	<0.03	<0.15
TMW38	TMW38102020	10/06/2020	<0.06	<0.30
	TMW38042020	04/28/2020	0.13	<0.06
	TMW38102019	10/04/2019	<0.03	<0.06
	TMW38042019	04/26/2019	0.057 J	<0.03
	TMW38042019DUP	04/26/2019	0.057 J	<0.03
TMW39D	TMW39D102020	10/07/2020	0.055 J	<0.30
	TMW39D042020	05/01/2020	<0.03	<0.06
	TMW39D102019	10/09/2019	<0.03	<0.15
	TMW39D042019	04/20/2019	0.44	<0.03
TMW40D	TMW40D102020	10/07/2020	1.7	<0.30
	TMW40D042020	05/01/2020	1.8	<0.06
	TMW40D102019	10/10/2019	1.9	0.053 J
	TMW40D042019	04/20/2019	1.9	0.089 J
TMW48	TMW48102020	10/08/2020	11.2	<0.12
	TMW48042020	05/01/2020	9.4	<0.06
	TMW48102019	10/10/2019	12.2	<0.06
	TMW48042019	04/23/2019	13.8	<0.30

TABLE B-1: SUMMARY OF NITRATE-N AND NITRITE-N ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Nitrate as Nitrogen	Nitrite as Nitrogen
			mg/L	
SL			10	1
TMW49	TMW49102020	10/08/2020	3.0	<0.30
	TMW49042020	04/29/2020	1.4	<0.06
	TMW49102019	10/09/2019	4.5	<0.06
	TMW49042019	04/24/2019	6.4	<0.15

NOTES & ABBREVIATIONS:

mg/L = milligrams per liter

< = less than cited Detection Limit; less than Limit of Detection
for October 2020 and newer data

NA = not analyzed

J = estimated value

– = not established or not applicable

SL = screening level

Bold Numbers = Result exceeds cited (lowest) SL

TABLE B-2: SUMMARY OF EXPLOSIVES ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Am-DNT	2-Nitrotoluene	3,5-Dinitroaniline	3-Nitrotoluene	4-Am-DNT	4-Nitrotoluene	HMX	Nitrobenzene	Nitroglycerin	PETN	RDX	Tetryl
			µg/L																
			SL	590	2	9.8	2.4	0.49	39	3.1	38	1.7	39	43	1,000	1.4	2	39	9.7
ALLUVIAL WELLS																			
BGMW01	BGMW01102020	09/30/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	BGMW01042020	04/22/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	BGMW01102019	10/02/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	BGMW01042019	04/11/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
BGMW02	BGMW02102020	09/30/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	BGMW02042020	04/28/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	BGMW02102019	10/06/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	BGMW02042019	04/11/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
BGMW03	BGMW03102020	09/28/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	BGMW03042020	04/21/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	BGMW03102019	09/30/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	BGMW03042019	04/23/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	BGMW03042019DUP	04/23/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
FW31	FW31102020	10/05/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	FW31102020DUP	10/05/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	FW31042020	04/24/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	FW31102019	10/04/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	FW31042019	04/11/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
MW01	MW01102020	09/29/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	MW01042020	04/22/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW01102019	10/01/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW01042019	04/10/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
MW02	MW02102020	09/29/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	MW02042020	04/22/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW02102019	10/02/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW02042019	04/17/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
MW03	MW03102020	10/01/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	MW03042020	04/23/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW03102019	10/03/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW03042019	04/11/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10

TABLE B-2: SUMMARY OF EXPLOSIVES ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Am-DNT	2-Nitrotoluene	3,5-Dinitroaniline	3-Nitrotoluene	4-Am-DNT	4-Nitrotoluene	HMX	Nitrobenzene	Nitroglycerin	PETN	RDX	Tetryl
			µg/L																
			SL	590	2	9.8	2.4	0.49	39	3.1	38	1.7	39	43	1,000	1.4	2	39	9.7
MW18D	MW18D102020	10/06/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	MW18D042020	04/30/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW18D102019	10/07/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW18D042019	04/26/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
MW20	MW20102020	10/05/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	MW20042020	04/28/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW20102019	10/06/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW20042019	04/18/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
MW22D	MW22D102020	10/07/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	MW22D042020	05/01/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW22D102019	10/10/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW22D042019	04/16/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
MW23	MW23102020	09/28/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	MW23042020	04/21/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW23102019	09/30/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW23042019	04/17/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
MW24	MW24102020	09/29/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	MW24042020	04/20/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW24042020DUP	04/20/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW24102019	09/30/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	MW24042019	04/18/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
SMW01	SMW01102020	09/29/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	SMW01042020	04/21/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	1.0
	SMW01102019	10/01/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	SMW01042019	04/11/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW01	TMW01102020	10/01/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW01042020	04/24/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW01102019	10/08/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW01042019	04/18/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10

TABLE B-2: SUMMARY OF EXPLOSIVES ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Am-DNT	2-Nitrotoluene	3,5-Dinitroaniline	3-Nitrotoluene	4-Am-DNT	4-Nitrotoluene	HMX	Nitrobenzene	Nitroglycerin	PETN	RDX	Tetryl
			µg/L																
SL			590	2	9.8	2.4	0.49	39	3.1	38	1.7	39	43	1,000	1.4	2	39	9.7	39
TMW02	TMW02102020	10/02/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW02102020DUP	10/02/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW02042020	04/24/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.28 J	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW02042020DUP	04/24/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.24 J	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW02102019	10/08/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW02042019	04/18/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW02042019DUP	04/18/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW03	TMW03102020	10/07/2020	0.62 J	<0.20	<0.20	0.43 J	<0.20	0.53 J	<0.20	5.9	<0.20	1.1	<0.20	6.0	<0.20	<62	<62	390	<0.20
	TMW03042020	05/01/2020	0.76 J	<0.10	<0.10	0.33 J	<0.10	0.67 J	<0.10	5.0	<0.10	0.96 J	<0.10	5.4	<0.10	<31	<31	400	<0.10
	TMW03102019	10/09/2019	0.68 J	<0.10	<0.10	<0.10	<0.10	0.52 J	<0.10	5.4	<0.10	0.82 J	<0.10	4.9	<0.10	<31	<31	330 E	<0.10
	TMW03102019DUP	10/09/2019	0.66 J	<0.10	<0.10	<0.10	<0.10	0.36 J	<0.10	5.1	<0.10	0.76 J	<0.10	5.1	<0.10	<31	<31	320	<0.10
	TMW03042019	04/19/2019	0.87 J	<0.10	<0.10	0.86 J	0.81 J	1.1	<0.10	5.8	<0.10	0.45 J	<0.10	5.5	<0.10	<31	<31	330	<0.10
TMW04	TMW04102020	10/02/2020	2.0	<0.20	<0.20	<0.20	<0.20	0.95 J	<0.20	0.96	<0.20	1.2	<0.20	<0.20	<0.20	<62	<62	2.1	<0.20
	TMW04042020	04/27/2020	2.0	<0.10	<0.10	<0.10	<0.10	0.53 J	<0.10	0.51	<0.10	0.95 J	<0.10	<0.10	<0.10	<31	<31	2.1	<0.10
	TMW04102019	10/09/2019	1.5	<0.10	<0.10	<0.10	<0.10	1.2	<0.10	0.95	<0.10	1.3	<0.10	<0.10	<0.10	<31	<31	1.4	<0.10
	TMW04042019	04/19/2019	2.3	<0.10	<0.10	<0.10	<0.10	0.99 J	<0.10	0.85	<0.10	1.3	<0.10	<0.10	<0.10	<31	<31	1.9	<0.10
TMW06	TMW06102020	10/06/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW06042020	04/28/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW06102019	10/06/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW06102019DUP	10/06/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW06042019	04/15/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW07	TMW07102020	10/01/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW07102020DUP	10/01/2020	<0.10	<0.10	<0.10	<0.10	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<62.5	<62.5	<0.10	<0.10
	TMW07042020	04/21/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW07102019	09/30/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW07042019	04/23/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW10	TMW10102020	10/01/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW10042020	04/23/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW10102019	10/03/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW10042019	04/22/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10

TABLE B-2: SUMMARY OF EXPLOSIVES ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Am-DNT	2-Nitrotoluene	3,5-Dinitroaniline	3-Nitrotoluene	4-Am-DNT	4-Nitrotoluene	HMX	Nitrobenzene	Nitroglycerin	PETN	RDX	Tetryl
			µg/L																
			SL	590	2	9.8	2.4	0.49	39	3.1	38	1.7	39	43	1,000	1.4	2	39	9.7
TMW11	TMW11042020	04/20/2020	<0.10	<0.10	<0.10	<0.10	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<62.5	<62.5	<0.10	<0.10
	TMW11102019	10/02/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW11042019	04/19/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW13	TMW13042019	04/17/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW15	TMW15102020	10/05/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW15102020DUP	10/05/2020	<0.10	<0.10	<0.10	<0.10	<0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<62.5	<62.5	<0.10	<0.10
	TMW15042020	04/27/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW15042020DUP	04/27/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW15102019	10/04/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW21	TMW15042019	04/17/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW21102020	10/07/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW21042020	04/27/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW21102019	10/08/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW21102019DUP	10/08/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW22	TMW21042019	04/23/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW22102020	10/01/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW22042020	04/23/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW22102019	10/04/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW23	TMW22042019	04/25/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW23102020	10/01/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	62	<0.20
	TMW23042020	04/23/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	37	<0.10
	TMW23102019	10/03/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	42	<0.10
TMW24	TMW23042019	04/25/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	35	<0.10
	TMW24102020	10/01/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW24042020	04/22/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW24102019	10/02/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW25	TMW24042019	04/11/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW25102020	10/07/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW25042020	05/01/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW25102019	10/07/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW25042019	04/26/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10

TABLE B-2: SUMMARY OF EXPLOSIVES ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Am-DNT	2-Nitrotoluene	3,5-Dinitroaniline	3-Nitrotoluene	4-Am-DNT	4-Nitrotoluene	HMX	Nitrobenzene	Nitroglycerin	PETN	RDX	Tetryl
			µg/L																
SL			590	2	9.8	2.4	0.49	39	3.1	38	1.7	39	43	1,000	1.4	2	39	9.7	39
TMW26	TMW26102020	09/30/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW26042020	04/21/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW26042020DUP	04/21/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW26102019	10/01/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW26042019	04/10/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW29	TMW29102020	10/01/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW29042020	04/22/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW29102019	10/03/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW29102019DUP	10/03/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW29042019	04/11/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW31S	TMW31S102020	10/01/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW31S042020	04/23/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW31S102019	10/08/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW31S042019	04/27/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW35	TMW35102019	10/08/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW39S	TMW39S102020	10/01/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW39S042020	04/24/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW39S102019	10/08/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW39S042019	04/27/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW40S	TMW40S042020	04/20/2020	1.1	<0.10	<0.10	<0.10	<0.10	0.45 J	<0.10	8.7	<0.10	<0.10	<0.10	18	<0.10	<31	<31	890	<0.10
	TMW40S102019	10/02/2019	0.34 J	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	9.6	<0.10	<0.10	<0.10	21	<0.10	<31	<31	940	<0.10
	TMW40S042019	04/23/2019	12	<0.10	<0.10	<0.10	<0.10	0.81 J	<0.10	15	<0.10	0.91 J	<0.10	20	<0.10	<31	<31	880	<0.10
TMW41	TMW41102020	10/01/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW41042020	04/23/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW41102019	10/04/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW41042019	04/17/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW43	TMW43102020	10/02/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	1.9	<0.20
	TMW43042020	04/28/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	1.8	<0.10
	TMW43102019	10/08/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	1.4	<0.10
	TMW43042019	04/18/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	2.8	<0.10

TABLE B-2: SUMMARY OF EXPLOSIVES ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Am-DNT	2-Nitrotoluene	3,5-Dinitroaniline	3-Nitrotoluene	4-Am-DNT	4-Nitrotoluene	HMX	Nitrobenzene	Nitroglycerin	PETN	RDX	Tetryl
			µg/L																
			SL	590	2	9.8	2.4	0.49	39	3.1	38	1.7	39	43	1,000	1.4	2	39	9.7
TMW44	TMW44102020	09/29/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW44042020	04/22/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW44102019	10/02/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW44042019	04/18/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW45	TMW45102020	10/05/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW45042020	04/27/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW45102019	10/04/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW45042019	04/17/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW46	TMW46102020	09/29/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW46042020	04/22/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW46102019	10/02/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW46102019DUP	10/02/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW46042019	04/26/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW47	TMW47102020	10/07/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW47042020	04/24/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.34 J	<31	<31	<0.10	<0.10
	TMW47102019	10/04/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW47042019	04/15/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
BEDROCK WELLS																			
BGMW07	BGMW07102020	09/28/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	BGMW07042020	04/20/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	BGMW07102019	10/01/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	BGMW07042019	05/02/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
BGMW08	BGMW08102020	09/28/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	BGMW08042020	04/20/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	BGMW08102019	09/30/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	BGMW08042019	04/28/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
BGMW09	BGMW09102020	09/29/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	BGMW09042020	04/21/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	BGMW09102019	10/04/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	BGMW09042019	04/27/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10

TABLE B-2: SUMMARY OF EXPLOSIVES ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Am-DNT	2-Nitrotoluene	3,5-Dinitroaniline	3-Nitrotoluene	4-Am-DNT	4-Nitrotoluene	HMX	Nitrobenzene	Nitroglycerin	PETN	RDX	Tetryl
			µg/L																
			SL	590	2	9.8	2.4	0.49	39	3.1	38	1.7	39	43	1,000	1.4	2	39	9.7
BGMW10	BGMW10102020	09/29/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	BGMW10042020	04/23/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	BGMW10102019	10/04/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	BGMW10042019	04/27/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW14A	TMW14A102020	10/02/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW14A042020	04/30/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW14A102019	10/07/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW14A042019	04/15/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW16	TMW16102020	09/28/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW16042020	04/20/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW16102019	10/02/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW16042019	04/19/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW16042019DUP	04/19/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW18	TMW18102020	09/28/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW18042020	04/20/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW18102019	10/01/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW18042019	04/17/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW19	TMW19102020	09/28/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW19102020DUP	09/28/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW19042020	04/21/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW19102019	10/03/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW19042019	04/15/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW30	TMW30102020	09/30/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW30042020	04/24/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.42	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW30102019	10/08/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW30042019	04/25/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW31D	TMW31D102020	10/02/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW31D042020	04/27/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW31D102019	10/09/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW31D042019	04/24/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10

TABLE B-2: SUMMARY OF EXPLOSIVES ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Am-DNT	2-Nitrotoluene	3,5-Dinitroaniline	3-Nitrotoluene	4-Am-DNT	4-Nitrotoluene	HMX	Nitrobenzene	Nitroglycerin	PETN	RDX	Tetryl
			µg/L																
			SL	590	2	9.8	2.4	0.49	39	3.1	38	1.7	39	43	1,000	1.4	2	39	9.7
TMW32	TMW32102020	10/07/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW32042020	04/29/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW32102019	10/08/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW32042019	04/18/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW36	TMW36102020	09/28/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW36042020	04/20/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW36102019	09/30/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW36042019	04/16/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW37	TMW37102020	09/29/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW37042020	04/20/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW37102019	09/30/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW37042019	04/16/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW37042019DUP	04/16/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW38	TMW38102020	10/06/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	4.6	<62	<62	<0.20	<0.20
	TMW38042020	04/28/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW38102019	10/04/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW38042019	04/25/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW38042019DUP	04/25/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW39D	TMW39D102020	10/07/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW39D042020	05/01/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW39D102019	10/09/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW39D042019	04/19/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW40D	TMW40D102020	10/07/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW40D042020	05/01/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW40D102019	10/10/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW40D042019	04/19/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
TMW48	TMW48102020	10/08/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<62	<62	<0.20	<0.20
	TMW48042020	05/01/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW48102019	10/10/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW48042019	04/22/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10

TABLE B-2: SUMMARY OF EXPLOSIVES ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Am-DNT	2-Nitrotoluene	3,5-Dinitroaniline	3-Nitrotoluene	4-Am-DNT	4-Nitrotoluene	HMX	Nitrobenzene	Nitroglycerin	PETN	RDX	Tetryl
			µg/L																
			SL	590	2	9.8	2.4	0.49	39	3.1	38	1.7	39	43	1,000	1.4	2	39	9.7
TMW49	TMW49102020	10/08/2020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.47 J	<62	<62	<0.20	<0.20
	TMW49042020	04/29/2020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW49102019	10/09/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10
	TMW49042019	04/23/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<31	<31	<0.10	<0.10

NOTES & ABBREVIATIONS:

µg/L = micrograms per liter
< = less than cited Detection Limit; less than Limit of Detection for October 2020 and newer data
NA = not analyzed
J = estimated value
Q = One or more quality control criteria failed
E = Indicates that the result is above the maximum calibration range or estimated value.

2-Am-DNT = 2-Amino-4,6-dinitrotoluene
4-Am-DNT = 4-Amino-2,6-dinitrotoluene
HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
– = not established or not applicable
SL = Region 6 regional screening levels (USEPA, 2018)

PETN = Pentaerythritol tetranitrate
R = (Rejected) The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine
Tetryl = Methyl-2,4,6-trinitrophenylnitramine
Bold Numbers = Result exceeds cited SL

TABLE B-3: SUMMARY OF PERCHLORATE ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Perchlorate
			µg/L
SL			15
ALLUVIAL WELLS			
BGMW01	BGMW01102020	09/30/2020	0.17 J
	BGMW01042020	04/22/2020	0.35 J
	BGMW01102019	10/02/2019	<0.05
	BGMW01042019	04/15/2019	<0.05
BGMW02	BGMW02102020	09/30/2020	0.50
	BGMW02042020	04/28/2020	0.66
	BGMW02102019	10/06/2019	0.33
	BGMW02042019	04/15/2019	0.45
BGMW03	BGMW03102020	09/28/2020	0.15 J
	BGMW03042020	04/21/2020	0.28 J
	BGMW03102019	09/30/2019	<0.10
	BGMW03042019	04/25/2019	<0.10
	BGMW03042019DUP	04/25/2019	<0.10
MW01	MW01102020	09/29/2020	<0.10
	MW01042020	04/22/2020	<0.25
	MW01102019	10/01/2019	<0.10
	MW01042019	04/15/2019	<0.25
MW02	MW02102020	09/29/2020	<0.10
	MW02042020	04/22/2020	<0.25
	MW02102019	10/02/2019	<0.10
	MW02042019	04/22/2019	<0.13
MW03	MW03102020	10/01/2020	<0.10
	MW03042020	04/23/2020	<0.05
	MW03102019	10/03/2019	<0.05
	MW03042019	04/15/2019	<0.05
MW18D	MW18D102020	10/06/2020	<0.10
	MW18D042020	04/30/2020	<0.05
	MW18D102019	10/07/2019	<0.10
	MW18D042019	04/30/2019	<0.05
MW20	MW20102020	10/05/2020	0.21
	MW20042020	04/28/2020	<0.05
	MW20102019	10/06/2019	0.16 J
	MW20042019	04/22/2019	0.35

TABLE B-3: SUMMARY OF PERCHLORATE ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Perchlorate µg/L
SL			15
MW22D	MW22D102020	10/07/2020	1.7
	MW22D042020	05/01/2020	1.8
	MW22D102019	10/10/2019	1.6
	MW22D042019	04/17/2019	1.3
MW23	MW23102020	09/28/2020	<0.50
	MW23042020	04/21/2020	0.30 J
	MW23102019	09/30/2019	<0.10
	MW23042019	04/22/2019	<0.25
MW24	MW24102020	09/29/2020	<0.50
	MW24042020	04/20/2020	<0.25
	MW24042020DUP	04/20/2020	<0.25
	MW24102019	09/30/2019	<0.10
	MW24042019	04/23/2019	<0.25
SMW01	SMW01102020	09/29/2020	<0.10
	SMW01042020	04/21/2020	<0.25
	SMW01102019	10/01/2019	<0.10
	SMW01042019	04/15/2019	<0.05
TMW01	TMW01102020	10/01/2020	247
	TMW01042020	04/24/2020	255
	TMW01102019	10/08/2019	254
	TMW01042019	04/23/2019	276
TMW02	TMW02102020	10/02/2020	4.7
	TMW02102020DUP	10/02/2020	4.7
	TMW02042020	04/24/2020	5.0
	TMW02042020DUP	04/24/2020	4.5
	TMW02102019	10/08/2019	4.5
	TMW02042019	04/22/2019	3.9
	TMW02042019DUP	04/22/2019	4.1
TMW03	TMW03102020	10/07/2020	0.72
	TMW03042020	05/01/2020	0.77 J
	TMW03102019	10/09/2019	1.8
	TMW03102019DUP	10/09/2019	1.5
	TMW03042019	04/22/2019	0.69

TABLE B-3: SUMMARY OF PERCHLORATE ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Perchlorate
			µg/L
SL			15
TMW04	TMW04102020	10/02/2020	0.36
	TMW04042020	04/27/2020	0.25
	TMW04102019	10/09/2019	0.71
	TMW04042019	04/23/2019	0.44 J
TMW08	TMW08102020	09/30/2020	<0.10
	TMW08042020	04/23/2020	<0.05
	TMW08102019	10/03/2019	<0.05
	TMW08042019	04/17/2019	<0.05
TMW10	TMW10102020	10/01/2020	<0.10
	TMW10042020	04/23/2020	<0.05
	TMW10102019	10/03/2019	<0.05
	TMW10042019	04/25/2019	<0.05
TMW11	TMW11042020	04/20/2020	<0.50
	TMW11102019	10/02/2019	<0.10
	TMW11042019	04/22/2019	0.096 J
TMW13	TMW13102020	10/06/2020	0.064 J
	TMW13102020DUP	10/06/2020	<0.10
	TMW13042020	04/28/2020	<0.25
	TMW13042020DUP	04/28/2020	<0.25
	TMW13102019	10/06/2019	<0.05
	TMW13102019DUP	10/06/2019	<0.10
	TMW13042019	04/18/2019	<0.05
TMW15	TMW15102020	10/05/2020	<0.10
	TMW15102020DUP	10/05/2020	<0.10
	TMW15042020	04/27/2020	<0.05
	TMW15042020DUP	04/27/2020	<0.05
	TMW15102019	10/04/2019	<0.10
	TMW15042019	04/18/2019	<0.05
TMW21	TMW21102020	10/07/2020	<0.10
	TMW21042020	04/27/2020	<0.05
	TMW21102019	10/08/2019	0.26 J
	TMW21102019DUP	10/08/2019	0.29 J
	TMW21042019	04/30/2019	<0.25

TABLE B-3: SUMMARY OF PERCHLORATE ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Perchlorate µg/L
SL			15
TMW22	TMW22102020	10/01/2020	<0.10
	TMW22042020	04/23/2020	<0.05
	TMW22102019	10/04/2019	<0.05
	TMW22042019	04/30/2019	<0.05
TMW23	TMW23102020	10/01/2020	<0.50
	TMW23042020	04/23/2020	<0.05
	TMW23102019	10/03/2019	<0.05
	TMW23042019	04/30/2019	<0.05
TMW24	TMW24102020	10/01/2020	<0.10
	TMW24042020	04/22/2020	<0.25
	TMW24102019	10/02/2019	<0.05
	TMW24042019	04/15/2019	<0.05
TMW26	TMW26102020	09/30/2020	<0.10
	TMW26042020	04/21/2020	<0.25
	TMW26042020DUP	04/21/2020	<0.25
	TMW26102019	10/01/2019	<0.10
	TMW26042019	04/15/2019	<0.25
TMW27	TMW27102020	10/02/2020	<0.50
	TMW27102020DUP	10/02/2020	<0.25
	TMW27042020	04/24/2020	<0.25
	TMW27102019	10/09/2019	<0.50
	TMW27042019	04/15/2019	<0.25
	TMW27042019DUP	04/15/2019	<0.25
TMW29	TMW29102020	10/01/2020	<0.10
	TMW29042020	04/22/2020	0.32 J
	TMW29102019	10/03/2019	<0.10
	TMW29102019DUP	10/03/2019	<0.10
	TMW29042019	04/15/2019	<0.05
TMW31S	TMW31S102020	10/01/2020	518
	TMW31S042020	04/23/2020	477
	TMW31S102019	10/08/2019	544
	TMW31S042019	05/02/2019	558

TABLE B-3: SUMMARY OF PERCHLORATE ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Perchlorate
			µg/L
SL			15
TMW34	TMW34102020	10/05/2020	0.25
	TMW34042020	04/24/2020	0.24
	TMW34042020DUP	04/24/2020	0.23
	TMW34102019	10/04/2019	<0.10
	TMW34102019DUP	10/04/2019	0.19 J
	TMW34042019	04/30/2019	0.25
TMW35	TMW35102020	10/06/2020	<0.10
	TMW35042020	04/29/2020	<0.05
	TMW35102019	10/08/2019	0.32 J
	TMW35042019	04/17/2019	<0.05
TMW39S	TMW39S102020	10/01/2020	657
	TMW39S042020	04/24/2020	732
	TMW39S102019	10/08/2019	755
	TMW39S042019	05/02/2019	720
TMW40S	TMW40S042020	04/20/2020	1.7
	TMW40S102019	10/02/2019	0.87
	TMW40S042019	04/25/2019	2.3
TMW41	TMW41102020	10/01/2020	9.1
	TMW41042020	04/23/2020	11.4
	TMW41102019	10/04/2019	7.4
	TMW41042019	04/18/2019	7.3
TMW43	TMW43102020	10/02/2020	<0.10
	TMW43042020	04/28/2020	<0.05
	TMW43102019	10/08/2019	0.22 J
	TMW43042019	04/22/2019	<0.05
TMW44	TMW44102020	09/29/2020	<0.10
	TMW44042020	04/22/2020	0.71 J
	TMW44102019	10/02/2019	<0.10
	TMW44042019	04/22/2019	<0.05
TMW45	TMW45102020	10/05/2020	<0.10
	TMW45042020	04/27/2020	<0.05
	TMW45102019	10/04/2019	<0.05
	TMW45042019	04/18/2019	<0.05

TABLE B-3: SUMMARY OF PERCHLORATE ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Perchlorate
			µg/L
SL			15
TMW46	TMW46102020	09/29/2020	0.16 J
	TMW46042020	04/22/2020	0.34 J
	TMW46102019	10/02/2019	0.15 J
	TMW46102019DUP	10/02/2019	<0.10
	TMW46042019	04/30/2019	0.16 J
TMW47	TMW47102020	10/07/2020	<0.10
	TMW47042020	04/24/2020	<0.05
	TMW47102019	10/04/2019	<0.10
	TMW47042019	04/17/2019	<0.05
BEDROCK WELLS			
BGMW07	BGMW07102020	09/28/2020	<0.10
	BGMW07042020	04/20/2020	<0.05
	BGMW07102019	10/01/2019	<0.05
	BGMW07042019	05/08/2019	0.081 J
BGMW08	BGMW08102020	09/28/2020	<0.10
	BGMW08042020	04/20/2020	<0.05
	BGMW08102019	09/30/2019	<0.05
	BGMW08042019	04/30/2019	<0.05
BGMW09	BGMW09102020	09/29/2020	<0.10
	BGMW09042020	04/21/2020	<0.05
	BGMW09102019	10/04/2019	<0.05
	BGMW09042019	04/30/2019	<0.05
BGMW10	BGMW10102020	09/29/2020	<0.10
	BGMW10042020	04/23/2020	<0.05
	BGMW10102019	10/04/2019	<0.05
	BGMW10042019	04/30/2019	<0.05
TMW16	TMW16102020	09/28/2020	<0.50
	TMW16042020	04/20/2020	<0.25
	TMW16102019	10/02/2019	<0.10
	TMW16042019	04/23/2019	<0.25
	TMW16042019DUP	04/23/2019	<0.25
TMW17	TMW17102020	10/02/2020	<0.20
	TMW17042020	04/30/2020	<0.05
	TMW17102019	10/07/2019	0.29 J
	TMW17042019	04/15/2019	<0.05

TABLE B-3: SUMMARY OF PERCHLORATE ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Perchlorate
			µg/L
SL			15
TMW18	TMW18102020	09/28/2020	<0.10
	TMW18042020	04/20/2020	<0.05
	TMW18102019	10/01/2019	<0.05
	TMW18042019	04/18/2019	<0.05
TMW19	TMW19102020	09/28/2020	<0.10
	TMW19102020DUP	09/28/2020	<0.05
	TMW19042020	04/21/2020	<0.05
	TMW19102019	10/03/2019	<0.05
	TMW19042019	04/17/2019	<0.05
TMW30	TMW30102020	09/30/2020	499
	TMW30042020	04/24/2020	762
	TMW30102019	10/08/2019	857
	TMW30042019	04/30/2019	799
TMW31D	TMW31D102020	10/02/2020	802
	TMW31D042020	04/27/2020	613
	TMW31D102019	10/09/2019	903
	TMW31D042019	04/30/2019	929
TMW32	TMW32102020	10/07/2020	454
	TMW32042020	04/29/2020	335
	TMW32102019	10/08/2019	352
	TMW32042019	04/23/2019	429
TMW36	TMW36102020	09/28/2020	<0.10
	TMW36042020	04/20/2020	<0.05
	TMW36102019	09/30/2019	<0.10
	TMW36042019	04/17/2019	<0.05
TMW37	TMW37102020	09/29/2020	<0.10
	TMW37042020	04/20/2020	<0.05
	TMW37102019	09/30/2019	<0.05
	TMW37042019	04/17/2019	<0.05
	TMW37042019DUP	04/17/2019	<0.05
TMW38	TMW38102020	10/06/2020	<0.10
	TMW38042020	04/28/2020	<0.05
	TMW38102019	10/04/2019	<0.05
	TMW38042019	04/30/2019	<0.05
	TMW38042019DUP	04/30/2019	<0.05

TABLE B-3: SUMMARY OF PERCHLORATE ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Perchlorate
			µg/L
SL			15
TMW39D	TMW39D102020	10/07/2020	0.32
	TMW39D042020	05/01/2020	1.1
	TMW39D102019	10/09/2019	59.7
	TMW39D042019	04/23/2019	33.9
TMW40D	TMW40D102020	10/07/2020	302
	TMW40D042020	05/01/2020	244
	TMW40D102019	10/10/2019	341
	TMW40D042019	04/23/2019	260
TMW48	TMW48102020	10/08/2020	746
	TMW48042020	05/01/2020	1,060
	TMW48102019	10/10/2019	1,780
	TMW48042019	04/25/2019	973
TMW49	TMW49102020	10/08/2020	336
	TMW49042020	04/29/2020	1,070
	TMW49102019	10/09/2019	1,580
	TMW49042019	04/25/2019	1,080

NOTES & ABBREVIATIONS:

µg/L = micrograms per liter

< = less than cited Detection Limit; less than
Limit of Detection for October 2020 and
newer data

NA = not analyzed

J = estimated value

M = Manual integrated compound

– = not established or not applicable

SL = Screening Level

**Bold
Numbers** = Result exceeds cited SL

TABLE B-4: SUMMARY OF VOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,2-Dichloroethane	1,3-Dichlorobenzene	Acetone	Carbon Disulfide	Chloroform	Chloromethane	Methylene chloride	MTBE	Toluene
SL			5	75	14,000	810	80	190	5	100	1,000
ALLUVIAL WELLS											
BGMW01	BGMW01102020	09/30/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	BGMW01042020	04/22/2020	<0.10	<0.10	14 J	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	BGMW01102019	10/02/2019	<0.10	0.15 J	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	BGMW01042019	04/11/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
BGMW02	BGMW02102020	09/30/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	BGMW02042020	04/28/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	BGMW02102019	10/06/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	BGMW02042019	04/11/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
BGMW03	BGMW03102020	09/28/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	1.0 J	<0.30	<0.20
	BGMW03042020	04/21/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	BGMW03102019	09/30/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	BGMW03042019	04/23/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	0.14 J
FW31	BGMW03042019DUP	04/23/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	0.12 J
	FW31102020	10/05/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	FW31102020DUP	10/05/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	FW31042020	04/24/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
MW01	FW31102019	10/04/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	FW31042019	04/11/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	MW01102020	09/29/2020	0.48 J	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	MW01042020	04/22/2020	0.41 J	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	0.15 J	<0.10
MW02	MW01102019	10/01/2019	0.41 J	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	MW01042019	04/10/2019	0.96 J	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	MW02102020	09/29/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	MW02042020	04/22/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
MW03	MW02102019	10/02/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	MW02042019	04/17/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	MW03102020	10/01/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	MW03042020	04/23/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
MW18D	MW03102019	10/03/2019	0.12 J	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	MW03042019	04/11/2019	0.14 J	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	MW18D102020	10/06/2020	110	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	MW18D042020	04/30/2020	93	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
MW20	MW18D102019	10/07/2019	98	<1.0	<50	<2.5	<1.0	<2.5	<5.0	<1.5	<1.0
	MW18D042019	04/26/2019	100	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	MW20102020	10/05/2020	1.5	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	MW20042020	04/28/2020	1.8	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
MW22D	MW20102019	10/06/2019	1.4	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	MW20042019	04/18/2019	1.4	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	MW22D102020	10/07/2020	0.34 J	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	MW22D042020	05/01/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
MW22D	MW22D102019	10/10/2019	0.35 J	<0.10	<5.0	<0.25	<0.10	<0.25	0.59 J	<0.15	<0.10
	MW22D042019	04/16/2019	0.41 J	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10

TABLE B-4: SUMMARY OF VOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,2-Dichloroethane	1,3-Dichlorobenzene	Acetone	Carbon Disulfide	Chloroform	Chloromethane	Methylene chloride	MTBE	Toluene
			µg/L								
	SL		5	75	14,000	810	80	190	5	100	1,000
MW23	MW23102020	09/28/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	MW23042020	04/21/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	MW23102019	09/30/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	MW23042019	04/17/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
MW24	MW24102020	09/29/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	MW24042020	04/20/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	MW24042020DUP	04/20/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	MW24102019	09/30/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
SMMV01	MW24042019	04/18/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	SMMV01102020	09/29/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	SMMV01042020	04/21/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	SMMV01102019	10/01/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMMV01	SMMV01042019	04/11/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMMV01102020	10/01/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMMV01042020	04/24/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMMV01102019	10/08/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMMV02	TMMV01042019	04/18/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMMV02102020	10/02/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMMV02102020DUP	10/02/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMMV02042020	04/24/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMMV03	TMMV02042020DUP	04/24/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMMV02102019	10/08/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMMV02042019	04/18/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMMV02042019DUP	04/18/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMMV04	TMMV03102020	10/07/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMMV03042020	05/01/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMMV03102019	10/09/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	0.55 J	<0.15	<0.10
	TMMV03102019DUP	10/09/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	0.60 J	<0.15	<0.10
TMMV06	TMMV03042019	04/19/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMMV04102020	10/02/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMMV04042020	04/27/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMMV04102019	10/26/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMMV07	TMMV04042019	04/19/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMMV06102020	10/06/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMMV06042020	04/28/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMMV06102019	10/06/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMMV07	TMMV06102019DUP	10/06/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMMV06042019	04/15/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMMV07102020	10/01/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMMV07102020DUP	10/01/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMMV07	TMMV07042020	04/21/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMMV07102019	09/30/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMMV07042019	04/23/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10

TABLE B-4: SUMMARY OF VOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,2-Dichloroethane	1,3-Dichlorobenzene	Acetone	Carbon Disulfide	Chloroform	Chloromethane	Methylene chloride	MTBE	Toluene
SL			5	75	14,000	810	80	190	5	100	1,000
TMW08	TMW08102020	09/30/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW08042020	04/23/2020	<0.10	<0.10	9.8 J	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW08102019	10/03/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW08042019	04/15/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW10	TMW10102020	10/01/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW10042020	04/23/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW10102019	10/03/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW10042019	04/22/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW11	TMW11042020	04/20/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW11102019	10/02/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW11042019	04/19/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW13102020	10/06/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
TMW13	TMW13102020DUP	10/06/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW13042020	04/28/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW13042020DUP	04/28/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW13102019	10/06/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW13102019DUP	10/06/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW13042019	04/17/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW15	TMW15102020	10/05/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW15102020DUP	10/05/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW15042020	04/27/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW15042020DUP	04/27/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW15102019	10/04/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW15042019	04/17/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW21	TMW21102020	10/07/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW21042020	04/27/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW21102019	10/08/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW21102019DUP	10/08/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW21042019	04/23/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW22	TMW22102020	10/01/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW22042020	04/23/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW22102019	10/04/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW22042019	04/25/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW23	TMW23102020	10/01/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW23042020	04/23/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW23102019	10/03/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW23042019	04/25/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW24	TMW24102020	10/01/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW24042020	04/22/2020	<0.10	<0.10	<5.0	0.29 J	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW24102019	10/02/2019	<0.10	0.11 J	<5.0	0.75 J	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW24042019	04/11/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10

TABLE B-4: SUMMARY OF VOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,2-Dichloroethane	1,3-Dichlorobenzene	Acetone	Carbon Disulfide	Chloroform	Chloromethane	Methylene chloride	MTBE	Toluene
			µg/L								
			SL	5	75	14,000	810	80	190	5	100
TMW25	TMW25102020	10/07/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW25042020	05/01/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW25102019	10/07/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW25042019	04/26/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW26	TMW26102020	09/30/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW26042020	04/21/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW26042020DUP	04/21/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW26102019	10/01/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW27	TMW26042019	04/10/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW27102020	10/02/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	0.58 J	<0.30	<0.20
	TMW27102020DUP	10/02/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW27042020	04/24/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW27102019	10/09/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW27042019	04/10/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW28	TMW27042019DUP	04/10/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW28102020	10/02/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW28042020	04/24/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW28102019	10/03/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW29	TMW28042019	04/16/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW29102020	10/01/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW29042020	04/22/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW29102019	10/03/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW29102019DUP	10/03/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW31S	TMW29042019	04/11/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW31S102020	10/01/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW31S042020	04/23/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW31S102019	10/08/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW33	TMW31S042019	04/27/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW33102020	10/01/2020	45	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW33042020	04/22/2020	63	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW33102019	10/02/2019	44	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW34	TMW33042019	04/25/2019	42	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW34102020	10/05/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW34042020	04/24/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW34042020DUP	04/24/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW34102019	10/04/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW35	TMW34102019DUP	10/04/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW34042019	04/25/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW35102020	10/06/2020	0.78 J	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW35042020	04/29/2020	0.82 J	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW35102019	10/08/2019	0.74 J	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW35042019	04/16/2019	0.87 J	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10

TABLE B-4: SUMMARY OF VOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,2-Dichloroethane	1,3-Dichlorobenzene	Acetone	Carbon Disulfide	Chloroform	Chloromethane	Methylene chloride	MTBE	Toluene
SL			5	75	14,000	810	80	190	5	100	1,000
TMW39S	TMW39S102020	10/01/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW39S042020	04/24/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW39S102019	10/08/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW39S042019	04/27/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	0.47 J
TMW40S	TMW40S042020	04/20/2020	<0.10	<0.10	<5.0	<0.25	0.21 J	<0.25	<0.50	<0.15	<0.10
	TMW40S102019	10/02/2019	<0.10	<0.10	<5.0	<0.25	0.15 J	<0.25	<0.50	<0.15	<0.10
	TMW40S042019	04/23/2019	<0.10	<0.10	6.6 J	<0.25	0.14 J	<0.25	<0.50	<0.15	0.18 J
TMW41	TMW41102020	10/01/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW41042020	04/23/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW41102019	10/04/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW41042019	04/17/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	0.14 J
TMW43	TMW43102020	10/02/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW43042020	04/28/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW43102019	10/08/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW43042019	04/18/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW44	TMW44102020	09/29/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW44042020	04/22/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW44102019	10/02/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW44042019	04/18/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW45	TMW45102020	10/05/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	0.54 J	<0.30	<0.20
	TMW45042020	04/27/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW45102019	10/04/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW45042019	04/17/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW46	TMW46102020	09/29/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW46042020	04/22/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW46102019	10/02/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW46102019DUP	10/02/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW46042019	04/26/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW47	TMW47102020	10/07/2020	<0.20	<0.20	<10	1.2	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW47042020	04/24/2020	<0.10	<0.10	17 J	1.5	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW47102019	10/04/2019	<0.10	<0.10	<5.0	1.3	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW47042019	04/15/2019	<0.10	<0.10	<5.0	2.7	<0.10	<0.25	<0.50	<0.15	<0.10
BEDROCK WELLS											
BGMW07	BGMW07102020	09/28/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	BGMW07042020	04/20/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	BGMW07102019	10/01/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	BGMW07042019	05/02/2019	<0.10	<0.10	<5.0	0.27 J	<0.10	<0.25	<0.50	<0.15	<0.10
BGMW08	BGMW08102020	09/28/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	1.4 J	<0.30	<0.20
	BGMW08042020	04/20/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	BGMW08102019	09/30/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	BGMW08042019	04/27/2019	<0.10	<0.10	5.6 J	1.1	<0.10	<0.25	<0.50	<0.15	<0.10

TABLE B-4: SUMMARY OF VOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,2-Dichloroethane	1,3-Dichlorobenzene	Acetone	Carbon Disulfide	Chloroform	Chloromethane	Methylene chloride	MTBE	Toluene
SL			5	75	14,000	810	80	190	5	100	1,000
BGMW09	BGMW09102020	09/29/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	BGMW09042020	04/21/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	BGMW09102019	10/04/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	BGMW09042019	04/27/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
BGMW10	BGMW10102020	09/29/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	BGMW10042020	04/23/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	BGMW10102019	10/04/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	BGMW10042019	04/27/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW14A	TMW14A102020	10/02/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW14A042020	04/30/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW14A102019	10/07/2019	<0.10	<0.10	<5.0	0.90 J	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW14A042019	04/15/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW16	TMW16102020	09/28/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW16042020	04/20/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW16102019	10/02/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW16042019	04/19/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW16042019DUP	04/19/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW16042019	04/15/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW17	TMW17102020	10/02/2020	<0.20	<0.20	<10	<0.50	<0.20	0.38 J	<1.0	<0.30	<0.20
	TMW17042020	04/30/2020	<0.10	<0.10	<5.0	<0.25	<0.10	0.44 J	<0.50	<0.15	<0.10
	TMW17102019	10/07/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW17042019	04/11/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW18	TMW18102020	09/28/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	0.19 J
	TMW18042020	04/20/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	0.65 J
	TMW18102019	10/01/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	0.26 J
	TMW18042019	04/17/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	0.22 J
TMW19	TMW19102020	09/28/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW19102020DUP	09/28/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW19042020	04/21/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW19102019	10/03/2019	<0.10	<0.10	17 J	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW30	TMW19042019	04/15/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW30102020	09/30/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW30042020	04/24/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW30102019	10/08/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW31D	TMW30042019	04/25/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW31D102020	10/02/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW31D042020	04/27/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW31D102019	10/09/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW31D	TMW31D042019	04/24/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10

TABLE B-4: SUMMARY OF VOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	1,2-Dichloroethane	1,3-Dichlorobenzene	Acetone	Carbon Disulfide	Chloroform	Chloromethane	Methylene chloride	MTBE	Toluene
			µg/L								
			SL	5	75	14,000	810	80	190	5	100
TMW32	TMW32102020	10/07/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW32042020	04/29/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW32102019	10/08/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW32042019	04/18/2019	<0.10	<0.10	<5.0	0.35 J	<0.10	<0.25	<0.50	<0.15	<0.10
TMW36	TMW36102020	09/28/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	1.1 J	<0.30	<0.20
	TMW36042020	04/20/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW36102019	09/30/2019	<0.10	0.14 J	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW36042019	04/16/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	0.12 J
TMW37	TMW37102020	09/29/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW37042020	04/20/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW37102019	09/30/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW37042019	04/16/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW38	TMW37042019DUP	04/16/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW38102020	10/06/2020	<0.20	<0.20	<10	0.72 J	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW38042020	04/28/2020	<0.10	<0.10	<5.0	0.73 J	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW38102019	10/04/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW38042019	04/25/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	0.13 J
TMW39D	TMW38042019DUP	04/25/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW39D102020	10/07/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW39D042020	05/01/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW39D102019	10/26/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW40D	TMW39D042019	04/19/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW40D102020	10/07/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW40D042020	05/01/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW40D102019	10/10/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	0.56 J	<0.15	<0.10
TMW48	TMW40D042019	04/19/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW48102020	10/08/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW48042020	05/01/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW48102019	10/26/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
TMW49	TMW48042019	04/22/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW49102020	10/08/2020	<0.20	<0.20	<10	<0.50	<0.20	<0.50	<1.0	<0.30	<0.20
	TMW49042020	04/29/2020	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10
	TMW49102019	10/09/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	0.53 J	<0.15	<0.10
	TMW49042019	04/23/2019	<0.10	<0.10	<5.0	<0.25	<0.10	<0.25	<0.50	<0.15	<0.10

NOTES & ABBREVIATIONS:

µg/L = micrograms per liter

< = less than cited Detection Limit; less than Limit of

Detection for October 2020 and newer data

NA = not analyzed

J = estimated value

Q = One or more quality control criteria failed

-- = not established or not applicable

SL = Screening Level

Bold Numbers = Result exceeds cited SL

MTBE = Methyl-tert-butyl ether

TABLE B-5: SUMMARY OF TPH AND SVOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	TPH-GRO	TPH-DRO	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dinitrophenol	2-Chloronaphthalene	2-Methylnaphthalene	2-Nitroaniline	4-Nitrophenol	bis(2-Ethylhexyl)phthalate	Naphthalene
SL			10.1	16.7	70	600	75	75	39	750	30	190	91	6	30
ALLUVIAL WELLS															
BGMW01	BGMW01102020	09/30/2020	NA	NA	<12	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<12	<5.8
	BGMW01042020	04/22/2020	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	BGMW01102019	10/02/2019	NA	NA	<5.5	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.5	<2.8
	BGMW01042019	04/12/2019	NA	NA	<5.8	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.8	<2.9
BGMW02	BGMW02102020	09/30/2020	NA	NA	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4
	BGMW02042020	04/28/2020	NA	NA	<5.1	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<5.1	<2.6
	BGMW02102019	10/06/2019	NA	NA	<5.7	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9
	BGMW02042019	04/12/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
BGMW03	BGMW03102020	09/28/2020	NA	NA	<23	<11	<11	<11	<11	<11	<11	<11	<11	<23	<11
	BGMW03042020	04/21/2020	NA	NA	<5.8	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.8	<2.9
	BGMW03102019	09/30/2019	NA	NA	<5.4	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<5.4	<2.7
	BGMW03042019	04/23/2019	NA	NA	<5.4	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<5.4	<2.7
	BGMW03042019DUP	04/23/2019	NA	NA	<5.5	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.5	<2.8
FW31	FW31102020	10/05/2020	NA	NA	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7
	FW31102020DUP	10/05/2020	NA	NA	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6
	FW31042020	04/24/2020	NA	NA	<5.8	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.8	<2.9
	FW31102019	10/04/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	FW31042019	04/12/2019	NA	NA	<5.4	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<5.4	<2.7
MW01	MW01102020	09/29/2020	<20	120 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW01042020	04/22/2020	<10	250 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW01102019	10/01/2019	<10	<62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW01042019	04/10/2019	<10	400 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE B-5: SUMMARY OF TPH AND SVOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	TPH-GRO	TPH-DRO	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dinitrophenol	2-Chloronaphthalene	2-Methylnaphthalene	2-Nitroaniline	4-Nitrophenol	bis(2-Ethylhexyl)phthalate	Naphthalene
			µg/L												
SL			10.1	16.7	70	600	75	75	39	750	30	190	91	6	30
MW02	MW02102020	09/29/2020	<20	<110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW02042020	04/22/2020	<10	180 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW02102019	10/02/2019	<10	<55	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW02042019	04/17/2019	<10	74 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW03	MW03102020	10/01/2020	<20	<100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW03042020	04/23/2020	<10	<48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW03102019	10/03/2019	<10	<49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW03042019	04/11/2019	<10	<55	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW18D	MW18D102020	10/06/2020	<20	<100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW18D042020	04/30/2020	<10	120 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW18D102019	10/07/2019	40 J	79 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW18D042019	04/26/2019	<10	110 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW20	MW20102020	10/05/2020	<20	210 J	<23	<12	<12	<12	<12	<12	<12	<12	<12	<23	<12
	MW20042020	04/28/2020	<10	310 J	<6.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<6.1	<3.1
	MW20102019	10/06/2019	<10	190 J	<5.7	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9
	MW20042019	04/18/2019	100	240 J	<5.4	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<5.4	<2.7
MW22D	MW22D102020	10/07/2020	<20	<100	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6
	MW22D042020	05/01/2020	11 J	58 J	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	MW22D102019	10/10/2019	21 J	<52	<5.2	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<5.2	<2.6
	MW22D042019	04/16/2019	<10	<52	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4
MW23	MW23102020	09/28/2020	NA	NA	<23	<12	<12	<12	<12	<12	<12	<12	<12	<23	<12
	MW23042020	04/21/2020	NA	NA	<5.7	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9
	MW23102019	09/30/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	MW23042019	04/17/2019	NA	NA	<6.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<6.1	<3.1

TABLE B-5: SUMMARY OF TPH AND SVOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	TPH-GRO	TPH-DRO	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dinitrophenol	2-Chloronaphthalene	2-Methylnaphthalene	2-Nitroaniline	4-Nitrophenol	bis(2-Ethylhexyl)phthalate	Naphthalene
			µg/L												
SL			10.1	16.7	70	600	75	75	39	750	30	190	91	6	30
MW24	MW24102020	09/29/2020	NA	NA	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1
	MW24042020	04/20/2020	NA	NA	<6.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<6.0	<3.0
	MW24042020DUP	04/20/2020	NA	NA	<5.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.9	<2.9
	MW24102019	09/30/2019	NA	NA	<5.4	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<5.4	<2.7
	MW24042019	04/18/2019	NA	NA	<5.5	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.5	<2.8
SMW01	SMW01102020	09/29/2020	NA	NA	<12	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<12	<6.0
	SMW01042020	04/21/2020	NA	NA	<5.4	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<5.4	<2.7
	SMW01102019	10/01/2019	NA	NA	<5.8	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.8	<2.9
	SMW01042019	04/12/2019	NA	NA	<5.4	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<5.4	<2.7
TMW03	TMW03102020	10/07/2020	NA	NA	<21	<10	<10	<10	<10	<10	<10	<10	<10	<21	<10
	TMW03042020	05/01/2020	NA	NA	<11	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<11	<5.2
	TMW03102019	10/09/2019	NA	NA	<12	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<12	<6.2
	TMW03102019DUP	10/09/2019	NA	NA	<11	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<11	<5.2
	TMW03042019	04/19/2019	NA	NA	<6.5	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<6.5	<3.3
TMW04	TMW04102020	10/02/2020	NA	NA	<22	<11	<11	<11	<11	<11	<11	<11	<11	<22	<11
	TMW04042020	04/27/2020	NA	NA	<5.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.9	<2.9
	TMW04102019	10/09/2019	NA	NA	<12	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<12	<5.8
	TMW04042019	04/19/2019	NA	NA	<5.5	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.5	<2.8
TMW06	TMW06102020	10/06/2020	NA	NA	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7
	TMW06042020	04/28/2020	NA	NA	<6.2	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<6.2	<3.1
	TMW06102019	10/06/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	TMW06102019DUP	10/06/2019	NA	NA	<5.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.9	<2.9
	TMW06042019	04/15/2019	NA	NA	<5.2	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<5.2	<2.6

TABLE B-5: SUMMARY OF TPH AND SVOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	TPH-GRO	TPH-DRO	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dinitrophenol	2-Chloronaphthalene	2-Methylnaphthalene	2-Nitroaniline	4-Nitrophenol	bis(2-Ethylhexyl)phthalate	Naphthalene
			µg/L												
SL			10.1	16.7	70	600	75	75	39	750	30	190	91	6	30
TMW07	TMW07102020	10/01/2020	NA	NA	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5
	TMW07102020DUP	10/01/2020	NA	NA	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0
	TMW07042020	04/21/2020	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	41	<2.8
	TMW07102019	09/30/2019	NA	NA	<5.7	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9
	TMW07042019	04/23/2019	NA	NA	<5.4	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<5.4	<2.7
TMW08	TMW08102020	09/30/2020	<20	55 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TMW08042020	04/23/2020	<10	130 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TMW08102019	10/03/2019	<10	130 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TMW08042019	04/15/2019	<10	<53	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TMW15	TMW15102020	10/05/2020	NA	NA	<12	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<12	<6.0
	TMW15102020DUP	10/05/2020	NA	NA	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4
	TMW15042020	04/27/2020	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	TMW15042020DUP	04/27/2020	NA	NA	<6.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<6.1	<3.1
	TMW15102019	10/04/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	TMW15042019	04/17/2019	NA	NA	<6.5	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<6.5	<3.3
TMW22	TMW22102020	10/01/2020	NA	NA	<11	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<11	<5.3
	TMW22042020	04/23/2020	NA	NA	<5.5	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.5	<2.8
	TMW22102019	10/04/2019	NA	NA	<5.7	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9
	TMW22042019	04/25/2019	NA	NA	<12	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<12	<6.2
TMW31S	TMW31S102020	10/01/2020	NA	NA	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6
	TMW31S042020	04/23/2020	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	TMW31S102019	10/08/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	TMW31S042019	04/27/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8

TABLE B-5: SUMMARY OF TPH AND SVOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	TPH-GRO	TPH-DRO	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dinitrophenol	2-Chloronaphthalene	2-Methylnaphthalene	2-Nitroaniline	4-Nitrophenol	bis(2-Ethylhexyl)phthalate	Naphthalene
			µg/L												
SL			10.1	16.7	70	600	75	75	39	750	30	190	91	6	30
TMW33	TMW33102020	10/01/2020	<20	77 J	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6
	TMW33042020	04/22/2020	<10	160 J	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	TMW33102019	10/02/2019	18 J	<49	<5.7	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.7	<2.8
	TMW33042019	04/25/2019	<10	79 J	<5.8	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.8	<2.9
TMW34	TMW34102020	10/05/2020	<20	<110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TMW34042020	04/24/2020	<10	150 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TMW34042020DUP	04/24/2020	<10	130 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TMW34102019	10/04/2019	<10	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TMW34102019DUP	10/04/2019	<10	<48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TMW35	TMW34042019	04/25/2019	<10	53 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TMW35102020	10/06/2020	<20	<100	<12	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<6.1	<12	<6.1
	TMW35042020	04/29/2020	<10	<51	<5.8	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.8	<2.9
	TMW35102019	10/08/2019	<10	<53	<6.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<6.0	<3.0
	TMW35042019	04/16/2019	<10	<58	<10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<10	<5.1
TMW39S	TMW39S102020	10/01/2020	NA	NA	<11	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<11	<5.5
	TMW39S042020	04/24/2020	NA	NA	<5.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.9	<2.9
	TMW39S102019	10/08/2019	NA	NA	<5.3	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<5.3	<2.6
	TMW39S042019	04/27/2019	NA	NA	<5.1	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.1	<2.5
TMW40S	TMW40S042020	04/22/2020	NA	NA	<6.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<6.0	<3.0
	TMW40S102019	10/03/2019	NA	NA	<5.4	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<5.4	<2.7
	TMW40S042019	04/26/2019	NA	NA	<15	<7.7	<7.7	<7.7	<7.7	<7.7	<7.7	<7.7	<7.7	<15	<7.7

TABLE B-5: SUMMARY OF TPH AND SVOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	TPH-GRO	TPH-DRO	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dinitrophenol	2-Chloronaphthalene	2-Methylnaphthalene	2-Nitroaniline	4-Nitrophenol	bis(2-Ethylhexyl)phthalate	Naphthalene
			µg/L												
SL			10.1	16.7	70	600	75	75	39	750	30	190	91	6	30
TMW41	TMW41102020	10/01/2020	NA	NA	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4
	TMW41042020	04/23/2020	NA	NA	<6.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<6.0	<3.0
	TMW41102019	10/04/2019	NA	NA	<5.2	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<5.2	<2.6
	TMW41042019	04/17/2019	NA	NA	<5.4	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<5.4	<2.7
TMW43	TMW43102020	10/02/2020	NA	NA	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6
	TMW43042020	04/28/2020	NA	NA	<5.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.9	<2.9
	TMW43102019	10/08/2019	NA	NA	<5.3	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<5.3	<2.6
	TMW43042019	04/18/2019	NA	NA	<5.7	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.7	<2.8
TMW44	TMW44102020	09/29/2020	NA	NA	<22	<11	<11	<11	<11	<11	<11	<11	<11	<22	<11
	TMW44042020	04/22/2020	NA	NA	<5.3	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<5.3	<2.6
	TMW44102019	10/02/2019	NA	NA	<5.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.9	<2.9
	TMW44042019	04/18/2019	NA	NA	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5
TMW45	TMW45102020	10/05/2020	NA	NA	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7
	TMW45042020	04/27/2020	NA	NA	<5.7	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9
	TMW45102019	10/04/2019	NA	NA	<5.7	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9
	TMW45042019	04/17/2019	NA	NA	<6.2	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<6.2	<3.1
TMW46	TMW46102020	09/29/2020	NA	NA	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9
	TMW46042020	04/22/2020	NA	NA	<5.5	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.5	<2.8
	TMW46102019	10/02/2019	NA	NA	<5.7	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.7	<2.8
	TMW46102019DUP	10/02/2019	NA	NA	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5
TMW47	TMW46042019	04/26/2019	NA	NA	<6.4	<3.2	<3.2	<3.2	<3.2	<3.2	<3.2	<3.2	<3.2	<6.4	<3.2
	TMW47102020	10/07/2020	NA	NA	<11	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<11	<5.3
	TMW47042020	04/24/2020	NA	NA	<5.7	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9
	TMW47102019	10/04/2019	NA	NA	<5.7	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.7	<2.8
TMW47	TMW47042019	04/15/2019	NA	NA	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5

TABLE B-5: SUMMARY OF TPH AND SVOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	TPH-GRO	TPH-DRO	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dinitrophenol	2-Chloronaphthalene	2-Methylnaphthalene	2-Nitroaniline	4-Nitrophenol	bis(2-Ethylhexyl)phthalate	Naphthalene
			µg/L												
SL			10.1	16.7	70	600	75	75	39	750	30	190	91	6	30
BEDROCK WELLS															
BGMW07	BGMW07102020	09/28/2020	NA	NA	<12	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<12	<6.0
	BGMW07042020	04/20/2020	NA	NA	<5.8	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.8	<2.9
	BGMW07102019	10/01/2019	NA	NA	<6.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<6.0	<3.0
	BGMW07042019	05/02/2019	NA	NA	<6.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<6.1	<3.1
BGMW08	BGMW08102020	09/28/2020	NA	NA	<12	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<12	<6.0
	BGMW08042020	04/20/2020	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	BGMW08102019	09/30/2019	NA	NA	<5.4	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<5.4	<2.7
	BGMW08042019	04/28/2019	NA	NA	<5.7	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	8.1 J	<2.9
BGMW09	BGMW09102020	09/29/2020	NA	NA	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7
	BGMW09042020	04/21/2020	NA	NA	<5.7	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9
	BGMW09102019	10/04/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	BGMW09042019	04/27/2019	NA	NA	<5.4	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<5.4	<2.7
BGMW10	BGMW10102020	09/29/2020	NA	NA	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6
	BGMW10042020	04/23/2020	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	BGMW10102019	10/04/2019	NA	NA	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5
	BGMW10042019	04/27/2019	NA	NA	<5.4	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<5.4	<2.7
TMW14A	TMW14A102020	10/02/2020	NA	NA	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7
	TMW14A042020	04/30/2020	NA	NA	<5.7	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9
	TMW14A102019	10/07/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	TMW14A042019	04/15/2019	NA	NA	<6.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<6.0	<3.0

TABLE B-5: SUMMARY OF TPH AND SVOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	TPH-GRO	TPH-DRO	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dinitrophenol	2-Chloronaphthalene	2-Methylnaphthalene	2-Nitroaniline	4-Nitrophenol	bis(2-Ethylhexyl)phthalate	Naphthalene
			µg/L												
SL			10.1	16.7	70	600	75	75	39	750	30	190	91	6	30
TMW16	TMW16102020	09/28/2020	NA	NA	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7
	TMW16042020	04/20/2020	NA	NA	<5.7	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.7	<2.8
	TMW16102019	10/02/2019	NA	NA	<5.5	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.5	<2.8
	TMW16042019	04/19/2019	NA	NA	<5.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.9	<2.9
	TMW16042019DUP	04/19/2019	NA	NA	<5.7	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.7	<2.8
	TMW16042019	04/13/2019	NA	NA	<5.3	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<5.3	<2.6
	TMW16042019DUP	04/13/2019	NA	NA	<5.4	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<5.4	<2.7
TMW18	TMW18102020	09/28/2020	NA	NA	<12	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<12	<6.0
	TMW18042020	04/20/2020	NA	NA	<5.8	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.8	<2.9
	TMW18102019	10/01/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	TMW18042019	04/16/2019	NA	NA	<5.7	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.7	<2.8
TMW19	TMW19102020	09/28/2020	NA	NA	<12	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<12	<6.0
	TMW19102020DUP	09/28/2020	NA	NA	<13	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<13	<6.3
	TMW19042020	04/21/2020	NA	NA	<5.5	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.5	<2.8
	TMW19102019	10/03/2019	NA	NA	<5.7	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9
TMW30	TMW19042019	04/13/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	TMW30102020	09/30/2020	NA	NA	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7
	TMW30042020	04/24/2020	<10	NA	<5.8	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.8	<2.9
	TMW30102019	10/08/2019	NA	NA	<6.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<6.0	<3.0
	TMW30042019	04/25/2019	NA	NA	<5.7	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9
TMW31D	TMW31D102020	10/02/2020	NA	NA	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9
	TMW31D042020	04/27/2020	NA	NA	<5.7	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9
	TMW31D102019	10/09/2019	NA	NA	<5.7	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9
	TMW31D042019	04/24/2019	NA	NA	<6.2	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<6.2	<3.1

TABLE B-5: SUMMARY OF TPH AND SVOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	TPH-GRO	TPH-DRO	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dinitrophenol	2-Chloronaphthalene	2-Methylnaphthalene	2-Nitroaniline	4-Nitrophenol	bis(2-Ethylhexyl)phthalate	Naphthalene
			µg/L												
SL			10.1	16.7	70	600	75	75	39	750	30	190	91	6	30
TMW32	TMW32102020	10/07/2020	NA	NA	<12	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<12	<5.8
	TMW32042020	04/29/2020	NA	NA	<6.2	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<6.2	<3.1
	TMW32102019	10/08/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	TMW32042019	04/18/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
TMW36	TMW36102020	09/28/2020	NA	NA	<12	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<12	<5.9
	TMW36042020	04/20/2020	NA	NA	<5.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.9	<2.9
	TMW36102019	09/30/2019	NA	NA	<6.2	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<6.2	<3.1
	TMW36042019	04/16/2019	NA	NA	<5.1	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<5.1	<2.6
TMW37	TMW37102020	09/29/2020	NA	NA	<11	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<11	<5.6
	TMW37042020	04/20/2020	NA	NA	<5.4	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<5.4	<2.7
	TMW37102019	09/30/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	TMW37042019	04/16/2019	NA	NA	<5.3	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<5.3	<2.6
	TMW37042019DUP	04/16/2019	NA	NA	<4.9	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<4.9	<2.5
TMW38	TMW38102020	10/06/2020	NA	NA	<12	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<12	<6.0
	TMW38042020	04/28/2020	NA	NA	<6.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<6.0	<3.0
	TMW38102019	10/04/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	TMW38042019	04/25/2019	NA	NA	<6.5	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<6.5	<3.3
	TMW38042019DUP	04/25/2019	NA	NA	<5.1	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.1	<2.5
TMW39D	TMW39D102020	10/07/2020	NA	NA	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4
	TMW39D042020	05/01/2020	NA	NA	<5.7	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.7	<2.8
	TMW39D102019	10/09/2019	NA	NA	<5.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.9	<2.9
	TMW39D042019	04/19/2019	NA	NA	<5.2	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<5.2	<2.6

TABLE B-5: SUMMARY OF TPH AND SVOC ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	TPH-GRO	TPH-DRO	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dinitrophenol	2-Chloronaphthalene	2-Methylnaphthalene	2-Nitroaniline	4-Nitrophenol	bis(2-Ethylhexyl)phthalate	Naphthalene
SL			10.1	16.7	70	600	75	75	39	750	30	190	91	6	30
TMW40D	TMW40D102020	10/07/2020	NA	NA	<11	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7	<11	<5.7
	TMW40D042020	05/01/2020	NA	NA	<5.2	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<5.2	<2.6
	TMW40D102019	10/10/2019	NA	NA	<6.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<6.0	<3.0
	TMW40D042019	04/19/2019	NA	NA	<6.4	<3.2	<3.2	<3.2	<3.2	<3.2	<3.2	<3.2	<3.2	<6.4	<3.2
TMW48	TMW48102020	10/08/2020	NA	NA	<11	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11	<5.4
	TMW48042020	05/01/2020	NA	NA	<5.5	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.5	<2.8
	TMW48102019	10/10/2019	NA	NA	<5.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	<5.9	<2.9
	TMW48042019	04/23/2019	NA	NA	<5.7	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.7	<2.8
TMW49	TMW49102020	10/08/2020	NA	NA	<12	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<12	<6.2
	TMW49042020	04/29/2020	NA	NA	<5.3	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<5.3	<2.6
	TMW49102019	10/09/2019	NA	NA	<5.6	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8
	TMW49042019	04/23/2019	NA	NA	<5.2	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<5.2	<2.6

NOTES & ABBREVIATIONS:

µg/L = micrograms per liter

< = less than cited Detection Limit; less than Limit of Detection for October 2020 and newer data

NA = not analyzed

J = estimated value

M = Manual Integrated Compound

– = not established or not applicable

SL = Screening Level

Bold

Numbers = Result exceeds cited SL

TABLE B-6: SUMMARY OF DISSOLVED METALS ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury	
			5,000	6	10	2,000	4	5	-	50	50	1,000	1,000	15	-	200	200	-	50	50	-	2	86	10,000	2	
SL			ALLUVIAL WELLS																							
BGMW01	BGMW01102020	09/30/2020	<250	<2.5	<1.25	17.1	<1.0	<1.0	62,000	<1.0	<1.0	3.6 J	<250	<0.5	33,000	67	<2.5	263 J	5.1	<1.0	970,000	<1.0	5.0 J	<50	<0.20	
	BGMW01042020	04/22/2020	<100	<1.3	<0.63	14.8	<0.50	<0.50	54,700	<0.50	<0.50	5.9 J	<125	0.32 J	30,700	237	<1.3	307 J	2.4 J	<0.50	819,000	<0.50	3.8 J	<25	<0.10	
	BGMW01102019	10/02/2019	<100	<1.3	<0.63	15.9	<0.50	<0.50	44,100	<0.50	<0.50	8.5 J	<125	0.55 J	31,300	217	<1.3	340 J	1.6 J	<0.50	775,000	<0.50	4.1 J	<25	<0.10	
	BGMW01042019	04/11/2019	<200	<2.5	<1.3	17.9	<1.0	<1.0	58,600	<1.0	<1.0	9.0 J	<250	0.58 J	32,200	228	<2.5	<500	<1.5	<1.0	864,000	<1.0	5.5 J	<50	<0.10	
BGMW02	BGMW02102020	09/30/2020	<250	<2.5	0.66 J	13.4	<1.0	<1.0	69,400	<1.0	<1.0	<5.0	<250	<0.5	96,000	57.5	<2.5	387 J	46.5	<1.0	931,000	<1.0	8.0	<50	<0.20	
	BGMW02042020	04/28/2020	<100	<1.3	0.93 J	12.2	<0.50	<0.50	64,400	<0.50	<0.50	<2.5	<125	<0.25	89,400	53.9	<1.3	285 J	44.7	<0.50	868,000	<0.50	10.3	<25	<0.10	
	BGMW02102019	10/06/2019	<100	<1.3	<0.63	13.6	<0.50	<0.50	71,000	<0.50	<0.50	7.2 J	<125	0.63 J	103,000	60.2	<1.3	370 J	51.9	<0.50	772,000	<0.50	5.4	<25	<0.10	
	BGMW02042019	04/11/2019	<200	<2.5	<1.3	13.4	<1.0	<1.0	72,700	<1.0	<1.0	9.9 J	<250	0.55 J	98,600	59.9	<2.5	<500	52.9	<1.0	916,000	<1.0	6.7 J	<50	<0.10	
BGMW03	BGMW03102020	09/28/2020	<250	<2.5	1.8 J	24.8	<1.0	<1.0	55,800	0.62 J	0.73 J	3.9 J	<250	<0.5	13,500	11.4	2.6 J	1,200	23.1	<1.0	685,000	<1.0	13.5	<50	<0.20	
	BGMW03042020	04/21/2020	<100	<1.3	2.6 J	22.2	<0.50	<0.50	49,100	<0.50	1.3 J	6.3 J	<125	<0.25	12,100	13.2	1.9 J	1,020	31.7	<0.50	738,000	<0.50	15.3	<25	<0.10	
	BGMW03102019	09/30/2019	<100	<1.3	2.6 J	20.7	<0.50	<0.50	46,500	0.61 J	<0.50	15.9	<125	0.56 J	11,500	9.6	1.7 J	1,090	27.6	<0.50	721,000	<0.50	13.2	28.1 J	<0.10	
	BGMW03042019	04/23/2019	<200	<2.5	2.3 J	25.7	<1.0	<1.0	80,500	<1.0	<1.0	11.7 J	<250	0.55 J	17,900	7.5 J	<2.5	1,590 J	22.1	<1.0	665,000	<1.0	10.2	<50	<0.10	
	BGMW03042019DUP	04/23/2019	<200	<2.5	2.0 J	28.1	<1.0	<1.0	98,000	1.3 J	<1.0	<5.0	<250	3.4 J	20,900	6.7 J	<2.5	1,880 J	17.8	<1.0	643,000	<1.0	9.1 J	<50	<0.10	
FW31	FW31102020	10/05/2020	<250	<2.5	7.4	14.7	<1.0	<1.0	8,180	0.90 J	<1.0	<5.0	<250	<0.5	3,120	<2.5	<2.5	1,380	<1.5	<1.0	586,000	<1.0	10.5	<50	<0.20	
	FW31102020DUP	10/05/2020	<250	<2.5	7.3	14.3	<1.0	<1.0	8,060	0.90 J	<1.0	2.6 J	<250	<0.5	2,950	<2.5	<2.5	1,390	<1.5	<1.0	578,000	<1.0	10.4	<50	<0.20	
	FW31042020	04/24/2020	<100	<1.3	5.6	9.1	<0.50	<0.50	6,110	0.87 J	<0.50	<2.5	<125	<0.25	2,430	<1.3	<1.3	1,250	<0.75	<0.50	523,000	<0.50	10	<25	<0.10	
	FW31102019	10/04/2019	<100	<1.3	5.6	8.2	<0.50	<0.50	5,290	<0.50	<0.50	4.2 J	<125	0.60 J	2,200	<1.3	<1.3	1,180	<0.75	<0.50	473,000	<0.50	8.0	<25	<0.10	
	FW31042019	04/11/2019	<200	<2.5	6.3 J	10.1	<1.0	<1.0	6,250	<1.0	<1.0	10.2 J	<250	0.61 J	2,440	<2.5	<2.5	1,270 J	<1.5	<1.0	523,000	<1.0	9.6 J	<50	<0.10	
MW01	MW01102020	09/29/2020	<250	<2.5	<1.25	16.2	<1.0	<1.0	39,400	1.0 J	<1.0	3.1 J	<250	<0.5	9,780	<2.5	<2.5	1,060	12.5	<1.0	838,000	<1.0	2.0 J	<50	<0.20	
	MW01042020	04/22/2020	<100	<1.3	<0.63	15.1	<0.50	<0.50	38,900	0.56 J	<0.50	9.2 J	<125	0.54 J	10,100	<1.3	<1.3	1,340	8.5	<0.50	803,000	<0.50	1.4 J	25.8 J	<0.10	
	MW01102019	10/01/2019	<100	<1.3	<0.63	27.1	<0.50	<0.50	82,100	0.83 J	<0.50	9.0 J	<125	0.64 J	26,600	1.5 J	<1.3	5,660	10.9	<0.50	665,000	<0.50	<1.3	<25	<0.10	
	MW01042019	04/10/2019	<200	<2.5	<1.3	15.4	<1.0	<1.0	32,800	<1.0	<1.0	5.8 J	<250	<0.50	7,690	<2.5	<2.5	<500	15.2	<1.0	880,000	<1.0	<2.5	<50	<0.10	
MW02	MW02102020	09/29/2020	<250	<2.5	<1.25	40.1	<1.0	<1.0	117,000	0.73 J	<1.0	2.8 J	<250	<0.5	24,500	24.3	1.6 J	522 J	8.4	<1.0	541,000	<1.0	1.6 J	35.2 J	<0.20	
	MW02042020	04/22/2020	<100	<1.3	<0.63	38.5	<0.50	<0.50	105,000	<0.50	<0.50	7.0 J	<125	0.34 J	22,700	<1.3	<1.3	438 J	10.1	<0.50	449,000	<0.50	<1.3	36.6 J	<0.10	
	MW02102019	10/02/2019	<100	<1.3	<0.63	51.6	<0.50	<0.50	114,000	0.74 J	<0.50	5.0 J	<125	<0.25	26,000	3.8 J	<1.3	526 J	10.8	<0.50	389,000	<0.50	<1.3	36.3 J	<0.10	
	MW02042019	04/17/2019	<200	<2.5	<1.3	52.5	<1.0	<1.0	106,000	<1.0	<1.0	13.3 J	<250	0.52 J	20,600	<2.5	<2.5	638 J	6.8 J	<1.0	343,000	<1.0	<2.5	60.1 J	<0.10	
MW03	MW03102020	10/01/2020	<500	<5.0	<2.5	9.9 J	<2.0	<2.0	54,700	<2.0	<2.0	<10	<500	<1.0	10,600	50	<5.0	<1000	40	<2.0	1,060,000	<2.0	<5.0	<100	<0.20	
	MW03042020	04/23/2020	<200	<2.5	1.5 J	7.7 J	<1.0	<1.0	51,900	1.4 J	<1.0	<5.0	<250	<0.50	10,300	43.3	<2.5	<500	27	<1.0	943,000	<1.0	6.3 J	<50	<0.10	
	MW03102019	10/03/2019	<200	<2.5	<1.3	8.1 J	<1.0	<1.0	44,900	<1.0	<1.0	<5.0	<250	<0.50	9,860	47.5	<2.5	<500	27.5	<1.0	847,000	<1.0	<2.5	<50	0.11 J	
	MW03042019	04/11/2019	<200	<2.5	<1.3	8.4 J	<1.0	<1.0	51,700	<1.0	<1.0	14.8 J	<250	1.3 J	10,100	36.7	<2.5	<500	28.6	<1.0	974,000	<1.0	<2.5	<50	<0.10	
MW18D	MW18D102020	10/06/2020	<1000	<10	<5.0	16 J	<4.0	<4.0	73,200	<4.0	<4.0	<20	<1000	<2.0	19,900	759	<10	<2000	<6.0	<4.0	2,120,000	<4.0	<10	<200	<0.20	
	MW18D042020	04/30/2020	<400	<5.0	<2.5	15.4 J	<2.0	<2.0	68,600	<2.0	<2.0	<10	<500	<1.0	19,000	787	<5.0	<1,000	<3.0	<2.0	2,020,000	<2.0	<5.0	<100	<0.10	
	MW18D102019	10/07/2019	<400	<5.0	<2.5	14.8 J	<2.0	<2.0	62,400	<2.0	<2.0	<10	<500	<1.0	19,100	503	<5.0	<1,000	<3.0	<2.0	1,880,000	<2.0	<5.0	<100	<0.10	

TABLE B-6: SUMMARY OF DISSOLVED METALS ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury
	SL		5,000	6	10	2,000	4	5	-	50	50	1,000	1,000	15	-	200	200	-	50	50	-	2	86	10,000	2
MW23	MW23102020	09/28/2020	<200	<2.5	1.1 J	217	<1.0	<1.0	15,200	<1.0	<1.0	<5.0	<250	<0.50	6,610	69.2	1.3 J	1,050	<1.5	<1.0	484,000	<1.0	2.5 J	<50	<0.20
	MW23042020	04/21/2020	<100	<1.3	1.2 J	217	<0.50	<0.50	15,900	<0.50	<0.50	11.8	<125	0.56 J	6,780	68.9	<1.3	1,090	<0.75	<0.50	500,000	<0.50	2.5 J	<25	<0.10
	MW23102019	09/30/2019	<100	<1.3	1.4 J	206	<0.50	<0.50	15,000	<0.50	<0.50	7.3 J	<125	0.60 J	6,290	70.9	1.3 J	1,120	<0.75	<0.50	475,000	<0.50	3.1 J	26.8 J	<0.10
	MW23042019	04/17/2019	<200	<2.5	<1.3	192	<1.0	<1.0	14,300	<1.0	<1.0	8.9 J	<250	<0.50	6,080	66.4	<2.5	1,160 J	<1.5	<1.0	448,000	<1.0	3.7 J	<50	<0.10
MW24	MW24102020	09/29/2020	<200	<2.5	<1.25	298	<1.0	<1.0	33,600	0.78 J	<1.0	3.6 J	1,870	0.43 J	11,100	463	<2.5	821 J	<1.5	<1.0	309,000	<1.0	<2.5	<50	<0.20
	MW24042020	04/20/2020	<100	<1.3	0.73 J	278	<0.50	<0.50	33,400	<0.50	<0.50	<2.5	1,860	<0.25	11,000	451	<1.3	775 J	<0.75	<0.50	270,000	<0.50	<1.3	56.7 J	0.11 J
	MW24042020DUP	04/20/2020	<100	<1.3	0.80 J	291	<0.50	<0.50	33,200	<0.50	<0.50	<2.5	1,860	<0.25	11,100	453	<1.3	780 J	<0.75	<0.50	276,000	<0.50	<1.3	<25	0.10 J
	MW24102019	09/30/2019	<100	<1.3	0.72 J	282	<0.50	<0.50	31,700	<0.50	<0.50	5.4 J	1,830	0.47 J	10,100	429	<1.3	777 J	<0.75	<0.50	261,000	<0.50	<1.3	45.3 J	<0.10
SMW01	MW24042019	04/18/2019	<200	<2.5	<1.3	272	<1.0	<1.0	31,100	<1.0	<1.0	<5.0	1,660 J	<0.50	10,300	422	<2.5	755 J	<1.5	<1.0	254,000	<1.0	<2.5	<50	<0.10
	SMW01102020	09/29/2020	<500	<5.0	1.8 J	29.1	<2.0	<2.0	22,600	<2.0	<2.0	<10	<500	<1.0	7,660	30.8	<5.0	<1000	<3.0	<2.0	1,020,000	<2.0	6.0 J	<100	<0.20
	SMW01042020	04/21/2020	<200	<2.5	2.1 J	26.8	<1.0	<1.0	24,200	<1.0	<1.0	6.3 J	<250	<0.50	8,310	90.4	<2.5	<500	<1.5	<1.0	1,040,000	<1.0	3.8 J	<50	<0.10
	SMW01102019	10/01/2019	<200	<2.5	1.4 J	28.7	<1.0	<1.0	21,000	<1.0	<1.0	<5.0	<250	<0.50	8,610	11.4	<2.5	<500	<1.5	<1.0	917,000	<1.0	4.1 J	<50	<0.10
TMW01	SMW01042019	04/11/2019	<200	<2.5	2.0 J	30.4	<1.0	<1.0	25,600	<1.0	<1.0	10.7 J	<250	0.61 J	8,860	88	<2.5	<500	<1.5	<1.0	1,040,000	<1.0	4.2 J	<50	<0.10
	TMW01102020	10/01/2020	<250	<2.5	0.97 J	11.5	<1.0	<1.0	110,000	<1.0	<1.0	3.9 J	<250	<0.50	18,700	11.9	<2.5	<500	3.5 J	<1.0	579,000	<1.0	12.7	<50	<0.20
	TMW01042020	04/24/2020	<100	<1.3	<0.63	10	<0.50	<0.50	107,000	<0.50	<0.50	<2.5	<125	<0.25	19,100	11.6	<1.3	<250	3.3 J	<0.50	553,000	<0.50	12	<25	<0.10
	TMW01102019	10/08/2019	<100	<1.3	0.68 J	10.1	<0.50	<0.50	104,000	0.51 J	<0.50	10.4	<125	0.62 J	20,000	11.3	<1.3	<250	3.3 J	<0.50	517,000	<0.50	10.6	<25	<0.10
TMW02	TMW01042019	04/18/2019	<200	<2.5	1.6 J	10.3	<1.0	<1.0	115,000	<1.0	<1.0	<5.0	<250	<0.50	20,800	9.4 J	<2.5	<500	4.2 J	<1.0	585,000	<1.0	13.9	<50	<0.10
	TMW02102020	10/02/2020	<500	<5.0	<2.5	8.1 J	<2.0	<2.0	25,100	<2.0	<2.0	<10	<500	<2.0	3,040	<5.0	<5.0	1,310 J	81.9	<2.0	1,060,000	<2.0	39	<100	<0.20
	TMW02102020DUP	10/02/2020	<500	<5.0	<2.5	7.6 J	<2.0	<2.0	23,800	<2.0	<2.0	<10	<500	<2.0	2,860	<5.0	<5.0	1,250 J	77.3	<2.0	1,080,000	<2.0	36.6	<100	<0.20
	TMW02042020	04/24/2020	<200	<2.5	1.8 J	6.4 J	<1.0	<1.0	23,700	<1.0	<1.0	<5.0	<250	<0.50	2,820	<2.5	<2.5	1,220 J	77.8	<1.0	1,060,000	<1.0	44.8	<50	<0.10
	TMW02042020DUP	04/24/2020	<200	<2.5	1.8 J	6.2 J	<1.0	<1.0	23,200	<1.0	<1.0	<5.0	<250	<0.50	2,810	<2.5	<2.5	1,220 J	75.8	<1.0	1,090,000	<1.0	45.2	<50	<0.10
	TMW02102019	10/08/2019	<200	<2.5	<1.3	6.5 J	<1.0	<1.0	18,100	<1.0	<1.0	6.4 J	<250	0.71 J	2,570	<2.5	<2.5	1,030 J	62.4	<1.0	991,000	<1.0	31.1	<50	<0.10
TMW03	TMW02042019	04/18/2019	<200	<2.5	<1.3	7.0 J	<1.0	<1.0	23,000	<1.0	<1.0	21.9	<250	0.91 J	2,740	<2.5	<2.5	1,240 J	71.2	<1.0	1,130,000	<1.0	39.5	<50	<0.10
	TMW02042019DUP	04/18/2019	<200	<2.5	<1.3	6.9 J	<1.0	<1.0	22,500	<1.0	<1.0	9.7 J	<250	<0.50	2,700	<2.5	<2.5	1,230 J	71.5	<1.0	1,120,000	<1.0	39.1	<50	<0.10
	TMW03102020	10/07/2020	<250	<2.5	<1.25	11.6	<1.0	<1.0	49,800	<1.0	<1.0	3.5 J	<250	<0.50	11,200	3.9 J	<2.5	332 J	52	<1.0	986,000	<1.0	<2.5	<50	<0.20
	TMW03042020	05/01/2020	<100	<1.3	<0.63	11.3	<0.50	<0.50	49,500	1.1 J	<0.50	2.8 J	<125	<0.25	11,100	4.2 J	<1.3	324 J	49.6	<0.50	931,000	<0.50	2.1 J	<25	<0.10
	TMW03102019	10/09/2019	<100	<1.3	<0.63	10.4	<0.50	<0.50	45,400	<0.50	<0.50	5.6 J	<125	0.53 J	11,400	3.0 J	<1.3	305 J	49.1	<0.50	828,000	<0.50	1.3 J	<25	<0.10
	TMW03102019DUP	10/09/2019	<100	<1.3	<0.63	10.4	<0.50	<0.50	47,000	<0.50	<0.50	<2.5	<125	<0.25	11,400	2.8 J	<1.3	295 J	49.6	<0.50	830,000	<0.50	<1.3	<25	<0.10
TMW04	TMW03042019	04/19/2019	<200	<2.5	<1.3	11.9	<1.0	<1.0	51,100	<1.0	<1.0	8.7 J	<250	0.55 J	11,600	4.8 J	<2.5	<500	52.1	<1.0	949,000	<1.0	<2.5	<50	<0.10
	TMW04102020	10/02/2020	<250	<2.5	<1.25	7.8	<1.0	<1.0	30,900	3.8 J	<1.0	<5.0	<250	<0.50	5,930	<2.5	<2.5	562 J	80	<1.0	890,000	<1.0	14.1	<50	<0.20
	TMW04042020	04/27/2020	<100	<1.3	0.90 J	7.2	<0.50	<0.50	30,600	4.4 J	<0.50	4.2 J	<125	0.25 J	5,890	<1.3	<1.3	476 J	77.7	<0.50	892,000	<0.50	16.5	<25	<0.10
	TMW04102019	10/09/2019	<100	<1.3	0.78 J	6.0	<0.50	<0.50	27,000	2.3 J	<0.50	5.4 J	<125	0.49 J	5,220	<1.3	<1.3	509 J	75.2	<0.50	801,000	<0.50	14.1	<25	<0.10
TMW06	TMW04042019	04/19/2019	<200	<2.5	1.4 J	7.4 J	<1.0	<1.0	30,900	2.1 J	<1.0	8.9 J	<250	0.58 J	5,750	<2.5	<2.5	509 J	79.4	<1.0	845,000	<1.0	16.3	<50	<0.10
	TMW06102020	10/06/2020	<500	<5.0	<2.5	14.7	<2.0	<2.0	35,900	<2.0	<2.0	5.5 J	<500	<1.0	7,710	28.9	<5.0	<1000	<3.0	<2.0	913,000	<2.0	4.5 J	<100	<0.20
	TMW06042020	04/28/2020	<200	<2.5	1.6 J	12.4	<1.0	<1.0	31,500	<1.0	<1.0	<5.0	<250	<0.50	7,220	31.9	<2.5	<500	<1.5	<1.0	890,000	<1.0	13.9	<50	<0.10
	TMW06102019	10/06/2019	<200	<2.5	<1.3	13.4	<1.0	<1.0	31,200	<1.0	<1.0	<5.0	<250	<0.50	7,550	30.3	<2.5	<500	<1.5	<1.0	775,000	<1.0	<2.5	<50	<0.10
	TMW06102019DUP	10/06/2019	<200	<2.5	<1.3	13.4	<1.0	<1.0	32,800	<1.0	<1.0	7.2 J	<250	0.57 J	8,020	32.8	<2.5	<500	<1.5	<1.0	826,000	<1.0	<2.5	<50	<0.10
	TMW06042019	04/15/2019	<200	<2.5	<1.3	14	<1.0	<1.0	34,900	<1.0	<1.0	6.2 J	<250	<0.50	7,270	24.2	<2.5	<500	<1.5	<1.0	903,000	<1.0	3.4 J	<50	<0.10
TMW07	TMW07102020	10/01/2020	<500	<5.0	<2.5	13.2	<2.0	<2.0	57,800	<2.0	<2.0	<10	<500	<1.0	10,200	296	<5.0	3,960	<3.0	<2.0	1,250,000	<2.0	5.9 J	<100	<0.20
	TMW07102020DUP	10/01/2020	<500	<5.0	<2.5	13.4	<2.0	<2.0	58,500	<2.0	<2.0	5.0 J	<500	<1.0	10,400	302	<5.0	4,160	<3.0	<2.0	1,250,000	<2.0	5.9 J	<100	<0.20
	TMW07042020	04/21/2020	<200	<2.5	<1.3	11.8	<1.0	<1.0	58,500	<1.0	1.5 J	9.5 J	<250	<0.50	10,400	292	4.4 J	3,780	<1.5	<1.0	1,290,000	<1.0	3.9 J	<50	<0.10
	TMW07102019	09/30/2019	<200	<2.5	<1.3	12	<1.0	<1.0	60,200	<1.0	<1.0	7.3 J	<250	0.51 J	10,400	282	<2.5	2,530	<1.5	<1.0	1,320,000	<1.0	6.3 J	<50	<0.10
	TMW07042019	04/23/2019	<200	<2.5	<1.3	13.2	<1.0	<1.0	59,400	<1.0	<1.0	9.5 J	<250	0.57 J	10,900	331	<2.5	2,600	<1.5	<1.0	1,280,000	<1.0	5.7 J	<50	<0.10

TABLE B-6: SUMMARY OF DISSOLVED METALS ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury
	SL		5,000	6	10	2,000	4	5	-	50	50	1,000	1,000	15	-	200	200	-	50	50	-	2	86	10,000	2
TMW08	TMW08102020	09/30/2020	<1000	<10	<5.0	9.8 J	<4.0	<4.0	394,000	<4.0	<4.0	<20	<1000	<2.0	103,000	399	<10	1,670 J	27.8	<4.0	4,450,000	<4.0	<10	<200	<0.20
	TMW08042020	04/23/2020	<400	<5.0	<2.5	7.6 J	<2.0	<2.0	335,000	<2.0	<2.0	<10	<500	<1.0	89,300	362	<5.0	1,400 J	21.8	<2.0	4,780,000	<2.0	10.2 J	<100	<0.10
	TMW08102019	10/03/2019	<400	<5.0	<2.5	8.7 J	<2.0	<2.0	289,000	<2.0	<2.0	<10	<500	<1.0	77,800	387	<5.0	1,490 J	19.7 J	<2.0	3,550,000	<2.0	<5.0	<100	<0.10
	TMW08042019	04/15/2019	<200	<2.5	<1.3	9.5 J	<1.0	<1.0	238,000	<1.0	<1.0	<5.0	<250	<0.50	67,700	390	<2.5	1,080 J	40.2	<1.0	4,050,000	<1.0	<2.5	<50	<0.10
TMW10	TMW10102020	10/01/2020	<500	<5.0	<2.5	13.1	<2.0	<2.0	50,200	2.1 J	<2.0	<10	<500	<1.0	11,900	6.1 J	<5.0	<1000	<3.0	<2.0	1,530,000	<2.0	3.4 J	<100	<0.20
	TMW10042020	04/23/2020	<200	<2.5	<1.3	10.4	<1.0	<1.0	56,300	<1.0	<1.0	<5.0	<250	<0.50	12,200	12.5	<2.5	<500	<1.5	<1.0	1,580,000	<1.0	<2.5	<50	<0.10
	TMW10102019	10/03/2019	<200	<2.5	<1.3	12.2	<1.0	<1.0	46,200	<1.0	<1.0	8.2 J	<250	0.84 J	12,100	4.8 J	<2.5	<500	<1.5	<1.0	1,440,000	<1.0	3.5 J	<50	<0.10
	TMW10042019	04/22/2019	<200	<2.5	<1.3	13.7	<1.0	<1.0	63,100	<1.0	<1.0	9.1 J	<250	0.59 J	16,500	7.7 J	<2.5	<500	<1.5	<1.0	1,680,000	<1.0	3.0 J	<50	<0.10
TMW11	TMW11042020	04/20/2020	<100	<1.3	0.72 J	32.8	<0.50	<0.50	10,300	1.4 J	<0.50	6.6 J	<125	0.41 J	1,260	<1.3	<1.3	953 J	56.1	<0.50	536,000	<0.50	8.5	<25	<0.10
	TMW11102019	10/02/2019	<100	<1.3	<0.63	32	<0.50	<0.50	8,580	1.7 J	<0.50	13	<125	1.0 J	1,150	<1.3	<1.3	921 J	37.1	<0.50	478,000	<0.50	7.5	<25	<0.10
	TMW11042019	04/19/2019	<200	<2.5	<1.3	40	<1.0	<1.0	11,600	<1.0	<1.0	24.4	<250	1.5 J	1,570	33.1	<2.5	1,030 J	21.3	<1.0	551,000	<1.0	9.4 J	<50	<0.10
	TMW13102020	10/06/2020	<250	<2.5	<1.25	16.8	<1.0	<1.0	27,500	0.62 J	<1.0	4.9 J	<250	0.29 J	5,190	<2.5	<2.5	370 J	10.8	<1.0	579,000	<1.0	<2.5	<50	<0.20
TMW13	TMW13102020DUP	10/06/2020	<250	<2.5	<1.25	16.6	<1.0	<1.0	28,000	<1.0	<1.0	<5.0	<250	<0.50	5,220	<2.5	<2.5	366 J	10.5	<1.0	575,000	<1.0	<2.5	<50	<0.20
	TMW13042020	04/28/2020	<100	<1.3	<0.63	14.8	<0.50	<0.50	25,100	<0.50	<0.50	<2.5	<125	<0.25	4,800	<1.3	<1.3	<250	10.3	<0.50	533,000	<0.50	2.6 J	<25	<0.10
	TMW13042020DUP	04/28/2020	<100	<1.3	<0.63	14.7	<0.50	<0.50	24,800	<0.50	<0.50	<2.5	<125	<0.25	4,760	<1.3	<1.3	<250	9.8	<0.50	528,000	<0.50	2.9 J	<25	<0.10
	TMW13102019	10/06/2019	<100	<1.3	<0.63	16.2	<0.50	<0.50	25,400	<0.50	<0.50	<2.5	<125	<0.25	5,300	<1.3	<1.3	332 J	10.5	<0.50	505,000	<0.50	2.0 J	<25	<0.10
	TMW13102019DUP	10/06/2019	<100	<1.3	<0.63	16.5	<0.50	<0.50	25,400	<0.50	<0.50	<2.5	<125	<0.25	5,200	<1.3	<1.3	331 J	10.4	<0.50	497,000	<0.50	1.8 J	<25	<0.10
	TMW13042019	04/17/2019	<200	<2.5	<1.3	15.2	<1.0	<1.0	24,600	<1.0	<1.0	9.2 J	<250	<0.50	4,600	<2.5	<2.5	<500	9.4 J	<1.0	508,000	<1.0	2.5 J	<50	<0.10
TMW15	TMW15102020	10/05/2020	<250	<2.5	<1.25	21.2	<1.0	<1.0	18,600	0.73 J	<1.0	3.9 J	<250	<0.50	3,500	<2.5	<2.5	364 J	12.4	<1.0	563,000	<1.0	<2.5	<50	<0.20
	TMW15102020DUP	10/05/2020	<250	<2.5	<1.25	20.4	<1.0	<1.0	18,100	0.68 J	<1.0	<5.0	<250	<0.50	3,420	<2.5	<2.5	334 J	11.9	<1.0	551,000	<1.0	<2.5	<50	<0.20
	TMW15042020	04/27/2020	<100	<1.3	<0.63	18.8	<0.50	<0.50	17,200	0.68 J	<0.50	<2.5	<125	<0.25	3,280	<1.3	<1.3	259 J	11.7	<0.50	539,000	<0.50	2.9 J	<25	<0.10
	TMW15042020DUP	04/27/2020	<100	<1.3	<0.63	18.6	<0.50	<0.50	17,000	0.76 J	<0.50	<2.5	<125	<0.25	3,260	<1.3	<1.3	279 J	11.4	<0.50	543,000	<0.50	3.1 J	<25	<0.10
	TMW15102019	10/04/2019	<100	<1.3	<0.63	18.7	<0.50	<0.50	16,100	1.0 J	<0.50	5.7 J	<125	0.58 J	3,240	<1.3	<1.3	354 J	11.6	<0.50	497,000	<0.50	1.4 J	<25	<0.10
	TMW15042019	04/17/2019	<200	<2.5	<1.3	19.2	<1.0	<1.0	17,300	1.1 J	<1.0	10.3 J	<250	<0.50	3,210	<2.5	<2.5	<500	10.7	<1.0	493,000	<1.0	<2.5	<50	<0.10
TMW21	TMW21102020	10/07/2020	<250	<2.5	<1.25	15.5	<1.0	<1.0	35,900	0.90 J	<1.0	4.8 J	<250	<0.50	6,720	<2.5	<2.5	474 J	5.9	<1.0	646,000	<1.0	2.0 J	<50	0.12 J
	TMW21042020	04/27/2020	<100	<1.3	0.65 J	14.5	<0.50	<0.50	32,900	0.76 J	<0.50	<2.5	<125	<0.25	6,640	<1.3	1.7 J	368 J	6.2	<0.50	632,000	<0.50	3.4 J	<25	<0.10
	TMW21102019	10/08/2019	<100	<1.3	0.67 J	16.6	<0.50	<0.50	30,200	1.1 J	<0.50	8.1 J	<125	0.58 J	6,850	2.2 J	1.8 J	496 J	5.7	<0.50	609,000	<0.50	4.6 J	29.7 J	<0.10
	TMW21102019DUP	10/08/2019	<100	<1.3	0.66 J	16.8	<0.50	<0.50	30,600	1.5 J	<0.50	3.7 J	<125	<0.25	6,670	1.6 J	1.3 J	463 J	5.2	<0.50	562,000	<0.50	4.4 J	<25	<0.10
	TMW21042019	04/23/2019	<200	<2.5	<1.3	18.4	<1.0	<1.0	33,100	<1.0	<1.0	9.9 J	<250	1.3 J	7,250	<2.5	3.2 J	526 J	4.1 J	<1.0	639,000	<1.0	<2.5	172 J	<0.10
	TMW22102020	10/01/2020	<250	<2.5	1.1 J	18.3	<1.0	<1.0	35,900	1.3 J	<1.0	8.6 J	<250	0.30 J	11,000	1.4 J	1.3 J	519 J	2.6 J	<1.0	798,000	<1.0	5.3	<50	<0.20
TMW22	TMW22042020	04/23/2020	<100	<1.3	1.4 J	17.2	<0.50	<0.50	35,800	1.5 J	<0.50	3.2 J	<125	<0.25	11,200	<1.3	2.5 J	477 J	3.3 J	<0.50	839,000	<0.50	7.9	<25	<0.10
	TMW22102019	10/04/2019	<100	<1.3	0.78 J	16.9	<0.50	<0.50	32,700	1.4 J	<0.50	7.2 J	<125	0.61 J	10,900	3.1 J	3.4 J	472 J	3.4 J	<0.50	758,000	<0.50	3.8 J	<25	0.11 J
	TMW22042019	04/25/2019	<200	<2.5	1.5 J	17.6	<1.0	<1.0	34,800	<1.0	<1.0	11.6 J	<250	0.53 J	10,200	<2.5	<2.5	505 J	2.0 J	<1.0	812,000	<1.0	4.8 J	<50	<0.10
	TMW23102020	10/01/2020	<250	<2.5	1.1 J	19.2	<1.0	<1.0	17,400	1.8 J	<1.0	9.4 J	<250	0.42 J	4,420	<2.5	<2.5	394 J	<1.5	<1.0	746,000	<1.0	3.1 J	<50	<0.20
TMW23	TMW23042020	04/23/2020	<100	<1.3	1.6 J	17.6	<0.50	<0.50	16,600	1.1 J	<0.50	3.6 J	<125	<0.25	4,430	3.1 J	1.7 J	368 J	<0.75	<0.50	748,000	<0.50	6.6	<25	<0.10
	TMW23102019	10/03/2019	<100	<1.3	1.1 J	17.4	<0.50	<0.50	15,800	1.5 J	0.53 J	6.9 J	<125	0.67 J	4,310	2.6 J	<1.3	351 J	<0.75	<0.50	662,000	<0.50	2.9 J	<25	<0.10
	TMW23042019	04/25/2019	<200	<2.5	1.7 J	18.8	<1.0	<1.0	17,000	<1.0	<1.0	12.1 J	<250	0.54 J	4,260	<2.5	<2.5	<500	<1.5	<1.0	770,000	<1.0	2.7 J	<50	<0.10
	TMW24102020	10/01/2020	<500	<5.0	<2.5	34.5	<2.0	<2.0	38,600	1.7 J	<2.0	<10	<500	<1.0	9,560	128	<5.0	<1000	<3.0	<2.0	1,030,000	<2.0	<5.0	<100	<0.20
TMW24	TMW24042020	04/22/2020	<200	<2.5	<1.3	29.8	<1.0	<1.0	36,500	<1.0	<1.0	<5.0	<250	<0.50	9,400	122	<2.5	<500	<1.5	<1.0	974,000	<1.0	<2.5	<50	<0.10
	TMW24102019	10/02/2019	<200	<2.5	<1.3	32.8	<1.0	<1.0	35,200	<1.0	<1.0	<5.0	<250	<0.50	10,100	129	<2.5	<500	<1.5	<1.0	907,000	<1.0	<2.5	<50	<0.10
	TMW24042019	04/11/2019	<200	<2.5	<1.3	34.7	<1.0	<1.0	39,700	<1.0	<1.0	<5.0	<250	<0.50	10,100	130	<2.5	<500	<1.5	<1.0	988,000	<1.0	<2.5	<50	<0.10
	TMW25102020	10/07/2020	<250	<2.5	<1.25	10.7	<1.0	<1.0	51,100	<1.0	<1.0	4.5 J	<250	<0.50	10,700	71	1.8 J	<500	<1.5	<1.0	896,000	<1.0	2.7 J	<50	0.16 J
TMW25	TMW25042020	05/01/2020	<100	<1.3	<0.63	10.3	<0.50	<0.50	49,500	0.58 J	<0.50	3.4 J	<125	<0.25	10,600	81.2	2.1 J	<250	<0.75	<0.50	852,000	<0.50	3.7 J	<25	<0.

TABLE B-6: SUMMARY OF DISSOLVED METALS ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury
	SL		5,000	6	10	2,000	4	5	-	50	50	1,000	1,000	15	-	200	200	-	50	50	-	2	86	10,000	2
TMW26	TMW26102020	09/30/2020	<250	<2.5	0.87 J	19.3	<1.0	<1.0	20,100	<1.0	<1.0	7.2 J	<250	0.69 J	8,400	130	2.5 J	275 J	<1.5	<1.0	885,000	<1.0	3.4 J	<50	<0.20
	TMW26042020	04/21/2020	<100	<1.3	1.1 J	16.2	<0.50	<0.50	19,000	<0.50	<0.50	<2.5	<125	<0.25	7,240	114	1.8 J	<250	<0.75	<0.50	876,000	<0.50	3.1 J	<25	<0.10
	TMW26042020DUP	04/21/2020	<100	<1.3	1.1 J	16.4	<0.50	<0.50	19,400	<0.50	<0.50	9.9 J	<125	0.51 J	7,480	117	2.0 J	252 J	<0.75	<0.50	880,000	<0.50	3.1 J	<25	<0.10
	TMW26102019	10/01/2019	<100	<1.3	0.96 J	16.5	<0.50	<0.50	16,600	<0.50	<0.50	5.1 J	<125	<0.25	7,420	111	1.8 J	334 J	<0.75	<0.50	786,000	<0.50	3.3 J	<25	<0.10
	TMW26042019	04/10/2019	<200	<2.5	1.3 J	16.6	<1.0	<1.0	18,600	<1.0	<1.0	<5.0	<250	<0.50	7,260	108	<2.5	<500	<1.5	<1.0	864,000	<1.0	3.8 J	<50	<0.10
TMW27	TMW27102020	10/02/2020	<250	<2.5	20.7	121	<1.0	<1.0	24,400	<1.0	<1.0	<5.0	576 J	<0.50	6,290	555	<2.5	476 J	<1.5	<1.0	343,000	<1.0	<2.5	<50	<0.20
	TMW27102020DUP	10/02/2020	<250	<2.5	20.9	120	<1.0	<1.0	24,500	<1.0	<1.0	<5.0	574 J	<0.50	6,440	570	<2.5	454 J	<1.5	<1.0	347,000	<1.0	<2.5	<50	<0.20
	TMW27042020	04/24/2020	<100	<1.3	20	114	<0.50	<0.50	23,500	<0.50	<0.50	<2.5	539 J	<0.25	6,120	539	<1.3	397 J	<0.75	<0.50	321,000	<0.50	<1.3	<25	<0.10
	TMW27102019	10/09/2019	<100	<1.3	19.6	99.3	<0.50	<0.50	22,600	<0.50	<0.50	<2.5	507 J	<0.25	6,310	540	<1.3	393 J	<0.75	<0.50	294,000	<0.50	<1.3	<25	<0.10
	TMW27042019	04/10/2019	<20	<0.25	20.1	123	<0.10	<0.10	24,500	0.30 J	0.17 J	6.0	589	0.53 J	6,230	519	0.73 J	422	<0.15	<0.10	351,000	<0.10	0.44 J	8.6 J	<0.10
TMW28	TMW27042019DUP	04/10/2019	<20	<0.25	19.7	124	<0.10	<0.10	24,700	0.18 J	0.15 J	<0.50	619	<0.05	6,420	530	0.40 J	405	<0.15	<0.10	351,000	<0.10	0.47 J	<5.0	<0.10
	TMW28102020	10/02/2020	<250	<2.5	<1.25	42.3	<1.0	<1.0	96,600	<1.0	<1.0	<5.0	294 J	<0.50	30,300	361	<2.5	1,110	<1.5	<1.0	351,000	<1.0	<2.5	<50	<0.20
	TMW28042020	04/24/2020	<100	<1.3	<0.63	47.5	<0.50	<0.50	107,000	<0.50	<0.50	<2.5	306 J	<0.25	33,100	400	<1.3	1,030	<0.75	<0.50	362,000	<0.50	1.3 J	<25	<0.10
	TMW28102019	10/03/2019	<100	<1.3	<0.63	47.6	<0.50	<0.50	73,400	<0.50	<0.50	3.5 J	272 J	0.49 J	24,800	349	<1.3	960 J	<0.75	<0.50	308,000	<0.50	<1.3	<25	<0.10
	TMW28042019	04/16/2019	<200	<2.5	<1.3	51	<1.0	<1.0	340,000	<1.0	<1.0	6.5 J	710 J	0.55 J	89,700	1,080	<2.5	1,240 J	<1.5	<1.0	700,000	<1.0	<2.5	<50	<0.10
TMW29	TMW29102020	10/01/2020	<250	<2.5	1.1 J	18.7	<1.0	<1.0	37,100	1.9 J	<1.0	4.9 J	<250	0.42 J	6,910	3.0 J	<2.5	693 J	22.8	<1.0	570,000	<1.0	4.8 J	<50	<0.20
	TMW29042020	04/22/2020	<100	<1.3	0.83 J	16.2	<0.50	<0.50	35,900	1.8 J	<0.50	4.6 J	<125	0.28 J	6,990	<1.3	<1.3	702 J	22.6	<0.50	561,000	<0.50	4.9 J	<25	<0.10
	TMW29102019	10/03/2019	<100	<1.3	1.1 J	15.8	<0.50	<0.50	33,800	1.1 J	<0.50	<2.5	<125	<0.25	6,640	<1.3	<1.3	597 J	16.7	<0.50	512,000	<0.50	4.5 J	<25	<0.10
	TMW29102019DUP	10/03/2019	<100	<1.3	0.98 J	16.7	<0.50	<0.50	34,900	1.3 J	<0.50	7.4 J	<125	0.66 J	6,760	<1.3	<1.3	631 J	17.1	<0.50	518,000	<0.50	4.5 J	<25	<0.10
	TMW29042019	04/11/2019	<200	<2.5	<1.3	17.5	<1.0	<1.0	37,800	1.3 J	<1.0	10.3 J	<250	0.59 J	7,220	<2.5	<2.5	661 J	19.3	<1.0	580,000	<1.0	4.8 J	<50	<0.10
TMW31S	TMW31S102020	10/01/2020	<250	<2.5	0.71 J	16.1	<1.0	4.0 J	133,000	2.3 J	0.97 J	45.5	<250	0.84 J	23,100	5.3	2.6 J	495 J	9.9	<1.0	563,000	<1.0	3.4 J	408	<0.20
	TMW31S042020	04/23/2020	<100	<1.3	0.65 J	12.8	<0.50	<0.50	115,000	1.3 J	<0.50	<2.5	<125	<0.25	21,100	6.4	<1.3	311 J	8.8	<0.50	558,000	<0.50	4.5 J	<25	<0.10
	TMW31S102019	10/08/2019	<100	<1.3	<0.63	12.8	<0.50	<0.50	115,000	1.5 J	<0.50	7.9 J	<125	0.73 J	20,300	2.7 J	<1.3	331 J	9.0	<0.50	502,000	<0.50	1.6 J	<25	<0.10
	TMW31S042019	04/27/2019	<200	<2.5	<1.3	15.7	<1.0	<1.0	113,000	<1.0	<1.0	9.9 J	<250	0.52 J	20,700	95.7	<2.5	<500	8.8 J	<1.0	541,000	<1.0	<2.5	<50	<0.10
	TMW33102020	10/01/2020	<500	<5.0	<2.5	15.2	<2.0	<2.0	112,000	<2.0	<2.0	<10	<500	<1.0	31,300	52.9	<5.0	523 J	<3.0	<2.0	2,360,000	<2.0	4.0 J	<100	<0.20
TMW33	TMW33042020	04/22/2020	<200	<2.5	<1.3	12	<1.0	<1.0	97,100	<1.0	<1.0	8.8 J	<250	<0.50	28,400	95.3	<2.5	<500	<1.5	<1.0	2,190,000	<1.0	<2.5	<50	<0.10
	TMW33102019	10/02/2019	<200	<2.5	<1.3	14.1	<1.0	<1.0	92,800	<1.0	<1.0	5.6 J	<250	<0.50	31,300	54.5	<2.5	638 J	<1.5	<1.0	2,240,000	<1.0	2.6 J	<50	<0.10
	TMW33042019	04/25/2019	<200	<2.5	1.3 J	14.3	<1.0	<1.0	102,000	<1.0	<1.0	9.8 J	<250	<0.50	27,300	76	<2.5	<500	<1.5	<1.0	2,230,000	<1.0	3.5 J	<50	<0.10
	TMW34102020	10/05/2020	<500	<5.0	<2.5	11.8	<2.0	<2.0	127,000	<2.0	<2.0	<10	<500	<1.0	27,500	143	<5.0	690 J	125	<2.0	1,330,000	<2.0	<5.0	<100	<0.20
TMW34	TMW34042020	04/24/2020	<200	<2.5	<1.3	11.2	<1.0	<1.0	126,000	<1.0	<1.0	<5.0	<250	<0.50	26,900	141	<2.5	<500	118	<1.0	1,330,000	<1.0	<2.5	<50	<0.10
	TMW34042020DUP	04/24/2020	<200	<2.5	<1.3	10.2	<1.0	<1.0	122,000	<1.0	<1.0	<5.0	<250	<0.50	26,300	138	<2.5	522 J	116	<1.0	1,340,000	<1.0	4.9 J	<50	<0.10
	TMW34102019	10/04/2019	<200	<2.5	<1.3	10.2	<1.0	<1.0	109,000	<1.0	<1.0	<5.0	<250	<0.50	25,400	138	<2.5	581 J	113	<1.0	1,220,000	<1.0	<2.5	<50	<0.10
	TMW34102019DUP	10/04/2019	<200	<2.5	<1.3	10.6	<1.0	<1.0	109,000	<1.0	<1.0	6.1 J	<250	0.62 J	24,200	133	<2.5	612 J	114	<1.0	1,240,000	<1.0	<2.5	<50	<0.10
	TMW34042019	04/25/2019	<200	<2.5	<1.3	11.1	<1.0	<1.0	124,000	<1.0	<1.0	<5.0	<250	<0.50	24,400	128	<2.5	<500	118	<1.0	1,300,000	<1.0	<2.5	<50	<0.10
TMW35	TMW35102020	10/06/2020	<250	<2.5	<1.25	11.1	<1.0	<1.0	75,100	<1.0	<1.0	5.2 J	<250	<0.50	14,200	137	<2.5	319 J	7.0	<1.0	1,100,000	<1.0	<2.5	<50	<0.20
	TMW35042020	04/29/2020	<100	<1.3	<0.63	10.2	<0.50	<0.50	73,500	<0.50	<0.50	3.8 J	<125	<0.25	14,000	124	<1.3	267 J	7.0	<0.50	1,090,000	<0.50	<1.3	<25	<0.10
	TMW35102019	10/08/2019	<200	<2.5	<1.3	8.3 J	<1.0	<1.0	51,800	<1.0	<1.0	6.0 J	<250	0.65 J	11,400	95.6	<2.5	<500	5.7 J	<1.0	1,070,000	<1.0	<2.5	<50	<0.10
	TMW35042019	04/16/2019	<200	<2.5	<1.3	11	<1.0	<1.0	76,200	<1.0	<1.0	9.3 J	<250	0.55 J	14,200	115	<2.5	<500	8.2 J	<1.0	1,140,000	<1.0	<2.5	<50	<0.10
	TMW39S102020	10/01/2020	<250	<2.5	<1.25	13.7	<1.0	<1.0	73,600	1.3 J	<1.0	2.8 J	<250	<0.50	16,000	<2.5	<2.5	424 J	12.5	<1.0	876,000	<1.0	3.2 J	<50	<0.20
TMW39S	TMW39S042020	04/24/2020	<100	<1.3	<0.63	10.8	<0.50	<0.50	70,600	1.4 J	<0.50	<2.5	<125	<0.25	16,100	<1.3	<1.3	387 J	10.9	<0.50	845,000	<0.50	4.4 J	<25	<0.10
	TMW39S102019	10/08/2019	<100	<1.3	<0.63	11.6	<0.50	<0.50	65,300	1.9 J	<0.50	7.5 J	<125	0.68 J	16,200	1.7 J	<1.3	457 J	11.7	<0.50	753,000	<0.50	2.2 J	<25	<0.10
	TMW39S042019	04/27/2019	<200	<2.5	<1.3	11.3	<1.0	<1.0	72,900	1.8 J	<1.0	10.6 J	<250	0.65 J	16,000	<2.5	<2.5	<500	11.5	<1.0	792,000	<1.0	3.0 J	<50	<0.10
TMW40S	TMW40S042020	04/20/2020	<200	<2.5	7.0 J	22	<1.0	<1.0	64,100	<1.0	<1.0	5.9 J	<250	<0.50	10,600	14.7	<2.5	<500	77.6	<1.0	1,030,000	<1.0	29.5	<50	<0.10

TABLE B-6: SUMMARY OF DISSOLVED METALS ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury	
			5,000	6	10	2,000	4	5	-	50	50	1,000	1,000	15	-	200	200	-	50	50	-	2	86	10,000	2	
TMW41	TMW41102020	10/01/2020	<250	<2.5	<1.25	10.2	<1.0	<1.0	15,600	0.84 J	<1.0	<5.0	<250	<0.50	3,640	1.5 J	<2.5	538 J	<1.5	<1.0	786,000	<1.0	7.1	<50	<0.20	
	TMW41042020	04/23/2020	<100	<1.3	0.90 J	8.5	<0.50	<0.50	15,100	0.71 J	<0.50	<2.5	<125	<0.25	3,660	<1.3	<1.3	466 J	<0.75	<0.50	856,000	<0.50	9.5	<25	<0.10	
	TMW41102019	10/04/2019	<100	<1.3	<0.63	9.0	<0.50	<0.50	13,600	1.2 J	<0.50	5.1 J	<125	0.58 J	3,670	<1.3	<1.3	481 J	0.80 J	<0.50	762,000	<0.50	5.7	<25	<0.10	
	TMW41042019	04/17/2019	<200	<2.5	<1.3	9.2 J	<1.0	<1.0	14,400	1.2 J	<1.0	7.2 J	<250	<0.50	3,450	<2.5	<2.5	575 J	<1.5	<1.0	758,000	<1.0	6.5 J	<50	<0.10	
TMW43	TMW43102020	10/02/2020	<250	<2.5	<1.25	19.7	<1.0	<1.0	34,400	<1.0	<1.0	4.1 J	<250	<0.50	6,500	73.5	<2.5	623 J	5.0 J	<1.0	570,000	<1.0	<2.5	<50	<0.20	
	TMW43042020	04/28/2020	<100	<1.3	<0.63	16.7	<0.50	<0.50	32,700	<0.50	<0.50	<2.5	<125	<0.25	6,390	48.3	<1.3	498 J	5.7	<0.50	556,000	<0.50	5.2	<25	<0.10	
	TMW43102019	10/08/2019	<100	<1.3	<0.63	17.6	<0.50	<0.50	30,700	<0.50	<0.50	6.7 J	<125	0.70 J	6,000	53.4	<1.3	574 J	5.3	<0.50	543,000	<0.50	1.6 J	<25	<0.10	
	TMW43042019	04/18/2019	<200	<2.5	<1.3	18.8	<1.0	<1.0	36,000	<1.0	<1.0	12.9 J	<250	0.83 J	6,860	53.7	<2.5	746 J	5.8 J	<1.0	578,000	<1.0	2.5 J	<50	<0.10	
TMW44	TMW44102020	09/29/2020	<250	<2.5	<1.25	15.3	<1.0	<1.0	36,800	3.1 J	<1.0	4.7 J	<250	0.54 J	12,100	8.2	1.8 J	308 J	2.3 J	<1.0	785,000	<1.0	3.6 J	<50	<0.20	
	TMW44042020	04/22/2020	<100	<1.3	<0.63	13.2	<0.50	<0.50	34,800	<0.50	<0.50	3.3 J	<125	<0.25	11,300	8.2	<1.3	299 J	1.9 J	<0.50	727,000	<0.50	3.7 J	<25	<0.10	
	TMW44102019	10/02/2019	124 J	<1.3	0.74 J	16.5	<0.50	<0.50	34,300	<0.50	<0.50	<2.5	<125	<0.25	12,600	19.2	<1.3	296 J	2.3 J	<0.50	660,000	<0.50	3.3 J	<25	<0.10	
	TMW44042019	04/18/2019	<200	<2.5	1.3 J	15.3	<1.0	<1.0	37,200	<1.0	<1.0	11.4 J	<250	0.63 J	12,500	15.9	<2.5	<500	2.4 J	<1.0	762,000	<1.0	4.8 J	<50	<0.10	
TMW45	TMW45102020	10/05/2020	<250	<2.5	<1.25	64.4	<1.0	<1.0	29,200	<1.0	<1.0	5.4 J	<250	<0.50	7,770	50.7	<2.5	471 J	0.89 J	<1.0	959,000	<1.0	2.5 J	<50	<0.20	
	TMW45042020	04/27/2020	<100	<1.3	0.86 J	60.1	<0.50	<0.50	27,500	0.65 J	<0.50	<2.5	<125	<0.25	7,460	14.4	1.4 J	353 J	0.87 J	<0.50	939,000	<0.50	5.1	<25	<0.10	
	TMW45102019	10/04/2019	<100	<1.3	0.81 J	58.5	<0.50	<0.50	26,000	<0.50	<0.50	2.5 J	<125	<0.25	7,270	28.5	<1.3	446 J	0.86 J	<0.50	816,000	<0.50	3.4 J	<25	<0.10	
	TMW45042019	04/17/2019	<200	<2.5	<1.3	58	<1.0	<1.0	26,600	<1.0	<1.0	12.5 J	<250	0.59 J	6,940	5.0 J	<2.5	501 J	<1.5	<1.0	845,000	<1.0	4.0 J	<50	<0.10	
TMW46	TMW46102020	09/29/2020	<500	<5.0	<2.5	10.4	<2.0	<2.0	94,100	<2.0	<2.0	<10	<500	<1.0	22,500	<5.0	<5.0	<1000	128	<2.0	1,320,000	<2.0	<5.0	<100	<0.20	
	TMW46042020	04/22/2020	<200	<2.5	<1.3	8.0 J	<1.0	<1.0	87,400	<1.0	<1.0	<5.0	<250	<0.50	20,000	<2.5	<2.5	<500	116	<1.0	1,250,000	<1.0	3.4 J	<50	<0.10	
	TMW46102019	10/02/2019	<200	<2.5	<1.3	10.6	<1.0	<1.0	77,500	<1.0	<1.0	<5.0	<250	<0.50	19,600	11.2	<2.5	<500	114	<1.0	1,170,000	<1.0	2.8 J	<50	<0.10	
	TMW46102019DUP	10/02/2019	<200	<2.5	<1.3	8.9 J	<1.0	<1.0	76,100	<1.0	<1.0	<5.0	<250	<0.50	19,800	<2.5	<2.5	<500	113	<1.0	1,140,000	<1.0	2.6 J	<50	<0.10	
	TMW46042019	04/26/2019	<200	<2.5	<1.3	9.3 J	<1.0	<1.0	84,200	<1.0	<1.0	6.1 J	<250	0.53 J	19,200	<2.5	<2.5	<500	120	<1.0	1,190,000	<1.0	3.9 J	<50	<0.10	
TMW47	TMW47102020	10/07/2020	<250	<2.5	<1.25	11.3	<1.0	<1.0	6,120	<1.0	<1.0	<5.0	<250	<0.50	661	34.5	<2.5	780 J	<1.5	<1.0	563,000	<1.0	<2.5	<50	<0.20	
	TMW47042020	04/24/2020	<100	<1.3	0.88 J	10.9	<0.50	<0.50	5,900	<0.50	<0.50	<2.5	<125	<0.25	660	35.8	<1.3	745 J	<0.75	<0.50	554,000	<0.50	2.6 J	<25	<0.10	
	TMW47102019	10/04/2019	<100	<1.3	<0.63	10.9	<0.50	<0.50	5,310	<0.50	<0.50	3.7 J	<125	0.59 J	679	35.6	<1.3	724 J	<0.75	<0.50	512,000	<0.50	<1.3	<25	<0.10	
	TMW47042019	04/15/2019	<200	<2.5	<1.3	11.2	<1.0	<1.0	6,560	<1.0	<1.0	8.7 J	<250	<0.50	673 J	36.1	<2.5	740 J	<1.5	<1.0	555,000	<1.0	<2.5	<50	<0.10	
BEDROCK WELLS																										
BGMW07	BGMW07102020	09/28/2020	<1000	<10	<5.0	29.1	<4.0	<4.0	617,000	<4.0	<4.0	<20	<1000	<2.0	84,300	1,310	<10	7,780	<6.0	<4.0	5,820,000	<4.0	<10	<200	<0.20	
	BGMW07042020	04/20/2020	<400	<5.0	<2.5	31.3	<2.0	<2.0	720,000	<2.0	<2.0	<10	<500	<1.0	95,100	1,380	<5.0	8,000	<3.0	<2.0	6,230,000	<2.0	<5.0	<100	<0.10	
	BGMW07102019	10/01/2019	<400	<5.0	<2.5	34.1	<2.0	<2.0	697,000	<2.0	<2.0	<10	<500	<1.0	97,000	1,760	<5.0	6,980	<3.0	<2.0	5,400,000	<2.0	<5.0	<100	<0.10	
	BGMW07042019	05/02/2019	<200	<2.5	2.0 J	44.4	<1.0	<1.0	842,000	<1.0	5.7 J	<5.0	<250	<0.50	118,000	2,210	<2.5	8,160	<1.5	<1.0	6,320,000	<1.0	3.1 J	<50	<0.50	
BGMW08	BGMW08102020	09/28/2020	<1000	<10	<5.0	13.8 J	<4.0	<4.0	335,000	<4.0	<4.0	<20	<1000	<2.0	40,600	513	<10	4,430	<6.0	<4.0	3,970,000	<4.0	<10	<200	<0.20	
	BGMW08042020	04/20/2020	<400	<5.0	<2.5	14.8 J	<2.0	<2.0	340,000	<2.0	9.4 J	<10	<500	<1.0	42,400	747	6.4 J	4,590	<3.0	<2.0	4,010,000	<2.0	<5.0	<100	<0.10	
	BGMW08102019	09/30/2019	<400	<5.0	<2.5	17.9 J	<2.0	<2.0	315,000	<2.0	12.4 J	<10	<500	<1.0	38,700	774	<5.0	4,270	<3.0	<2.0	3,840,000	<2.0	<5.0	<100	<0.10	
	BGMW08042019	04/28/2019	<200	<2.5	<1.3	15.1	<1.0	<1.0	292,000	<1.0	1.5 J	13.3 J	338 J	0.87 J	35,400	634	<2.5	4,520	<1.5	<1.0	3,530,000	<1.0	<2.5	<50	<0.10	
BGMW09	BGMW09102020	09/29/2020	<500	<5.0	<2.5	10.5	<2.0	<2.0	33,700	<2.0	<2.0	<10	<500	<1.0	3,930	71.6	<5.0	1,430 J	<3.0	<2.0	1,250,000	<2.0	3.8 J	<100</		

TABLE B-6: SUMMARY OF DISSOLVED METALS ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury
	SL		5,000	6	10	2,000	4	5	-	50	50	1,000	1,000	15	-	200	200	-	50	50	-	2	86	10,000	2
TMW14A	TMW14A102020	10/02/2020	<250	<2.5	<1.25	20	<1.0	<1.0	3,340	<1.0	<1.0	<5.0	<250	<0.50	383 J	13.4	<2.5	524 J	<1.5	<1.0	439,000	<1.0	<2.5	<50	<0.20
	TMW14A042020	04/30/2020	<100	<1.3	<0.63	15.1	<0.50	<0.50	3,300	<0.50	<0.50	<2.5	<125	<0.25	401 J	11.6	<1.3	537 J	<0.75	<0.50	457,000	<0.50	<1.3	<25	<0.10
	TMW14A102019	10/07/2019	<100	<1.3	<0.63	19	<0.50	<0.50	2,670	0.65 J	<0.50	11.1	<125	0.57 J	377 J	13.9	3.5 J	481 J	<0.75	<0.50	388,000	<0.50	<1.3	<25	<0.10
	TMW14A042019	04/15/2019	<200	<2.5	<1.3	17.1	<1.0	<1.0	3,450	<1.0	<1.0	21.1	<250	1.5 J	390 J	9.1 J	<2.5	<500	<1.5	<1.0	429,000	<1.0	<2.5	<50	<0.10
TMW16	TMW16102020	09/28/2020	<250	<2.5	<1.25	19.1	<1.0	<1.0	12,600	0.96 J	1.7 J	5.2 J	<250	<0.50	949	84.9	146	829 J	<1.5	<1.0	598,000	<1.0	4.0 J	48.3 J	<0.20
	TMW16042020	04/20/2020	<100	<1.3	<0.63	12.3	<0.50	<0.50	4,380	0.63 J	<0.50	<2.5	<125	<0.25	461 J	2.3 J	8.0	570 J	<0.75	<0.50	461,000	<0.50	5.3	<25	<0.10
	TMW16102019	10/02/2019	<100	<1.3	<0.63	11.7	<0.50	<0.50	3,700	0.93 J	<0.50	5.3 J	<125	<0.25	406 J	3.8 J	8.5	593 J	<0.75	<0.50	417,000	<0.50	4.7 J	<25	<0.10
	TMW16042019	04/19/2019	<20	<0.25	0.79 J	12.1	<0.10	<0.10	3,660	0.41 J	<0.10	0.69 J	<25	<0.05	383	1.2	2.2	490	0.17 J	<0.10	449,000	<0.10	19.7	<5.0	<0.10
TMW17	TMW16042019DUP	04/19/2019	<20	<0.25	0.18 J	11.6	<0.10	<0.10	3,710	0.84 J	<0.10	1.8 J	<25	<0.05	400	1.6	5.3	470	<0.15	<0.10	456,000	<0.10	2.9	6.0 J	<0.10
	TMW17102020	10/02/2020	<250	<2.5	<1.25	12.6	<1.0	<1.0	3,580	<1.0	<1.0	<5.0	<250	<0.50	466 J	11.2	<2.5	660 J	<1.5	<1.0	434,000	<1.0	<2.5	<50	<0.20
	TMW17042020	04/30/2020	<100	<1.3	<0.63	11.8	<0.50	<0.50	3,470	0.71 J	<0.50	<2.5	<125	<0.25	470 J	10.0	<1.3	652 J	<0.75	<0.50	430,000	<0.50	1.9 J	<25	<0.10
	TMW17102019	10/07/2019	<100	<1.3	<0.63	12.7	<0.50	<0.50	3,020	<0.50	<0.50	<2.5	<125	<0.25	598	7.9	<1.3	677 J	<0.75	<0.50	409,000	<0.50	<1.3	<25	<0.10
TMW18	TMW17042019	04/11/2019	42.3 J	<0.25	0.46 J	12.2	<0.10	<0.10	3,040	0.23 J	<0.10	<0.50	<25	<0.05	469	6.6	<0.25	653	<0.15	<0.10	431,000	<0.10	0.30 J	<5.0	<0.10
	TMW18102020	09/28/2020	175 J	<2.5	<1.25	10.9	<1.0	<1.0	7,010	0.75 J	<1.0	<5.0	<250	<0.50	1,070	6.2	<2.5	2,450	<1.5	<1.0	684,000	<1.0	5.3	<50	<0.20
	TMW18042020	04/20/2020	167 J	<1.3	0.88 J	11.3	<0.50	<0.50	7,490	1.8 J	<0.50	7.3 J	<125	0.93 J	1,050	5.9	<1.3	2,300	<0.75	<0.50	684,000	<0.50	18.9	<25	<0.10
	TMW18102019	10/01/2019	<100	<1.3	<0.63	10.6	<0.50	<0.50	6,260	0.52 J	<0.50	5.1 J	<125	0.77 J	1,140	4.6 J	<1.3	2,220	<0.75	<0.50	612,000	<0.50	3.1 J	<25	<0.10
TMW19	TMW18042019	04/17/2019	<200	<2.5	<1.3	13	<1.0	<1.0	6,630	<1.0	<1.0	12 J	<250	0.98 J	1,010	5.7 J	<2.5	2,570	<1.5	<1.0	604,000	<1.0	7.5 J	<50	<0.10
	TMW19102020	09/28/2020	<250	<2.5	<1.25	6.8	<1.0	<1.0	10,500	0.53 J	<1.0	<5.0	<250	<0.50	1,180	28.8	16.1	865 J	<1.5	<1.0	699,000	<1.0	4.2 J	<50	<0.20
	TMW19102020DUP	09/28/2020	<250	<2.5	<1.25	6.5	<1.0	<1.0	10,400	0.50 J	<1.0	<5.0	<250	<0.50	1,140	29.6	19.6	838 J	<1.5	<1.0	720,000	<1.0	4.2 J	<50	<0.20
	TMW19042020	04/21/2020	<100	<1.3	<0.63	5.9	<0.50	<0.50	10,400	<0.50	<0.50	<2.5	<125	<0.25	1,110	27	9.8	803 J	<0.75	<0.50	688,000	<0.50	3.9 J	<25	<0.10
TMW30	TMW19102019	10/03/2019	<100	<1.3	<0.63	5.8	<0.50	<0.50	8,770	<0.50	<0.50	5.9 J	<125	0.69 J	1,120	24	8.2	746 J	<0.75	<0.50	612,000	<0.50	3.9 J	<25	<0.10
	TMW19042019	04/15/2019	<200	<2.5	<1.3	6.7 J	<1.0	<1.0	9,860	<1.0	<1.0	10.4 J	<250	<0.50	1,030	14.8	2.5 J	776 J	<1.5	<1.0	674,000	<1.0	5.5 J	<50	<0.10
	TMW30102020	09/30/2020	<250	<2.5	<1.25	9.4	<1.0	<1.0	61,900	0.55 J	<1.0	3.0 J	<250	<0.50	12,700	<2.5	<2.5	736 J	7.3	<1.0	469,000	<1.0	13.1	<50	<0.20
	TMW30042020	04/24/2020	<100	<1.3	1.1 J	9.0	<0.50	<0.50	61,700	<0.50	<0.50	<2.5	<125	<0.25	12,500	<1.3	<1.3	676 J	7.4	<0.50	475,000	<0.50	15.7	<25	<0.10
TMW31D	TMW30102019	10/08/2019	125 J	<1.3	0.85 J	8.5	<0.50	<0.50	50,700	0.91 J	<0.50	4.7 J	<125	0.35 J	12,000	1.7 J	<1.3	648 J	7.0	<0.50	411,000	<0.50	11.3	<25	<0.10
	TMW30042019	04/25/2019	<20	<0.25	0.90 J	9.0	<0.10	<0.10	59,000	0.56 J	<0.10	9.9	<25	0.60 J	10,900	<0.25	0.37 J	620	7.5	<0.10	454,000	<0.10	12.2	13.3 J	<0.10
	TMW31D102020	10/02/2020	<250	<2.5	<1.25	9.2	<1.0	<1.0	63,900	<1.0	<1.0	2.6 J	<250	<0.50	11,100	8.1	<2.5	1,280	7.2	<1.0	613,000	<1.0	3.6 J	<50	<0.20
	TMW31D042020	04/27/2020	<100	<1.3	<0.63	8.2	<0.50	<0.50	60,000	<0.50	<0.50	<2.5	<125	<0.25	10,400	7.4	<1.3	1,100	6.9	<0.50	596,000	<0.50	6.4	<25	<0.10
TMW32	TMW31D102019	10/09/2019	<100	<1.3	<0.63	7.9	<0.50	<0.50	58,000	<0.50	<0.50	7.5 J	<125	0.57 J	11,000	4.9 J	<1.3	1,130	7.5	<0.50	538,000	<0.50	5.2	<25	<0.10
	TMW31D042019	04/24/2019	<200	<2.5	<1.3	8.4 J	<1.0	<1.0	66,800	<1.0	<1.0	<5.0	<250	<0.50	11,900	<2.5	<2.5	1,220 J	6.9 J	<1.0	576,000	<1.0	6.8 J	<50	<0.10
	TMW32102020	10/07/2020	<250	<2.5	1.4 J	6.3	<1.0	<1.0	11,200	<1.0	<1.0	2.5 J	<250	<0.50	1,190	24.6	<2.5	850 J	3.1 J	<1.0	754,000	<1.0	<2.5	<50	<0.20
	TMW32042020	04/29/2020	<100	<1.3	1.1 J	6.1	<0.50	<0.50	13,300	0.66 J	<0.50	<2.5	<125	<0.25	1,430	31.6	<1.3	889 J	1.4 J	<0.50	800,000	<0.50	<1.3	<25	<0.10
TMW36	TMW32102019	10/08/2019	<100	<1.3	1.4 J	5.9	<0.50	<0.50	9,020	<0.50	<0.50	3.5 J	<125	0.53 J	1,200	22.7	<1.3	759 J	2.2 J	<0.50	650,000	<0.50	<1.3	<25	<0.10
	TMW32042019	04/18/2019	<200	<2.5	<1.3	10.4	<1.0	<1.0	10,900	<1.0	<1.0	11 J	<250	2.0 J	1,270	25.1	<2.5	1,000 J	3.6 J	<1.0	727,000	<1.0	5.1 J	<50	<0.10
	TMW36102020	09/28/2020	<250	<2.5	<1.25	6.2	<1.0	<1.0	9,730	<1.0	1.1 J	34.3	<250	<0.50	986	43.4	61.1	783 J	<1.5	<1.0	687,000	<1.0	<2.5	93.6 J	<0.20
	TMW36042020	04/20/2020	<100	<1.3	<0.63	5.9	<0.50	<0.50	9,190	<0.50	<0.50	5.6 J	<125	0.54 J	974	23.2	10.6	771 J	<0.75	<0.50	680,000	<0.50	<1.3	41.7 J	<0.10
TMW37	TMW36102019	09/30/2019	<100	<1.3	<0.63	6.5	<0.50	<0.50	9,070	<0.50	<0.50	8.2 J	<125	0.66 J	945	20.9	7.0	778 J	<0.75	<0.50	674,000	<0.50	1.5 J	41.4 J	<0.10
	TMW36042019	04/16/2019	<200	<2.5	<1.3	6.5 J	<1.0	<1.0	9,060	<1.0	<1.0	5.2 J	<250	<0.50	909 J	14.2	6.8 J	682 J	<1.5	<1.0	667,000	<1.0	<2.5	<50	<0.10
	TMW37102020	09/29/2020	<250	<2.5	<1.25	8.7	<1.0	<1.0	8,290	4.3 J	1.0 J	5.6 J	<250	<0.50	905	41.9	76.2	722 J	<1.5	<1.0	652,000	<1.0	<2.5	<50	<0.20
	TMW37042020	04/20/2020	<100	<1.3	<0.63	9.4	<0.50	<0.50	10,700	0.85 J	1.7 J	6.7 J	150 J	0.39 J	1,110	80.1	86.3	792 J	<0.75	<0.50	684,000	<0.50	<1.3	47.4 J	<0.10
TMW37	TMW37102019	09/30/2019	<100	<1.3	<0.63	7.3	<0.50	<0.50	5,750	1.5 J	<0.50	6.1 J	<125	0.56 J	627	8.6	7.4	602 J	<0.75	<0.50	530,000	<0.50	2.7 J	<25	<0.10
	TMW37042019	04/16/2019	<200	<2.5	<1.3	9.9 J	<1.0	<1.0	5,790	<1.0	<1.0	<5.0	<250	<0.50	578 J	2.9 J	5.1 J	524 J	<1.5	<1.0	532,000	<1.0	7.2 J	<50	<0.10
	TMW37042019DUP	04/16/2019	<200	<2.5	<1.3	9.9 J	<1.0	<1.0	5,870	<1.0	<1.0	6.7 J	<250	0.71 J	594 J	2.9 J	5.8 J	554 J	<1.5	<1.0	535,000	<1.0	7.3 J	<50	<0.10

TABLE B-6: SUMMARY OF DISSOLVED METALS ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury
SL			5,000	6	10	2,000	4	5	-	50	50	1,000	1,000	15	-	200	200	-	50	50	-	2	86	10,000	2
TMW38	TMW38102020	10/06/2020	<250	<2.5	<1.25	11.4	<1.0	<1.0	18,100	<1.0	<1.0	<5.0	<250	<0.50	2,010	78.9	<2.5	1,140	<1.5	<1.0	952,000	<1.0	<2.5	<50	<0.20
	TMW38042020	04/28/2020	<100	<1.3	<0.63	9.0	<0.50	<0.50	10,900	<0.50	<0.50	<2.5	<125	<0.25	1,290	35.8	<1.3	802 J	<0.75	<0.50	727,000	<0.50	2.7 J	<25	<0.10
	TMW38102019	10/04/2019	<100	<1.3	<0.63	10.0	<0.50	<0.50	8,850	<0.50	<0.50	3.5 J	<125	0.55 J	1,170	34.4	<1.3	820 J	<0.75	<0.50	651,000	<0.50	2.5 J	<25	<0.10
	TMW38042019	04/25/2019	<200	<2.5	<1.3	10.2	<1.0	<1.0	6,800	<1.0	<1.0	<5.0	<250	<0.50	710 J	15.8	<2.5	585 J	<1.5	<1.0	565,000	<1.0	30	<50	<0.10
	TMW38042019DUP	04/25/2019	<200	<2.5	<1.3	11	<1.0	<1.0	6,850	<1.0	<1.0	53.9	<250	3.2 J	751 J	16	<2.5	564 J	<1.5	<1.0	572,000	<1.0	29	<50	<0.10
TMW39D	TMW39D102020	10/07/2020	<250	<2.5	<1.25	6.9	<1.0	<1.0	17,900	<1.0	<1.0	<5.0	<250	<0.50	1,830	51.3	<2.5	994 J	<1.5	<1.0	879,000	<1.0	<2.5	<50	<0.20
	TMW39D042020	05/01/2020	<100	<1.3	<0.63	6.4	<0.50	<0.50	17,400	<0.50	<0.50	<2.5	<125	<0.25	1,800	49.6	<1.3	941 J	<0.75	<0.50	757,000	<0.50	<1.3	<25	<0.10
	TMW39D102019	10/09/2019	<100	<1.3	<0.63	5.9	<0.50	<0.50	15,800	<0.50	<0.50	5.5 J	<125	0.58 J	1,770	45.1	<1.3	883 J	<0.75	<0.50	679,000	<0.50	<1.3	<25	<0.10
	TMW39D042019	04/19/2019	<200	<2.5	<1.3	7.8 J	<1.0	<1.0	20,700	<1.0	<1.0	<5.0	<250	<0.50	2,350	58.7	<2.5	994 J	<1.5	<1.0	715,000	<1.0	<2.5	<50	<0.10
TMW40D	TMW40D102020	10/07/2020	<250	<2.5	<1.25	8.6	<1.0	<1.0	14,800	<1.0	<1.0	2.7 J	<250	<0.50	1,950	46.7	<2.5	926 J	3.0 J	<1.0	725,000	<1.0	2.1 J	<50	0.15 J
	TMW40D042020	05/01/2020	<100	<1.3	<0.63	8.3	<0.50	<0.50	14,300	<0.50	<0.50	<2.5	<125	<0.25	1,940	46.7	<1.3	885 J	3.1 J	<0.50	700,000	<0.50	3.7 J	<25	<0.10
	TMW40D102019	10/10/2019	<100	<1.3	<0.63	7.5	<0.50	<0.50	13,900	<0.50	<0.50	16.9	<125	0.60 J	1,920	43.6	<1.3	841 J	2.8 J	<0.50	658,000	<0.50	1.9 J	<25	<0.10
	TMW40D042019	04/19/2019	<200	<2.5	<1.3	9.5 J	<1.0	<1.0	15,200	<1.0	<1.0	8.0 J	<250	0.58 J	2,090	50.6	<2.5	880 J	2.9 J	<1.0	728,000	<1.0	3.2 J	<50	<0.10
TMW48	TMW48102020	10/08/2020	<250	<2.5	<1.25	10.8	<1.0	<1.0	85,300	<1.0	<1.0	<5.0	<250	<0.50	16,700	59	<2.5	1,290	6.9	<1.0	630,000	<1.0	4.1 J	<50	<0.20
	TMW48042020	05/01/2020	<100	<1.3	<0.63	8.9	<0.50	<0.50	68,700	<0.50	<0.50	3.8 J	<125	<0.25	12,600	59.8	<1.3	1,160	5.8	<0.50	606,000	<0.50	4.2 J	<25	<0.10
	TMW48102019	10/10/2019	<100	<1.3	<0.63	9.0	<0.50	<0.50	87,100	<0.50	<0.50	6.5 J	<125	0.61 J	17,100	49.2	<1.3	1,010	6.8	<0.50	492,000	<0.50	3.6 J	<25	<0.10
	TMW48042019	04/22/2019	<200	<2.5	<1.3	11	<1.0	<1.0	92,400	<1.0	<1.0	8.0 J	<250	0.51 J	20,300	17.7	<2.5	1,030 J	7.6 J	<1.0	564,000	<1.0	6.6 J	<50	<0.10
TMW49	TMW49102020	10/08/2020	<250	<2.5	<1.25	10.5	<1.0	<1.0	76,600	0.71 J	<1.0	<5.0	<250	<0.50	12,900	67.2	12.1	1,620	21.7	<1.0	921,000	<1.0	9.0	<50	<0.20
	TMW49042020	04/29/2020	<100	<1.3	<0.63	8.9	<0.50	<0.50	78,300	1.3 J	<0.50	<2.5	<125	<0.25	13,500	13.9	1.3 J	1,180	20.7	<0.50	612,000	<0.50	11.1	<25	<0.10
	TMW49102019	10/09/2019	<100	<1.3	<0.63	8.0	<0.50	<0.50	59,300	0.98 J	<0.50	5.9 J	<125	0.63 J	11,800	15.5	1.5 J	1,240	25	<0.50	659,000	<0.50	10.6	<25	<0.10
	TMW49042019	04/23/2019	<200	<2.5	<1.3	10.7	<1.0	<1.0	79,600	1.1 J	<1.0	9.8 J	<250	0.70 J	14,100	17.2	<2.5	1,520 J	20.5	<1.0	616,000	<1.0	12.4	<50	<0.10

NOTES & ABBREVIATIONS:
µg/L = micrograms per liter
< = less than cited Detection Limit; less than Limit of Detection for October 2020 and newer data
NA = not analyzed
J = estimated value
- = not established or not applicable
SL = Screening Level
Bold Numbers = Result exceeds cited SL

TABLE B-7: SUMMARY OF TOTAL METALS ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury		
SL			5,000	6	10	2,000	4	5	-	50	50	1,000	1,000	15	-	200	200	-	50	50	-	2	86	10,000	2		
ALLUVIAL WELLS																											
BGMW01	BGMW01102020	09/30/2020	<250	<2.5	<1.25	21.5	<1.0	<1.0	66,200	<1.0	0.55 J	<5.0	<250	0.33 J	38,700	328	1.6 J	267 J	5.4	<1.0	1,010,000	<1.0	5.8	<50	<0.20		
	BGMW01042020	04/22/2020	<100	<1.3	<0.63	17.1	<0.50	<0.50	59,000	<0.50	<0.50	<2.5	<125	<0.25	33,600	358	<1.3	316 J	2.7 J	<0.50	903,000	<0.50	4.7 J	25.1 J	<0.10		
	BGMW01102019	10/02/2019	<100	<1.3	0.65 J	16.1	<0.50	<0.50	42,900	<0.50	<0.50	<2.5	<125	<0.25	29,700	264	<1.3	280 J	1.5 J	<0.50	760,000	<0.50	4.9 J	<25	<0.10		
	BGMW01042019	04/11/2019	<200	<2.5	<1.3	18.4	<1.0	<1.0	58,000	<1.0	<1.0	<5.0	<250	<0.50	32,000	285	<2.5	<500	<1.5	<1.0	894,000	<1.0	6.1 J	<50	<0.10		
BGMW02	BGMW02102020	09/30/2020	<250	<2.5	0.70 J	14.1	<1.0	<1.0	70,400	<1.0	<1.0	<5.0	<250	<0.50	99,900	62.7	<2.5	359 J	46.6	<1.0	924,000	<1.0	8.3	<50	<0.20		
	BGMW02042020	04/28/2020	<100	<1.3	0.85 J	12.3	<0.50	<0.50	64,800	<0.50	<0.50	<2.5	<125	<0.25	90,900	56.8	<1.3	275 J	45.2	<0.50	870,000	<0.50	9.5	<25	<0.10		
	BGMW02102019	10/06/2019	<100	<1.3	0.69 J	13.5	<0.50	<0.50	69,600	<0.50	<0.50	<2.5	<125	<0.25	109,000	73.9	<1.3	352 J	52.9	<0.50	807,000	<0.50	5.7	<25	<0.10		
	BGMW02042019	04/11/2019	<200	<2.5	<1.3	15.2	<1.0	<1.0	74,800	<1.0	<1.0	<5.0	<250	<0.50	101,000	63	<2.5	<500	55.2	<1.0	955,000	<1.0	6.7 J	<50	<0.10		
BGMW03	BGMW03102020	09/28/2020	230 J	<2.5	1.8 J	27.5	<1.0	<1.0	71,700	1.1 J	0.82 J	<5.0	136 J	<0.50	15,700	18.7	2.0 J	1,480	15.5	<1.0	607,000	<1.0	11.7	<50	<0.20		
	BGMW03042020	04/21/2020	1,350	<1.3	1.1 J	43.6	<0.50	<0.50	119,000	2.4 J	1.9 J	<2.5	1,020	1.0 J	24,500	39.1	2.6 J	2,260	11	<0.50	581,000	<0.50	8.1	<25	<0.10		
	BGMW03102019	09/30/2019	229 J	<1.3	1.8 J	27.5	<0.50	<0.50	85,100	<0.50	<0.50	<2.5	178 J	<0.25	17,600	20.1	<1.3	1,540	10.8	<0.50	617,000	<0.50	9.3	45.5 J	<0.10		
	BGMW03042019	04/23/2019	1,760	<2.5	2.1 J	45.8	<1.0	<1.0	95,800	<1.0	1.1 J	<5.0	1,130 J	1.7 J	20,600	87.8	<2.5	2,030	19.3	<1.0	663,000	<1.0	10.7	<50	<0.10		
	BGMW03042019DUP	04/23/2019	1,550	<2.5	2.0 J	49.2	<1.0	<1.0	103,000	<1.0	1.2 J	<5.0	1,230 J	1.9 J	21,500	94.1	<2.5	2,170	17.4	<1.0	652,000	<1.0	10.8	<50	<0.10		
FW31	FW31102020	10/05/2020	198 J	<2.5	7.3	23.3	<1.0	<1.0	8,660	1.7 J	<1.0	<5.0	<250	<0.50	3,130	20.8	2.2 J	1,470	<1.5	<1.0	587,000	<1.0	11.5	<50	<0.20		
	FW31102020DUP	10/05/2020	177 J	<2.5	7.3	22.4	<1.0	<1.0	8,380	1.5 J	<1.0	<5.0	<250	<0.50	3,040	21.1	2.5 J	1,440	<1.5	<1.0	581,000	<1.0	11	<50	<0.20		
	FW31042020	04/24/2020	176 J	<1.3	6.1	13.3	<0.50	<0.50	5,770	1.1 J	<0.50	<2.5	<125	<0.25	2,320	8.4	<1.3	1,310	<0.75	<0.50	476,000	<0.50	12.2	<25	<0.10		
	FW31102019	10/04/2019	1,100	<1.3	5.8	28.1	<0.50	<0.50	6,100	0.96 J	<0.50	<2.5	363 J	0.51 J	2,590	43.6	<1.3	1,410	<0.75	<0.50	450,000	<0.50	9.1	<25	0.13 J		
	FW31042019	04/11/2019	582 J	<2.5	6.8 J	31	<1.0	<1.0	7,080	<1.0	<1.0	9.7 J	<250	1.1 J	2,620	73	<2.5	1,360 J	<1.5	<1.0	521,000	<1.0	10.8	<50	0.11 J		
MW01	MW01102020	09/29/2020	<200	<2.5	0.66 J	18.8	<1.0	<1.0	40,300	0.79 J	<1.0	<5.0	<250	<0.50	10,300	14.4	<2.5	1,060	12.4	<1.0	819,000	<1.0	2.8 J	<50	<0.20		
	MW01042020	04/22/2020	<100	<1.3	<0.63	15	<0.50	<0.50	37,300	<0.50	<0.50	<2.5	<125	<0.25	9,650	4.3 J	<1.3	1,250	8.2	<0.50	765,000	<0.50	<1.3	<25	<0.10		
	MW01102019	10/01/2019	497 J	<1.3	<0.63	30.3	<0.50	<0.50	79,600	0.93 J	0.61 J	2.7 J	303 J	1.1 J	26,100	111	<1.3	5,270	10.3	<0.50	640,000	<0.50	1.7 J	33.2 J	<0.10		
	MW01042019	04/10/2019	526 J	<2.5	<1.3	22.8	<1.0	<1.0	37,100	<1.0	<1.0	<5.0	310 J	1.4 J	7,960	140	<2.5	<500	15	<1.0	891,000	<1.0	3.0 J	<50	<0.10		
MW02	MW02102020	09/29/2020	<200	<2.5	<1.25	41.2	<1.0	<1.0	113,000	0.52 J	<1.0	<5.0	<250	<0.50	24,600	20.7	<2.5	442 J	7.8	<1.0	482,000	<1.0	2.6 J	30.7 J	<0.20		
	MW02042020	04/22/2020	<100	<1.3	<0.63	38.6	<0.50	<0.50	107,000	<0.50	<0.50	<2.5	<125	<0.25	22,900	18.2	<1.3	423 J	10.6	<0.50	460,000	<0.50	<1.3	30.3 J	<0.10		
	MW02102019	10/02/2019	280 J	<1.3	<0.63	51.3	<0.50	<0.50	114,000	0.59 J	<0.50	<2.5	209 J	0.62 J	25,100	114	<1.3	469 J	10	<0.50	421,000	<0.50	1.8 J	47.8 J	<0.10		
	MW02042019	04/17/2019	<200	<2.5	<1.3	62.2	<1.0	<1.0	111,000	<1.0	<1.0	<5.0	<250	<0.50	22,400	173	<2.5	689 J	8.1 J	<1.0	352,000	<1.0	<2.5	92.4 J	<0.10		
MW03	MW03102020	10/01/2020	<500	<5.0	<2.5	8.2 J	<2.0	<2.0	48,900	<2.0	<2.0	<10	<500	<1.0	9,580	41.6	<5.0	<1000	34.5	<2.0	1,060,000	<2.0	<5.0	<100	<0.20		
	MW03042020	04/23/2020	<200	<2.5	<1.3	8.6 J	<1.0	<1.0	52,300	<1.0	<1.0	<5.0	<250	<0.50	10,200	47.1	<2.5	<500	27.6	<1.0	929,000	<1.0	5.1 J	<50	<0.10		
	MW03102019	10/03/2019	<200	<2.5	<1.3	8.9 J	<1.0	<1.0	43,900	<1.0	<1.0	<5.0	331 J	<0.50	9,080	51.7	<2.5	<500	30.6	<1.0	941,000	<1.0	<2.5	<50	<0.10		
	MW03042019	04/11/2019	<200	<2.5	<1.3	9.3 J	<1.0	<1.0	52,500	<1.0	<1.0	<5.0	<250	<0.50	10,400	39.5	<2.5	<500	29.6	<1.0	1,050,000	<1.0	<2.5	<50	<0.10		
MW18D	MW18D102020	10/06/2020	<1000	<10	<5.0	16.5 J	<4.0	<4.0	71,700	<4.0	<4.0	<20	<1000	<2.0	19,300	781	<10	<2000	<3.0	<4.0	2,130,000	<4.0	8.2 J	<200	<0.20		
	MW18D042020	04/30/2020	<400	<5.0	<2.5	17.4 J	<2.0	<2.0	63,700	<2.0	<2.0	<10	<500	<1.0	19,200	561	5.2 J	<1,000	<3.0	<2.0	2,020,000	<2.0	<5.0	<100	<0.10		
	MW18D102019	10/07/2019	<400	<5.0	<2.5	16.3 J	<2.0	<2.0	63,700	<2.0	<2.0	<10	<500	<1.0	18,100	503	<5.0	<1,000	<3.0	<2.0	1,970,000	<2.0	<5.0	<100	<0.10		
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TABLE B-7: SUMMARY OF TOTAL METALS ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan

Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury
SL			5,000	6	10	2,000	4	5	-	50	50	1,000	1,000	15	-	200	200	-	50	50	-	2	86	10,000	2
MW23	MW23102020	09/28/2020	<250	<2.5	1.5 J	233	<1.0	<1.0	16,700	<1.0	<1.0	<5.0	145 J	<0.50	7,210	77.7	<2.5	1,050	<1.5	<1.0	480,000	<1.0	3.6 J	<50	<0.20
	MW23042020	04/21/2020	<100	<1.3	1.4 J	216	<0.50	<0.50	15,800	<0.50	<0.50	<2.5	156 J	<0.25	6,700	69	<1.3	1,060	<0.75	<0.50	491,000	<0.50	3.1 J	<25	<0.10
	MW23102019	09/30/2019	<100	<1.3	1.7 J	209	<0.50	<0.50	14,300	0.62 J	<0.50	<2.5	184 J	1.2 J	6,360	64.8	2.2 J	1,030	<0.75	<0.50	485,000	<0.50	2.7 J	76.6 J	<0.10
	MW23042019	04/17/2019	<200	<2.5	1.4 J	207	<1.0	<1.0	16,600	<1.0	<1.0	<5.0	<250	<0.50	7,090	73.4	<2.5	972 J	<1.5	<1.0	493,000	<1.0	3.1 J	<50	<0.10
MW24	MW24102020	09/29/2020	<250	<2.5	0.95 J	293	<1.0	<1.0	32,500	<1.0	<1.0	<5.0	1,870	<0.50	11,000	449	<2.5	756 J	<1.5	<1.0	263,000	<1.0	1.6 J	<50	<0.20
	MW24042020	04/20/2020	150 J	<1.3	0.81 J	275	<0.50	<0.50	32,700	<0.50	<0.50	<2.5	1,910	<0.25	10,900	446	<1.3	782 J	<0.75	<0.50	268,000	<0.50	1.3 J	<25	<0.10
	MW24042020DUP	04/20/2020	126 J	<1.3	0.86 J	288	<0.50	<0.50	33,600	<0.50	<0.50	<2.5	1,950	<0.25	11,200	455	<1.3	778 J	<0.75	<0.50	272,000	<0.50	1.3 J	<25	<0.10
	MW24102019	09/30/2019	<100	<1.3	1.1 J	285	<0.50	<0.50	32,000	<0.50	<0.50	<2.5	1,930	<0.25	10,700	446	<1.3	753 J	<0.75	<0.50	262,000	<0.50	<1.3	<25	<0.10
SMW01	MW24042019	04/18/2019	<200	<2.5	<1.3	267	<1.0	<1.0	30,500	<1.0	<1.0	9.4 J	1,760 J	<0.50	10,400	421	<2.5	797 J	<1.5	<1.0	244,000	<1.0	<2.5	<50	<0.10
	SMW01102020	09/29/2020	<500	<5.0	2.4 J	30.7	<2.0	<2.0	23,100	<2.0	<2.0	<10	<500	<1.0	7,960	87.6	<5.0	<1000	<3.0	<2.0	1,040,000	<2.0	7.5 J	<100	<0.20
	SMW01042020	04/21/2020	<200	<2.5	2.0 J	41.6	<1.0	<1.0	24,100	<1.0	<1.0	<5.0	<250	<0.50	8,270	186	<2.5	<500	<1.5	<1.0	1,070,000	<1.0	4.0 J	<50	<0.10
	SMW01102019	10/01/2019	<200	<2.5	1.5 J	36.9	<1.0	<1.0	21,500	<1.0	<1.0	<5.0	<250	<0.50	8,940	403	<2.5	<500	<1.5	<1.0	978,000	<1.0	3.7 J	<50	<0.10
TMW01	SMW01042019	04/11/2019	<200	<2.5	1.7 J	47.1	<1.0	<1.0	25,800	<1.0	1.3 J	<5.0	<250	<0.50	8,730	827	<2.5	<500	<1.5	<1.0	1,010,000	<1.0	4.3 J	<50	<0.10
	TMW01102020	10/01/2020	<250	<2.5	0.91 J	11.5	<1.0	<1.0	111,000	0.95 J	<1.0	<5.0	<250	<0.50	18,900	12.2	<2.5	<500	3.5 J	<1.0	574,000	<1.0	12.6	<50	<0.20
	TMW01042020	04/24/2020	<100	<1.3	0.67 J	9.5	<0.50	<0.50	105,000	<0.50	<0.50	<2.5	<125	<0.25	18,600	11	<1.3	<250	3.0 J	<0.50	544,000	<0.50	13	<25	<0.10
	TMW01102019	10/08/2019	<100	<1.3	0.63 J	11.1	<0.50	<0.50	112,000	0.60 J	<0.50	6.7 J	<125	<0.25	19,800	11.9	<1.3	<250	3.4 J	<0.50	539,000	<0.50	10.8	<25	<0.10
TMW02	TMW01042019	04/18/2019	<200	<2.5	<1.3	10.3	<1.0	<1.0	113,000	<1.0	<1.0	18.3 J	<250	<0.50	19,600	9.6 J	<2.5	<500	2.0 J	<1.0	596,000	<1.0	13.5	<50	<0.10
	TMW02102020	10/02/2020	<500	<5.0	<2.5	7.7 J	<2.0	<2.0	24,300	<2.0	<2.0	<10	<500	<1.0	2,880	<5.0	<5.0	1,210 J	78.6	<2.0	1,110,000	<2.0	38.6	<100	<0.20
	TMW02102020DUP	10/02/2020	<500	<5.0	<2.5	7.3 J	<2.0	<2.0	24,300	<2.0	<2.0	<10	<500	<1.0	2,950	<5.0	<5.0	1,220 J	78	<2.0	1,080,000	<2.0	38.5	<100	<0.20
	TMW02042020	04/24/2020	<200	<2.5	<1.3	6.7 J	<1.0	<1.0	22,700	<1.0	<1.0	<5.0	<250	<0.50	2,740	<2.5	<2.5	1,190 J	72.6	<1.0	1,030,000	<1.0	41.4	<50	<0.10
	TMW02042020DUP	04/24/2020	<200	<2.5	<1.3	6.3 J	<1.0	<1.0	22,700	<1.0	<1.0	<5.0	<250	<0.50	2,750	<2.5	<2.5	1,180 J	71.7	<1.0	1,020,000	<1.0	41.2	<50	<0.10
	TMW02102019	10/08/2019	<200	<2.5	<1.3	7.0 J	<1.0	<1.0	22,000	<1.0	<1.0	<5.0	<250	<0.50	2,930	<2.5	<2.5	1,120 J	72.6	<1.0	1,030,000	<1.0	35.9	<50	<0.10
TMW03	TMW02042019	04/18/2019	<200	<2.5	<1.3	6.9 J	<1.0	<1.0	22,400	<1.0	<1.0	<5.0	<250	<0.50	2,730	<2.5	<2.5	1,270 J	73.5	<1.0	1,100,000	<1.0	40.3	<50	<0.10
	TMW02042019DUP	04/18/2019	<200	<2.5	<1.3	7.0 J	<1.0	<1.0	22,300	<1.0	<1.0	<5.0	<250	<0.50	2,740	<2.5	<2.5	1,300 J	68.4	<1.0	1,120,000	<1.0	40	<50	<0.10
	TMW03102020	10/07/2020	<250	<2.5	<1.25	12.6	<1.0	<1.0	65,000	<1.0	<1.0	<5.0	<250	<0.50	11,700	4.3 J	<2.5	336 J	68.5	<1.0	1,030,000	<1.0	<2.5	<50	<0.20
	TMW03042020	05/01/2020	<100	<1.3	<0.63	11.6	<0.50	<0.50	50,400	<0.50	<0.50	<2.5	<125	<0.25	11,300	4.0 J	<1.3	344 J	51.1	<0.50	947,000	<0.50	<1.3	<25	<0.10
	TMW03102019	10/09/2019	<100	<1.3	<0.63	11.5	<0.50	<0.50	46,600	<0.50	<0.50	<2.5	<125	<0.25	11,600	3.1 J	<1.3	271 J	52.1	<0.50	859,000	<0.50	<1.3	<25	<0.10
	TMW03102019DUP	10/09/2019	<100	<1.3	<0.63	10.7	<0.50	<0.50	46,300	<0.50	<0.50	<2.5	<125	<0.25	11,000	3.0 J	<1.3	260 J	49.2	<0.50	801,000	<0.50	<1.3	<25	<0.10
TMW04	TMW03042019	04/19/2019	<200	<2.5	<1.3	11.8	<1.0	<1.0	48,700	<1.0	<1.0	<5.0	<250	<0.50	11,100	3.7 J	<2.5	<500	48.9	<1.0	944,000	<1.0	<2.5	<50	<0.10
	TMW04102020	10/02/2020	<200	<2.5	<1.25	7.5	<1.0	<1.0	30,100	4.0 J	<1.0	<5.0	152 J	0.29 J	5,540	1.4 J	1.6 J	563 J	79.5	<1.0	881,000	<1.0	16	<50	<0.20
	TMW04042020	04/27/2020	<100	<1.3	1.7 J	9.8	<0.50	<0.50	31,700	4.4 J	<0.50	<2.5	1,380	0.35 J	5,830	4.8 J	<1.3	503 J	77.7	<0.50	915,000	<0.50	32.2	<25	<0.10
	TMW04102019	10/09/2019	<100	<1.3	0.90 J	6.7	<0.50	<0.50	27,600	2.3 J	<0.50	<2.5	126 J	<0.25	5,310	<1.3	<1.3	476 J	76.1	<0.50	787,000	<0.50	15.1	<25	<0.10
TMW06	TMW04042019	04/19/2019	<200	<2.5	<1.3.																				

TABLE B-7: SUMMARY OF TOTAL METALS ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury
SL			5,000	6	10	2,000	4	5	-	50	50	1,000	1,000	15	-	200	200	-	50	50	-	2	86	10,000	2
TMW08	TMW08102020	09/30/2020	<1000	<10	<5.0	10.3 J	<4.0	<4.0	427,000	<4.0	<4.0	<20	873 J	<2.0	108,000	421	<10	1,680 J	28.8	<4.0	4,590,000	<4.0	<10	<200	<0.20
	TMW08042020	04/23/2020	<400	<5.0	<2.5	7.5 J	<2.0	<2.0	319,000	<2.0	<2.0	<10	<500	<1.0	83,900	347	<5.0	1,360 J	20.1	<2.0	4,120,000	<2.0	<5.0	<100	<0.10
	TMW08102019	10/03/2019	<400	<5.0	<2.5	8.5 J	<2.0	<2.0	280,000	<2.0	<2.0	<10	<500	<1.0	83,300	406	<5.0	1,350 J	21.2	<2.0	3,760,000	<2.0	<5.0	<100	<0.10
	TMW08042019	04/15/2019	<200	<2.5	<1.3	9.3 J	<1.0	<1.0	246,000	<1.0	<1.0	<5.0	<250	<0.50	69,600	382	<2.5	1,090 J	39.1	<1.0	4,100,000	<1.0	<2.5	<50	<0.10
TMW10	TMW10102020	10/01/2020	<500	<5.0	<2.5	11.6	<2.0	<2.0	48,200	<2.0	<2.0	<10	<500	<1.0	11,700	7.0 J	<5.0	<1000	<3.0	<2.0	1,520,000	<2.0	3.6 J	<100	<0.20
	TMW10042020	04/23/2020	<200	<2.5	<1.3	11.6	<1.0	<1.0	55,000	<1.0	<1.0	<5.0	<250	<0.50	13,800	15.3	<2.5	<500	<1.5	<1.0	1,560,000	<1.0	<2.5	<50	<0.10
	TMW10102019	10/03/2019	<200	<2.5	<1.3	12.1	<1.0	<1.0	47,400	<1.0	<1.0	<5.0	<250	<0.50	12,100	5.8 J	<2.5	<500	<1.5	<1.0	1,470,000	<1.0	<2.5	<50	<0.10
	TMW10042019	04/22/2019	<200	<2.5	<1.3	13.4	<1.0	<1.0	62,200	<1.0	<1.0	<5.0	<250	<0.50	16,500	8.9 J	<2.5	<500	<1.5	<1.0	1,680,000	<1.0	2.9 J	<50	<0.10
TMW11	TMW11042020	04/20/2020	11,300	<2.5	1.3 J	105	0.60 J	<1.0	16,300	8.9	4.1	3.1 J	4,590	5.0 J	4,260	196	6.8	2,130	59.4	<1.0	544,000	<1.0	19.7	<50	<0.20
	TMW11102019	10/02/2019	51,700	<1.3	3.0 J	498	3.5	<0.50	40,500	33.2	20.2	13.3	19,400	26.8	16,700	1,040	35.7	4,680	46.4	<0.50	509,000	<0.50	49.3	137	<0.10
	TMW11042019	04/19/2019	78,800	<2.5	9.3 J	866	6.9	<1.0	70,700	46.6	27.2	18.5 J	28,400	45.7	22,900	1,490	45.3	6,930	23.1	<1.0	594,000	<1.0	72.9	257	<0.10
	TMW13102020	10/06/2020	<250	<2.5	<1.5	16.6	<1.0	<1.0	27,900	0.67 J	<1.0	<5.0	<250	<0.50	5,200	<2.5	<2.5	356 J	10.6	<1.0	600,000	<1.0	2.3 J	<50	<0.20
TMW13	TMW13102020DUP	10/06/2020	<250	<2.5	<1.5	16.8	<1.0	<1.0	27,400	0.82 J	<1.0	<5.0	<250	<0.50	5,040	<2.5	<2.5	332 J	10.5	<1.0	570,000	<1.0	2.3 J	<50	<0.20
	TMW13042020	04/28/2020	<100	<1.3	<0.63	15.7	<0.50	<0.50	26,700	<0.50	<0.50	<2.5	<125	<0.25	5,080	<1.3	<1.3	270 J	10.2	<0.50	570,000	<0.50	3.0 J	<25	<0.10
	TMW13042020DUP	04/28/2020	<100	<1.3	<0.63	15.2	<0.50	<0.50	25,900	<0.50	<0.50	<2.5	<125	<0.25	4,900	<1.3	<1.3	275 J	9.8	<0.50	551,000	<0.50	3.1 J	<25	<0.10
	TMW13102019	10/06/2019	<100	<1.3	<0.63	15.3	<0.50	<0.50	25,200	<0.50	<0.50	<2.5	<125	<0.25	5,240	<1.3	<1.3	318 J	10.5	<0.50	469,000	<0.50	1.5 J	<25	<0.10
	TMW13102019DUP	10/06/2019	<100	<1.3	<0.63	15.2	<0.50	<0.50	24,300	<0.50	<0.50	<2.5	<125	<0.25	5,160	<1.3	<1.3	317 J	10	<0.50	484,000	<0.50	1.6 J	<25	<0.10
	TMW13042019	04/17/2019	<200	<2.5	<1.3	16.9	<1.0	<1.0	26,600	<1.0	<1.0	<5.0	<250	<0.50	5,010	<2.5	<2.5	<500	10.5	<1.0	600,000	<1.0	2.8 J	<50	<0.10
TMW15	TMW15102020	10/05/2020	<250	<2.5	<1.5	20	<1.0	<1.0	18,400	0.74 J	<1.0	<5.0	<250	<0.50	3,380	<2.5	<2.5	356 J	12.2	<1.0	555,000	<1.0	<2.5	<50	<0.20
	TMW15102020DUP	10/05/2020	<250	<2.5	<1.5	20.8	<1.0	<1.0	18,500	0.99 J	<1.0	<5.0	<250	<0.50	3,560	<2.5	<2.5	345 J	12.4	<1.0	562,000	<1.0	<2.5	<50	<0.20
	TMW15042020	04/27/2020	<100	<1.3	<0.63	18.3	<0.50	<0.50	16,500	0.85 J	<0.50	<2.5	<125	<0.25	3,220	<1.3	<1.3	260 J	11.5	<0.50	521,000	<0.50	2.6 J	<25	<0.10
	TMW15042020DUP	04/27/2020	<100	<1.3	<0.63	18.7	<0.50	<0.50	17,400	0.82 J	<0.50	<2.5	<125	<0.25	3,330	<1.3	<1.3	<250	11.2	<0.50	541,000	<0.50	2.7 J	<25	<0.10
	TMW15102019	10/04/2019	<100	<1.3	<0.63	19.3	<0.50	<0.50	17,200	0.99 J	<0.50	<2.5	<125	<0.25	3,400	<1.3	<1.3	333 J	11.8	<0.50	506,000	<0.50	<1.3	<25	0.20 J
	TMW15042019	04/17/2019	<200	<2.5	<1.3	20.5	<1.0	<1.0	18,400	1.2 J	<1.0	<5.0	<250	<0.50	3,460	<2.5	<2.5	512 J	11.9	<1.0	545,000	<1.0	<2.5	<50	<0.10
TMW21	TMW21102020	10/07/2020	<250	<2.5	<1.5	16.4	<1.0	<1.0	35,800	0.93 J	<1.0	2.5 J	<250	<0.50	6,920	<2.5	<2.5	462 J	6.0	<1.0	658,000	<1.0	1.7 J	<50	<0.20
	TMW21042020	04/27/2020	<100	<1.3	<0.63	15.2	<0.50	<0.50	33,300	0.89 J	<0.50	<2.5	<125	<0.25	6,620	<1.3	1.7 J	385 J	5.5	<0.50	628,000	<0.50	3.2 J	<25	<0.10
	TMW21102019	10/08/2019	<100	<1.3	0.71 J	15.1	<0.50	<0.50	30,100	1.7 J	<0.50	4.3 J	<125	<0.25	6,760	2.5 J	1.7 J	442 J	5.6	<0.50	561,000	<0.50	5.1	<25	<0.10
	TMW21102019DUP	10/08/2019	<100	<1.3	0.68 J	16.4	<0.50	<0.50	31,300	1.4 J	<0.50	4.5 J	<125	<0.25	7,320	2.6 J	1.7 J	443 J	5.6	<0.50	617,000	<0.50	5.2	31.3 J	<0.10
	TMW21042019	04/23/2019	7,540	<2.5	3.3 J	153	<1.0	<1.0	43,100	5.7 J	3.8 J	11.6 J	5,690	5.1 J	9,500	284	7.8 J	1,800 J	4.5 J	<1.0	640,000	<1.0	12.9	<50	<0.10
TMW22	TMW22102020	10/01/2020	<250	<2.5	0.90 J	19.8	<1.0	<1.0	35,700	0.77 J	<1.0	<5.0	<250	<0.50	10,900	16	<2.5	509 J	2.4 J	<1.0	816,000	<1.0	5.3	<50	<0.20
	TMW22042020	04/23/2020	1,780	<1.3	1.3 J	48.9	<0.50	<0.50	35,400	6.3	0.74 J	<2.5	887 J	0.51 J	11,300	52.8	5.3	748 J	3.3 J	<0.50	815,000	<0.50	8.9	<25	<0.10
	TMW22102019	10/04/2019	8,140	<1.3	2.8 J	156	0.89 J	<0.50	52,500	27.9	4.7	7.2 J	3,880	5.7	13,900	579	28.2	1,350	3.3 J	<0.50	761,000	<0.50	18.2	33.3 J	<0.10
	TMW22042019	04/25/2019	14,100	<2.5	3.5 J	377	1.0 J	<1.0	60,000	12.4	5.3 J	19.3 J	6,600	6.6 J	15,300	487	12.8	2,020	3.0 J	<1.0	815,000	<1.0	22.6	<50	<0.10
TMW23	TMW23102020	10/01/2020	221 J	<2.5	0.93 J	21.8	<1.0	<1.0	16,600	1.0 J	<1.0	<5.0	<250	<0.50	4,310	3.8 J	<2.5	360 J	<1.5	<1.0	734,000	<1.0	2.9 J	<50	<0.20
	TMW23042020	04/23/2020	2,110	<1.3	1.6 J	60.6	<0.50	<0.50	18,400	6.4	1.4 J	<2.5	1,440	1.1 J	4,940	56.2	4.5 J	715 J	<0.75	<0.50	733,000	<0.50	6.5	<25	<0.10
	TMW23102019	10/03/2019	2,300	<1.3	1.3 J	45.3	<0.50	<0.50	18,900	4.0 J	2.2 J	<2.5	1,310	1.5 J	5,240	74.1	2.9 J	582 J	<0.75	<0.50	720,000	<0.50	4.7 J	<25	<0.10
	TMW23042019	04/25/2019	6,400	<2.5	3.2 J	130	<1.0	<1.0	24,800	5.9 J	2.7 J	<5.0	3,850	3.4 J	6,210	182	5.6 J	1,280 J	<1.5	<1.0	764,000	<1.0	12.6	<50	<0.10
TMW24	TMW24102020	10/01/2020	<500	<5.0	<2.5	35.2	<2.0	<2.0	40,400	<2.0	<2.0	11.5 J	<500	0.66 J	9,970	136	<5.0	<1000	<3.0	<2.0	1,080,000	<2.0	<5.0	<100	<0.20
	TMW24042020	04/22/2020	<200	<2.5	<1.3	32.7	<1.0	<1.0	40,400	<1.0	<1.0	<5.0	<250	<0.50	10,300	134	<2.5	<500	<1.5	<1.0	1,030,000	<1.0	<2.5	<50	<0.10
	TMW24102019	10/02/2019	<200	<2.5	<1.3	32.4	<1.0	<1.0	33,600	<1.0	<1.0	6.1 J	<250	<0.50	10,300	125	<2.5	<500	<1.5	<1.0	904,000	<1.0	3.4 J	59.5 J	<0.10
	TMW24042019	04/11/2019	<200	<2.5	<1.3	35.8	<1.0	<1.0	40,400	<1.0	<1.0	9.9 J	<250	0.59 J	10,200	130	<2.5	<500	<1.5	<1.0	1,030,000	<1.0	<2.5	<50	<0.10

TABLE B-7: SUMMARY OF TOTAL METALS ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan

Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury
SL			5,000	6	10	2,000	4	5	-	50	50	1,000	1,000	15	-	200	200	-	50	50	-	2	86	10,000	2
TMW25	TMW25102020	10/07/2020	<250	<2.5	<1.25	10.4	<1.0	<1.0	50,400	<1.0	<1.0	<5.0	<250	<0.50	10,400	80.7	2.1 J	<500	<1.5	<1.0	862,000	<1.0	3.0 J	<50	0.11 J
	TMW25042020	05/01/2020	<100	<1.3	<0.63	10.5	<0.50	<0.50	50,600	<0.50	<0.50	<2.5	<125	<0.25	10,800	96.8	2.4 J	<250	<0.75	<0.50	867,000	<0.50	3.2 J	<25	<0.10
	TMW25102019	10/07/2019	<100	<1.3	0.65 J	11.4	<0.50	<0.50	45,000	0.54 J	<0.50	4.3 J	<125	<0.25	10,500	188	<1.3	<250	<0.75	<0.50	771,000	<0.50	3.5 J	<25	<0.10
	TMW25042019	04/26/2019	862 J	<2.5	2.9 J	50.9	<1.0	<1.0	52,500	1.3 J	2.4 J	<5.0	3,780	1.1 J	10,900	3,220	6.8 J	<500	<1.5	<1.0	928,000	<1.0	19	142 J	<0.10
TMW26	TMW26102020	09/30/2020	<250	<2.5	1.0 J	18.6	<1.0	<1.0	20,300	<1.0	<1.0	<5.0	<250	<0.50	7,880	124	2.1 J	261 J	<1.5	<1.0	904,000	<1.0	3.8 J	<50	<0.20
	TMW26042020	04/21/2020	<100	<1.3	1.2 J	18.3	<0.50	<0.50	19,500	<0.50	<0.50	<2.5	<125	<0.25	7,710	121	1.8 J	256 J	<0.75	<0.50	874,000	<0.50	4.3 J	<25	<0.10
	TMW26042020DUP	04/21/2020	108 J	<1.3	1.1 J	18.4	<0.50	<0.50	19,500	<0.50	<0.50	<2.5	<125	<0.25	7,500	120	1.8 J	<250	<0.75	<0.50	888,000	<0.50	3.3 J	<25	<0.10
	TMW26102019	10/01/2019	<100	<1.3	0.95 J	17.9	<0.50	<0.50	17,300	<0.50	<0.50	<2.5	<125	<0.25	7,350	112	1.7 J	<250	<0.75	<0.50	784,000	<0.50	3.3 J	<25	<0.10
TMW27	TMW26042019	04/10/2019	<200	<2.5	<1.3	16.8	<1.0	<1.0	18,700	<1.0	<1.0	14.5 J	<250	1.4 J	7,190	108	<2.5	<500	<1.5	<1.0	853,000	<1.0	3.7 J	<50	<0.10
	TMW27102020	10/02/2020	<250	<2.5	21.2	118	<1.0	<1.0	24,100	<1.0	<1.0	<5.0	600 J	<0.50	6,230	552	<2.5	460 J	<1.5	<1.0	335,000	<1.0	<2.5	<50	<0.20
	TMW27102020DUP	10/02/2020	<250	<2.5	20.6	118	<1.0	<1.0	24,200	<1.0	<1.0	<5.0	602 J	<0.50	6,270	553	<2.5	450 J	<1.5	<1.0	345,000	<1.0	<2.5	<50	<0.20
	TMW27042020	04/24/2020	<100	<1.3	20.9	110	<0.50	<0.50	22,700	<0.50	<0.50	<2.5	548 J	<0.25	5,890	523	<1.3	412 J	<0.75	<0.50	325,000	<0.50	4.2 J	<25	<0.10
TMW28	TMW27102019	10/09/2019	<100	<1.3	19.7	108	<0.50	<0.50	21,700	<0.50	<0.50	<2.5	545 J	<0.25	6,300	533	<1.3	375 J	<0.75	<0.50	295,000	<0.50	<1.3	<25	<0.10
	TMW27042019	04/10/2019	<20	<0.25	21.3	130	<0.10	<0.10	26,200	0.23 J	0.16 J	<0.50	602	0.077 J	6,600	554	0.42 J	424	<0.15	<0.10	348,000	<0.10	0.51 J	16.7 J	<0.10
	TMW27042019DUP	04/10/2019	<20	<0.25	20.4	123	<0.10	<0.10	24,500	0.16 J	0.15 J	<0.50	570	<0.05	6,320	528	0.39 J	395	<0.15	<0.10	343,000	<0.10	0.47 J	14.1 J	<0.10
	TMW28102020	10/02/2020	<250	<2.5	<1.25	45.7	<1.0	<1.0	105,000	<1.0	<1.0	<5.0	311 J	<0.50	32,300	386	<2.5	1,080	<1.5	<1.0	361,000	<1.0	<2.5	<50	<0.20
TMW29	TMW28042020	04/24/2020	<100	<1.3	<0.63	48.4	<0.50	<0.50	114,000	<0.50	<0.50	<2.5	322 J	<0.25	34,400	418	<1.3	1,070	<0.75	<0.50	355,000	<0.50	3.2 J	<25	<0.10
	TMW28102019	10/03/2019	<100	<1.3	<0.63	47.1	<0.50	<0.50	73,800	<0.50	<0.50	<2.5	290 J	<0.25	25,200	369	<1.3	957 J	<0.75	<0.50	311,000	<0.50	<1.3	<25	<0.10
	TMW28042019	04/16/2019	<200	<2.5	<1.3	54.2	<1.0	<1.0	343,000	<1.0	<1.0	<5.0	760 J	0.51 J	92,100	1,110	<2.5	1,280 J	<1.5	<1.0	690,000	<1.0	<2.5	<50	<0.10
	TMW29102020	10/01/2020	1,430	<2.5	1.3 J	34.4	<1.0	<1.0	37,200	9.2	3.6 J	2.8 J	770 J	1.2 J	7,130	35.6	11.4	985 J	21.9	<1.0	565,000	<1.0	6.6	<50	<0.20
TMW31S	TMW29042020	04/22/2020	869	<1.3	0.85 J	38	<0.50	<0.50	39,600	3.4 J	0.75 J	<2.5	513 J	0.84 J	7,450	48.5	4.5 J	795 J	23.1	<0.50	559,000	<0.50	5.3	<25	<0.10
	TMW29102019	10/03/2019	5,040	<1.3	2.0 J	90.7	0.58 J	<0.50	46,400	4.9 J	2.7 J	3.7 J	3,070	4.0 J	8,630	221	5.8	1,310	18.2	<0.50	525,000	<0.50	10.6	<25	<0.10
	TMW29102019DUP	10/03/2019	2,380	<1.3	1.6 J	51	<0.50	<0.50	45,500	2.7 J	2.1 J	3.1 J	1,390	3.2 J	8,420	223	4.1 J	833 J	17.7	<0.50	532,000	<0.50	7.6	<25	<0.10
	TMW29042019	04/11/2019	1,810	<2.5	2.6 J	60.8	<1.0	<1.0	59,900	2.1 J	2.6 J	10.4 J	668 J	4.5 J	8,360	308	4.3 J	846 J	19	<1.0	557,000	<1.0	9.7 J	<50	<0.10
TMW33	TMW31S102020	10/01/2020	827	<2.5	<1.25	22.9	<1.0	<1.0	119,000	1.5 J	0.55 J	<5.0	348 J	0.56 J	21,100	197	<2.5	598 J	7.4	<1.0	574,000	<1.0	3.9 J	<50	<0.20
	TMW31S042020	04/23/2020	3,300	<1.3	<0.63	52.2	<0.50	<0.50	115,000	3.3 J	1.5 J	<2.5	1,530	1.9 J	21,100	160	2.8 J	722 J	8.3	<0.50	526,000	<0.50	6.5	<25	<0.10
	TMW31S102019	10/08/2019	<100	<1.3	<0.63	14	<0.50	<0.50	104,000	1.9 J	<0.50	<2.5	<125	<0.25	21,300	14.3	<1.3	290 J	8.9	<0.50	511,000	<0.50	1.5 J	<25	<0.10
	TMW31S042019	04/27/2019	926 J	<2.5	<1.3	23.2	<1.0	<1.0	115,000	1.7 J	<1.0	<5.0	417 J	<0.50	20,600	47.3	<2.5	<500	9.3 J	<1.0	543,000	<1.0	3.1 J	<50	<0.10
TMW34	TMW33102020	10/01/2020	<500	<5.0	<2.5	15.7	<2.0	<2.0	109,000	<2.0	<2.0	<10	<500	<1.0	30,800	350	<5.0	502 J	<3.0	<2.0	2,430,000	<2.0	4.2 J	<100	<0.20
	TMW33042020	04/22/2020	<200	<2.5	<1.3	18.1	<1.0	<1.0	103,000	<1.0	<1.0	<5.0	<250	<0.50	29,700	833	<2.5	534 J	<1.5	<1.0	2,350,000	<1.0	2.9 J	<50	<0.10
	TMW33102019	10/02/2019	<200	<2.5	<1.3	15.2	<1.0	<1.0	95,600	<1.0	<1.0	<5.0	<250	<0.50	30,900	539	<2.5	528 J	<1.5	<1.0	2,220,000	<1.0	3.8 J	<50	<0.10
	TMW33042019	04/25/2019	1,140	<2.5	1.8 J	32.8	<1.0	<1.0	103,000	1.0 J	<1.0	<5.0	881 J	0.71 J	28,200	486	3.0 J	659 J	<1.5	<1.0	2,250,000	<1.0	5.4 J	<50	<0.10
TMW35	TMW34102020	10/05/2020	<500	<5.0	<2.5	13.1	<2.0	<2.0	128,000	<2.0	<2.0	<10	<500	<1.0	27,700	220	<5.0	551 J	126	<2.0	1,340,000	<2.0	<5.0	<100	<0.20
	TMW34042020	04/24/2020	<200	<2.5	<1.3	13.3	<1.0	<1.0	119,000	<1.0	<1.0	<5.0	<250	<0.50	25,700	182	<2.5	572 J	115	<1.0	1,260,000	<1.0	<2.5	<50	<0.10
	TMW34042020DUP	04/24/2020	212 J	<2.5	<1.3	14	<1.0	<1.0	123,000	<1.0	<1.0	<5.0	<250	<0.50	26,400	195	<2.5	583 J	117	<1.0	1,310,000	<1.0	2.7 J	<50	<0.10
	TMW34102019	10/04/2019	<200	<2.5	<1.3	10.5	<1.0	<1.0	116,000	<1.0	<1.0	<5.0	<250	<0.50	27,700	157	<2.5	560 J	115	<1.0	1,150,000	<1.0	<2.5	<50	<0.10
TMW35	TMW34102019DUP	10/04/2019	<200	<2.5	<1.3	10.4	<1.0	<1.0	115,000	<1.0	<1.0	<5.0	<250	<0.50	25,100	157	<2.5	564 J	116	<1.0	1,160,000	<1.0	<2.5	<50	0.10 J
	TMW34042019	04/25/2019	207 J	<2.5	<1.3	14.7	<1.0	<1.0	127,000	<1.0	<1.0	<5.0	<250	<0.50	25,000	236	<2.5	525 J	123	<1.0	1,310,000	<1.0	<2.5	<50	<0.10
	TMW35102020	10/06/2020	<250	<2.5	<1.25	10.9	<1.0	<1.0	76,000	<1.0	<1.0	<5.0	<250	<0.50	14,200	136	<2.5	271 J	6.5	<1.0	1,110,000	<1.0	<1.3	<50	<0.20
	TMW35042020	04/29/2020	<100	<1.3	<0.63	10.5	<0.50	<0.50	75,100	<0.50	<0.50	<2.5	<125	<0.25	14,400	129	<1.3	275 J	8.0	<0.50	1,120,000	<0.50	<1.3	<25	<0.10
TMW35	TMW35102019	10/08/2019	<200	<2.5	<1.3	10.2	<1.0	<1.0	66,100	<1.0	<1.0	<5.0	<250	<0.50	14,000	124	<2.5	<500	7.4 J	<1.0	983,000	<1.0	<2.5	<50	<0.10
	TMW35042019	04/16/2019	<200	<2.5	<1.3	12.1	<1.0	<1.0	76,600	<1.0	<1.0	<5.0	<250	<0.50	14,700	131	<2.5	<500	8.4 J	<1.0	1,130,000	<1.0	<2.5	<50	<0.10

TABLE B-7: SUMMARY OF TOTAL METALS ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury	
			µg/L																							
			SL	5,000	6	10	2,000	4	5	-	50	50	1,000	1,000	15	-	200	200	-	50	50	-	2	86	10,000	2
TMW39S	TMW39S102020	10/01/2020	676	<2.5	0.64 J	26.2	<1.0	<1.0	75,600	2.2 J	<1.0	<5.0	399 J	0.75 J	16,500	55.2	<2.5	487 J	12.3	<1.0	876,000	<1.0	4.6 J	<50	<0.20	
	TMW39S042020	04/24/2020	1,150	<1.3	<0.63	29.5	<0.50	<0.50	73,600	2.9 J	0.58 J	<2.5	625 J	0.61 J	16,500	54	1.5 J	552 J	10.9	<0.50	828,000	<0.50	4.9 J	<25	<0.10	
	TMW39S102019	10/08/2019	374 J	<1.3	<0.63	17.1	<0.50	<0.50	63,900	2.5 J	<0.50	2.5 J	189 J	0.34 J	15,100	14.3	<1.3	429 J	11.3	<0.50	823,000	<0.50	2.4 J	<25	<0.10	
	TMW39S042019	04/27/2019	3,090	<2.5	<1.3	60.1	<1.0	<1.0	72,200	3.1 J	1.1 J	<5.0	1,540 J	1.6 J	15,700	136	<2.5	737 J	10.9	<1.0	825,000	<1.0	6.8 J	<50	<0.10	
TMW40S	TMW40S042020	04/20/2020	1,580	<5.0	7.1 J	37.8	<2.0	<2.0	64,000	2.0 J	<2.0	<10	701 J	1.5 J	10,900	31	<5.0	<1000	77.6	<2.0	1,020,000	<2.0	31.1	<100	<0.20	
	TMW40S102019	10/02/2019	<200	<2.5	6.4 J	24.4	<1.0	<1.0	54,100	1.6 J	<1.0	<5.0	<250	0.58 J	10,200	19.6	<2.5	<500	70	<1.0	898,000	<1.0	25.9	<50	<0.10	
	TMW40S042019	04/23/2019	3,400	<2.5	8.9 J	62.3	<1.0	<1.0	63,400	2.0 J	<1.0	<5.0	1,880 J	4.1 J	11,300	79.5	<2.5	737 J	76.5	<1.0	999,000	<1.0	33.2	54.2 J	<0.10	
TMW41	TMW41102020	10/01/2020	173 J	<2.5	<1.25	10.8	<1.0	<1.0	15,200	0.60 J	<1.0	<5.0	<250	<0.50	3,640	3.5 J	<2.5	519 J	<1.5	<1.0	864,000	<1.0	7.1	<50	<0.20	
	TMW41042020	04/23/2020	214 J	<1.3	<0.63	10.9	<0.50	<0.50	14,800	1.3 J	<0.50	<2.5	<125	<0.25	3,570	8.0	<1.3	484 J	<0.75	<0.50	819,000	<0.50	7.6	<25	<0.10	
	TMW41102019	10/04/2019	23,000	<1.3	2.6 J	456	1.9 J	<0.50	92,900	19.7	9.3	8.2 J	9,770	14	14,400	1,350	22.1	2,360	1.0 J	<0.50	751,000	<0.50	33.2	57.5 J	<0.10	
	TMW41042019	04/17/2019	756 J	<2.5	<1.3	16	<1.0	<1.0	17,600	1.9 J	<1.0	<5.0	372 J	<0.50	4,010	26.3	<2.5	681 J	<1.5	<1.0	809,000	<1.0	8.0 J	<50	<0.10	
TMW43	TMW43102020	10/02/2020	144 J	<2.5	<1.25	23.7	<1.0	<1.0	34,900	<1.0	<1.0	<5.0	<250	0.27 J	6,420	78.1	<2.5	615 J	4.9 J	<1.0	560,000	<1.0	<2.5	<50	<0.20	
	TMW43042020	04/28/2020	<100	<1.3	<0.63	16.8	<0.50	<0.50	32,700	<0.50	<0.50	<2.5	<125	<0.25	6,140	46.8	<1.3	523 J	5.9	<0.50	569,000	<0.50	4.7 J	<25	<0.10	
	TMW43102019	10/08/2019	<100	<1.3	<0.63	18.9	<0.50	<0.50	31,600	<0.50	<0.50	<2.5	<125	<0.25	6,260	59	<1.3	540 J	5.3	<0.50	524,000	<0.50	1.5 J	<25	<0.10	
TMW44	TMW43042019	04/18/2019	<200	<2.5	<1.3	19.1	<1.0	<1.0	37,200	1.1 J	<1.0	25.1	<250	1.2 J	7,190	54.9	<2.5	838 J	6.2 J	<1.0	604,000	<1.0	2.7 J	<50	<0.10	
	TMW44102020	09/29/2020	224 J	<2.5	1.1 J	21	<1.0	<1.0	38,400	4.3 J	<1.0	<5.0	137 J	0.50 J	12,400	76.1	3.7 J	291 J	2.8 J	<1.0	757,000	<1.0	5.1	<50	<0.20	
	TMW44042020	04/22/2020	197 J	<1.3	<0.63	16.5	<0.50	<0.50	35,900	0.63 J	<0.50	<2.5	<125	<0.25	11,800	51.7	<1.3	274 J	1.9 J	<0.50	748,000	<0.50	3.7 J	<25	<0.10	
	TMW44102019	10/02/2019	<100	<1.3	<0.63	14.3	<0.50	<0.50	33,300	<0.50	<0.50	6.1 J	<125	0.56 J	12,100	8.9	<1.3	301 J	2.0 J	<0.50	665,000	<0.50	3.0 J	<25	<0.10	
TMW45	TMW44042019	04/18/2019	<200	<2.5	<1.3	19.7	<1.0	<1.0	37,100	<1.0	<1.0	<5.0	<250	<0.50	12,800	50.2	<2.5	<500	2.4 J	<1.0	784,000	<1.0	4.6 J	<50	<0.10	
	TMW45102020	10/05/2020	<250	<2.5	<1.25	67.2	<1.0	<1.0	32,100	<1.0	<1.0	<5.0	<250	<0.50	7,970	303	1.4 J	475 J	0.94 J	<1.0	1,010,000	<1.0	2.5 J	<50	<0.20	
	TMW45042020	04/27/2020	<100	<1.3	0.90 J	63.1	<0.50	<0.50	28,000	<0.50	<0.50	<2.5	<125	<0.25	7,530	128	<1.3	381 J	0.88 J	<0.50	953,000	<0.50	4.4 J	<25	<0.10	
	TMW45102019	10/04/2019	<100	<1.3	0.93 J	58.7	<0.50	<0.50	24,800	<0.50	<0.50	<2.5	<125	<0.25	7,520	102	<1.3	395 J	0.82 J	<0.50	801,000	<0.50	3.5 J	<25	<0.10	
TMW46	TMW45042019	04/17/2019	<200	<2.5	<1.3	60.1	<1.0	<1.0	29,900	<1.0	<1.0	<5.0	<250	<0.50	7,790	137	<2.5	<500	<1.5	<1.0	952,000	<1.0	4.2 J	<50	<0.10	
	TMW46102020	09/29/2020	<500	<5.0	<2.5	10.9	<2.0	<2.0	95,500	9.3 J	<2.0	<10	<500	<1.0	22,100	8.7 J	6.5 J	<1000	122	<2.0	1,270,000	<2.0	6.0 J	<100	<0.20	
	TMW46042020	04/22/2020	<200	<2.5	<1.3	8.6 J	<1.0	<1.0	86,600	<1.0	<1.0	<5.0	<250	<0.50	19,900	7.9 J	<2.5	<500	116	<1.0	1,240,000	<1.0	3.5 J	<50	<0.10	
	TMW46102019	10/02/2019	<200	<2.5	<1.3	9.2 J	<1.0	<1.0	75,100	<1.0	<1.0	10.7 J	<250	0.56 J	20,200	2.6 J	<2.5	<500	113	<1.0	1,080,000	<1.0	4.2 J	<50	<0.10	
TMW47	TMW46102019DUP	10/02/2019	200 J	<2.5	<1.3	12.6	<1.0	<1.0	76,200	<1.0	<1.0	<5.0	<250	<0.50	20,900	23.7	<2.5	<500	114	<1.0	1,170,000	<1.0	5.2 J	<50	<0.10	
	TMW46042019	04/26/2019	874 J	<2.5	<1.3	23.9	<1.0	<1.0	90,200	1.0 J	<1.0	<5.0	466 J	0.97 J	19,400	73.3	<2.5	<500	121	<1.0	1,230,000	<1.0	5.3 J	<50	<0.10	
	TMW47102020	10/07/2020	<250	<2.5	<1.25	11.5	<1.0	<1.0	6,110	<1.0	<1.0	<5.0	<250	<0.50	682	36.6	<2.5	734 J	<1.5	<1.0	559,000	<1.0	<2.5	<50	<0.20	
	TMW47042020	04/24/2020	<100	<1.3	<0.63	10.3	<0.50	<0.50	5,660	<0.50	<0.50	<2.5	<125	<0.25	630	34.5	<1.3	713 J	<0.75	<0.50	529,000	<0.50	2.1 J	<25	<0.10	
TMW47	TMW47102019	10/04/2019	<100	<1.3	<0.63	10.9	<0.50	<0.50	5,480	<0.50	<0.50	<2.5	<125	<0.25	666	35.8	<1.3	728 J	<0.75	<0.50	484,000	<0.50	<1.3	<25	<0.10	
	TMW47042019	04/15/2019	<200	<2.5	<1.3	12.3	<1.0	<1.0	6,760	<1.0	<1.0	<5.0	<250	<0.50	718 J	37.2	<2.5	812 J	<1.5	<1.0	561,000	<1.0	<2.5	<50	<0.10	
BEDROCK WELLS																										
BGMW07	BGMW07102020	09/28/2020	<1000	<10	<5.0	30	<4.0	<4.0	637,000	<4.0	<4.0	<20	<1000	<2.0	87,100	1,430	<10	8,310	<6.0	<4.0	6,100,000	<4.0	6.9 J	<200	<0.20	
	BGMW07042020	04/20/2020	14,700	<5.0	<2.5	109	<2.0	<2.0	730,000	11.2 J	6.8 J	<10	5,290	4.7 J	99,200	1,980	10.2 J	9,170	<3.0	<2.0	6,080,000	<2.0	26.3	<100	<0.10	
	BGMW07102019	10/01/2019	2,030	<5.0	<2.5	43	<2.0	<2.0	815,000	<2.0	2.1 J	<10	950 J	1.6 J	115,000	2,200	<5.0	7,190	<3.0	<2.0	6,010,000	<2.0	<5.0	<100	<0.10	
	BGMW07042019	05/02/2019	6,440	<2.5	2.8 J	76.3	<1.0	<1.0	908,000	5.0 J	8.1	<5.0	2,590													

TABLE B-7: SUMMARY OF TOTAL METALS ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury
SL			5,000	6	10	2,000	4	5	-	50	50	1,000	1,000	15	-	200	200	-	50	50	-	2	86	10,000	2
BGMW09	BGMW09102020	09/29/2020	629 J	<5.0	1.5 J	12.7	<2.0	<2.0	34,100	7.3 J	<2.0	<10.0	393 J	<1.0	4,140	79.9	5.7 J	1,410 J	<3.0	<2.0	1,220,000	<2.0	6.8 J	<100	<0.20
	BGMW09042020	04/21/2020	4,540	<2.5	1.9 J	51.1	<1.0	<1.0	35,600	7.4 J	2.1 J	<5.0	2,950	2.1 J	5,150	130	5.7 J	1,850 J	<1.5	<1.0	1,270,000	<1.0	11.1	<50	<0.10
	BGMW09102019	10/04/2019	6,070	<2.5	1.8 J	62.4	<1.0	<1.0	32,400	7.4 J	2.2 J	<5.0	3,110	1.9 J	5,370	133	6.1 J	1,830 J	<1.5	<1.0	1,110,000	<1.0	9.1 J	<50	<0.10
	BGMW09042019	04/27/2019	14,200	<2.5	4.2 J	156	1.0 J	<1.0	40,700	17	5.1 J	6.1 J	8,260	4.2 J	7,820	288	11.4	2,660	<1.5	<1.0	1,260,000	<1.0	20.4	<50	<0.10
BGMW10	BGMW10102020	09/29/2020	<250	<2.5	<1.25	7.7	<1.0	<1.0	8,840	1.7 J	<1.0	<5.0	<250	<0.50	980	32.9	<2.5	698 J	<1.5	<1.0	647,000	<1.0	<2.5	<50	<0.20
	BGMW10042020	04/23/2020	<100	<1.3	<0.63	6.4	<0.50	<0.50	7,740	1.3 J	<0.50	<2.5	<125	<0.25	863	21.1	<1.3	671 J	<0.75	<0.50	612,000	<0.50	<1.3	<25	<0.10
	BGMW10102019	10/04/2019	<100	<1.3	<0.63	6.6	<0.50	<0.50	7,880	<0.50	<0.50	<2.5	<125	<0.25	966	20.6	<1.3	666 J	<0.75	<0.50	567,000	<0.50	<1.3	<25	<0.10
	BGMW10042019	04/27/2019	<200	<2.5	<1.3	7.6 J	<1.0	<1.0	8,460	<1.0	<1.0	<5.0	<250	<0.50	925 J	23.2	<2.5	660 J	<1.5	<1.0	623,000	<1.0	<2.5	<50	<0.10
TMW14A	TMW14A102020	10/02/2020	<250	<2.5	<1.25	17.7	<1.0	<1.0	3,420	<1.0	<1.0	8.1 J	<250	<0.50	404 J	14.7	<2.5	527 J	<1.5	<1.0	443,000	<1.0	<2.5	<50	<0.20
	TMW14A042020	04/30/2020	<100	<1.3	<0.63	15	<0.50	<0.50	3,260	<0.50	<0.50	22.6	<125	<0.25	396 J	11.6	<1.3	510 J	<0.75	<0.50	431,000	<0.50	<1.3	<25	<0.10
	TMW14A102019	10/07/2019	<100	<1.3	<0.63	21.9	<0.50	<0.50	3,200	0.63 J	<0.50	177	<125	0.43 J	405 J	19.9	7.9	487 J	<0.75	0.80 J	400,000	<0.50	<1.3	<25	<0.10
	TMW14A042019	04/15/2019	<200	<2.5	<1.3	26.1	<1.0	<1.0	4,130	<1.0	<1.0	<5.0	<250	<0.50	450 J	19.7	<2.5	<500	<1.5	<1.0	440,000	<1.0	<2.5	<50	<0.10
TMW16	TMW16102020	09/28/2020	547	<2.5	<1.25	23.5	<1.0	<1.0	11,800	6.8	2.2 J	5.9 J	487 J	0.54 J	1,010	94.1	135	849 J	<1.5	<1.0	571,000	<1.0	5.8	82.4 J	0.11 J
	TMW16042020	04/20/2020	458 J	<1.3	<0.63	17.2	<0.50	<0.50	4,230	9.2	<0.50	2.8 J	205 J	0.26 J	543	7.4	10.0	588 J	<0.75	<0.50	452,000	<0.50	5.6	<25	<0.10
	TMW16102019	10/02/2019	208 J	<1.3	<0.63	18.1	<0.50	<0.50	3,840	4.0 J	<0.50	7.2 J	<125	0.28 J	491 J	7.5	11.9	515 J	<0.75	<0.50	419,000	<0.50	4.3 J	<25	<0.10
	TMW16042019	04/19/2019	273	<0.25	0.28 J	15.3	<0.10	<0.10	4,040	3.2	0.18 J	3.9	117 J	0.17 J	471	5.3	9.4	521	<0.15	<0.10	427,000	<0.10	3.0	13.4 J	<0.10
TMW17	TMW16042019DUP	04/19/2019	3,900	<0.25	1.3	79.3	0.25 J	<0.10	8,640	6.3	1.2	6.0	1,450	1.8	1,530	115	6.9	1,120	0.19 J	0.93 J	430,000	<0.10	30.1	18.4 J	<0.10
	TMW17102020	10/02/2020	127 J	<2.5	<1.25	13.8	<1.0	<1.0	3,850	<1.0	<1.0	<5.0	<250	0.58 J	534	14.7	<2.5	655 J	<1.5	<1.0	441,000	<1.0	<2.5	<50	<0.20
	TMW17042020	04/30/2020	212 J	<1.3	0.80 J	13.4	<0.50	<0.50	3,720	<0.50	<0.50	<2.5	<125	0.37 J	574	11.9	<1.3	680 J	<0.75	<0.50	440,000	<0.50	2.2 J	<25	<0.10
	TMW17102019	10/07/2019	105 J	<1.3	<0.63	13.2	<0.50	<0.50	3,420	<0.50	<0.50	<2.5	<125	0.53 J	544	10.5	<1.3	605 J	<0.75	<0.50	398,000	<0.50	<1.3	<25	<0.10
TMW18	TMW17042019	04/11/2019	290	<0.25	0.46 J	13.5	<0.10	<0.10	3,150	0.29 J	<0.10	<0.50	103 J	0.27 J	540	9.6	<0.25	680	<0.15	<0.10	443,000	<0.10	0.49 J	10.6 J	<0.10
	TMW18102020	09/28/2020	210 J	<2.5	0.65 J	13.6	<1.0	<1.0	7,720	1.8 J	<1.0	<5.0	<250	0.78 J	1,200	10.9	1.9 J	2,590	<1.5	<1.0	733,000	<1.0	8.9	<50	0.12 J
	TMW18042020	04/20/2020	257 J	<1.3	0.98 J	12.3	<0.50	<0.50	7,380	1.7 J	<0.50	<2.5	<125	0.59 J	1,050	7.1	<1.3	2,280	<0.75	<0.50	677,000	<0.50	17.6	<25	<0.10
	TMW18102019	10/01/2019	122 J	<1.3	<0.63	11.4	<0.50	<0.50	6,490	0.62 J	<0.50	<2.5	<125	<0.25	1,120	5.6	<1.3	2,120	<0.75	<0.50	624,000	<0.50	2.6 J	<25	<0.10
TMW19	TMW18042019	04/17/2019	250 J	<2.5	<1.3	13.8	<1.0	<1.0	6,860	2.4 J	<1.0	<5.0	<250	0.64 J	1,000	7.9 J	<2.5	2,510	<1.5	<1.0	654,000	<1.0	21.2	<50	<0.10
	TMW19102020	09/28/2020	683	<2.5	<1.25	13	<1.0	<1.0	13,800	1.4 J	0.73 J	5.8 J	572 J	2.2 J	1,360	86.1	13.9	905 J	<1.5	<1.0	697,000	<1.0	6.4	<50	<0.20
	TMW19102020DUP	09/28/2020	1,930	<2.5	<1.25	15.1	<1.0	<1.0	12,800	2.7 J	0.87 J	<5.0	976 J	1.9 J	1,620	74.5	18	1,050	<1.5	<1.0	691,000	<1.0	6.6	<50	<0.20
	TMW19042020	04/21/2020	3,680	<1.3	<0.63	31.6	<0.50	<0.50	12,800	61.7	2.0 J	6.8 J	2,030	2.3 J	2,240	87.4	35.7	1,230	<0.75	0.64 J	726,000	<0.50	7.4	25.7 J	<0.10
TMW30	TMW19102019	10/03/2019	162 J	<1.3	<0.63	7.4	<0.50	<0.50	9,730	31.1	<0.50	4.0 J	173 J	0.61 J	1,180	31.9	19.9	773 J	<0.75	<0.50	655,000	<0.50	3.4 J	<25	<0.10
	TMW19042019	04/15/2019	<200	<2.5	<1.3	7.0 J	<1.0	<1.0	10,300	<1.0	<1.0	<5.0	<250	<0.50	1,090	17.5	2.7 J	807 J	<1.5	<1.0	724,000	<1.0	5.8 J	<50	<0.10
	TMW30102020	09/30/2020	119 J	<2.5	<1.25	11.2	<1.0	<1.0	64,200	1.6 J	<1.0	<5.0	691 J	0.25 J	13,100	9.2	<2.5	744 J	7.2	<1.0	481,000	<1.0	14.2	<50	<0.20
	TMW30042020	04/24/2020	<100	<1.3	0.78 J	10.4	<0.50	<0.50	57,900	<0.50	<0.50	<2.5	<125	<0.25	11,900	2.7 J	<1.3	670 J	6.9	<0.50	446,000	<0.50	13.9	<25	<0.10
TMW31D	TMW30102019	10/08/2019	285 J	<1.3	0.87 J	12.4	<0.50	<0.50	52,900	2.3 J	<0.50	<2.5	199 J	0.33 J	11,400	6.6	<1.3	688 J	7.0	<0.50	422,000	<0.50	12.6	<25	<0.10
	TMW30042019	04/25/2019	358	<0.25	1.0	13.7	<0.10	<0.10	60,400	0.67 J	0.21 J	1.5 J	218	0.31 J	11,400	7.0	0.39 J	712	8.0	<0.10	457,000	<0.10	13.5	6.3 J	<0.10
	TMW31D102020	10/02/2020	<250	<2.5	<1.25	9.2	<1.0	<1.0	60,300	<1.0	<1.0	<5.0	<250	<0.50	10,600	9.1	<2.5	1,230	7.4	<1.0	626,000	<1.0	3.5 J	<50	<0.20
	TMW31D042020	04/27/2020	<100	<1.3	<0.63	8.0	<0.50	<0.50	62,000	<0.50	<0.50	<2.5	<125	<0.25	10,700	8.0	<1.3	1,140	6.8	<0.50	593,000	<0.50	6.3	<25	<0.10
TMW32	TMW31D102019	10/09/2019	<100	<1.3	<0.63	8.3	<0.50	<0.50	58,700	<0.50	<0.50	<2.5	<125	<0.25	11,100	5.9	<1.3	1,080	7.5	<0.50	525,000	<0.50	5.0	<25	<0.10
	TMW31D042019	04/24/2019	<200	<2.5	<1.3	8.4 J	<1.0	<1.0	68,400	<1.0	<1.0	<5.0	<250	<0.50	12,100	<2.5	<2.5	1,300 J	7.7 J	<1.0	589,000	<1.0	6.9 J	<50	<0.10
	TMW32102020	10/07/2020	<250	<2.5	1.2 J	6.1	<1.0	<1.0	11,200	<1.0	<1.0	<5.0	<250	<0.50	1,170	24.1	<2.5	837 J	3.3 J	<1.0	750,000	<1.0	<2.5	<50	<0.20
	TMW32042020	04/29/2020	<100	<1.3	1.3 J	6.1	<0.50	<0.50	13,500	<0.50	<0.50	<2.5	<125	<0.25	1,460	32.5	<1.3	879 J	1.9 J	<0.50	796,000	<0.50	1.4 J	<25	<0.10
TMW32	TMW32102019	10/08/2019	<100	<1.3	1.4 J	5.6	<0.50	<0.50	10,200	1.5 J	<0.50	<2.5	<125	<0.25	1,270	25.1	<1.3	785 J	2.3 J	<0.50	746,000	<0.50	<1.3	<25	<0.10
	TMW32042019	04/18/2019	<200	<2.5	<1.3	7.0 J	<1.0	<1.0	9,950	<1.0	<1.0	<5.0	<250	<0.50	1,130	22.9	<2.5	879 J	2.4 J	<1.0	715,000	<1.0	4.8 J	<50	<0.10

TABLE B-7: SUMMARY OF TOTAL METALS ANALYTICAL DETECTIONS 2019-2020

Interim Groundwater Monitoring Plan
Fort Wingate Depot Activity, New Mexico

Well ID	Sample ID	Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury
SL			5,000	6	10	2,000	4	5	–	50	50	1,000	1,000	15	–	200	200	–	50	50	–	2	86	10,000	2
TMW36	TMW36102020	09/28/2020	1,120	<2.5	<1.25	13.2	<1.0	<1.0	11,100	44.6	5.2	408	1,620	3.8 J	1,270	101	225	1,010	<1.5	<1.0	676,000	<1.0	2.8 J	580	<0.20
	TMW36042020	04/20/2020	129 J	<1.3	<0.63	6.0	<0.50	<0.50	8,950	1.0 J	<0.50	4.6 J	<125	<0.25	969	23.8	13	700 J	<0.75	<0.50	671,000	<0.50	<1.3	30 J	<0.10
	TMW36102019	09/30/2019	<100	<1.3	<0.63	6.8	<0.50	<0.50	8,950	0.71 J	<0.50	3.8 J	<125	0.41 J	967	21.4	8.2	743 J	<0.75	<0.50	671,000	<0.50	1.4 J	57.2 J	<0.10
	TMW36042019	04/16/2019	<200	<2.5	<1.3	6.8 J	<1.0	<1.0	9,210	1.7 J	<1.0	<5.0	<250	<0.50	929 J	15.9	8.3 J	706 J	<1.5	<1.0	692,000	<1.0	<2.5	<50	<0.10
TMW37	TMW37102020	09/29/2020	199 J	<2.5	<1.25	13.9	<1.0	<1.0	12,100	236	6.2	61.3	1,800	2.1 J	1,290	149	358	858 J	<1.5	<1.0	728,000	<1.0	3.6 J	143	<0.20
	TMW37042020	04/20/2020	142 J	<1.3	<0.63	11.2	<0.50	<0.50	11,900	52.6	2.5 J	23.7	652 J	0.47 J	1,240	103	124	773 J	<0.75	<0.50	721,000	<0.50	<1.3	72.5 J	<0.10
	TMW37102019	09/30/2019	154 J	<1.3	<0.63	8.5	<0.50	<0.50	6,200	6.6	<0.50	<2.5	160 J	0.61 J	701	10.9	12.5	607 J	<0.75	<0.50	569,000	<0.50	2.5 J	43.2 J	<0.10
	TMW37042019	04/16/2019	768 J	<2.5	<1.3	16.7	<1.0	<1.0	5,850	5.8 J	<1.0	18.3 J	581 J	3.6 J	728 J	24.2	9.8 J	702 J	<1.5	<1.0	541,000	<1.0	8.3 J	138 J	<0.10
TMW38	TMW37042019DUP	04/16/2019	316 J	<2.5	<1.3	13.8	<1.0	<1.0	5,850	4.1 J	<1.0	<5.0	<250	2.7 J	647 J	22.3	9.2 J	586 J	<1.5	<1.0	532,000	<1.0	8.0 J	124 J	<0.10
	TMW38102020	10/06/2020	<250	<2.5	<1.25	10.7	<1.0	<1.0	17,000	<1.0	<1.0	<5.0	141 J	<0.50	1,860	78.2	<2.5	1,050	<1.5	<1.0	922,000	<1.0	<2.5	<50	<0.20
	TMW38042020	04/28/2020	<100	<1.3	<0.63	8.5	<0.50	<0.50	10,400	<0.50	<0.50	<2.5	<125	<0.25	1,250	34.3	<1.3	769 J	<0.75	<0.50	718,000	<0.50	2.3 J	<25	<0.10
	TMW38102019	10/04/2019	<100	<1.3	0.75 J	10.2	<0.50	<0.50	9,120	<0.50	<0.50	<2.5	<125	0.32 J	1,210	36.8	2.5 J	798 J	<0.75	<0.50	658,000	<0.50	3.3 J	<25	<0.10
TMW39D	TMW38042019	04/25/2019	319 J	<2.5	<1.3	16.1	<1.0	<1.0	7,490	<1.0	<1.0	<5.0	<250	0.60 J	878 J	36.6	<2.5	627 J	<1.5	<1.0	585,000	<1.0	30.4	189 J	<0.10
	TMW38042019DUP	04/25/2019	1,260	<2.5	<1.3	19.1	<1.0	<1.0	7,460	<1.0	<1.0	<5.0	657 J	0.72 J	1,040	39.6	<2.5	798 J	<1.5	<1.0	572,000	<1.0	30.6	90 J	<0.10
	TMW39D102020	10/07/2020	<250	<2.5	<1.25	7.0	<1.0	<1.0	18,300	<1.0	<1.0	<5.0	<250	<0.50	1,860	54	<2.5	1,010	<1.5	<1.0	789,000	<1.0	<2.5	<50	<0.20
	TMW39D042020	05/01/2020	239 J	<1.3	<0.63	7.2	<0.50	<0.50	18,100	<0.50	<0.50	<2.5	<125	<0.25	1,890	51.7	<1.3	1,000 J	<0.75	<0.50	744,000	<0.50	<1.3	<25	<0.10
TMW40D	TMW39D102019	10/09/2019	128 J	<1.3	<0.63	6.3	<0.50	<0.50	16,600	<0.50	<0.50	<2.5	<125	<0.25	1,770	47.8	<1.3	858 J	<0.75	<0.50	655,000	<0.50	<1.3	<25	0.46 J
	TMW39D042019	04/19/2019	<200	<2.5	<1.3	7.5 J	<1.0	<1.0	20,000	<1.0	<1.0	<5.0	<250	<0.50	2,240	57.1	<2.5	917 J	<1.5	<1.0	744,000	<1.0	<2.5	<50	<0.10
	TMW40D102020	10/07/2020	<250	<2.5	<1.25	8.7	<1.0	<1.0	15,100	<1.0	<1.0	<5.0	<250	<0.50	2,000	48.4	<2.5	970 J	3.1 J	<1.0	734,000	<1.0	2.9 J	<50	<0.20
	TMW40D042020	05/01/2020	<100	<1.3	<0.63	8.3	<0.50	<0.50	14,800	<0.50	<0.50	<2.5	<125	<0.25	1,990	48.2	<1.3	931 J	3.1 J	<0.50	711,000	<0.50	3.4 J	<25	<0.10
TMW48	TMW40D102019	10/10/2019	<100	<1.3	<0.63	7.1	<0.50	<0.50	13,400	<0.50	<0.50	<2.5	<125	<0.25	1,980	45.4	<1.3	811 J	3.0 J	<0.50	653,000	<0.50	2.0 J	<25	<0.10
	TMW40D042019	04/19/2019	<200	<2.5	<1.3	8.6 J	<1.0	<1.0	14,100	<1.0	<1.0	<5.0	<250	<0.50	1,970	46.4	<2.5	757 J	2.9 J	<1.0	720,000	<1.0	2.9 J	<50	<0.10
	TMW48102020	10/08/2020	<250	<2.5	<1.25	10.7	<1.0	<1.0	85,600	<1.0	<1.0	<5.0	<250	<0.50	16,900	58.9	<2.5	1,300	6.7	<1.0	626,000	<1.0	4.5 J	<50	<0.20
	TMW48042020	05/01/2020	<100	<1.3	<0.63	9.6	<0.50	<0.50	76,800	<0.50	<0.50	<2.5	<125	<0.25	14,500	70.5	<1.3	1,180	6.0	<0.50	610,000	<0.50	4.5 J	<25	<0.10
TMW49	TMW48102019	10/10/2019	<100	<1.3	<0.63	9.5	<0.50	<0.50	85,400	<0.50	<0.50	<2.5	<125	<0.25	16,700	53.6	<1.3	1,020	6.7	<0.50	548,000	<0.50	3.6 J	<25	<0.10
	TMW48042019	04/22/2019	<200	<2.5	<1.3	10.7	<1.0	<1.0	89,700	<1.0	<1.0	<5.0	<250	<0.50	19,600	16	<2.5	950 J	7.3 J	<1.0	556,000	<1.0	6.1 J	<50	<0.10
	TMW49102020	10/08/2020	<250	<2.5	<1.25	9.3	<1.0	<1.0	71,700	1.4 J	<1.0	<5.0	<250	<0.50	12,400	26.2	3.8 J	1,480	27.9	<1.0	791,000	<1.0	12.4	<50	<0.20
	TMW49042020	04/29/2020	<100	<1.3	<0.63	9.7	<0.50	<0.50	85,100	1.6 J	<0.50	<2.5	<125	<0.25	14,700	22.8	1.4 J	1,230	20.9	<0.50	623,000	<0.50	12.5	<25	<0.10
TMW49	TMW49102019	10/09/2019	<100	<1.3	<0.63	9.2	<0.50	<0.50	63,200	1.1 J	<0.50	<2.5	<125	<0.25	11,300	16.5	1.9 J	1,280	27	<0.50	635,000	<0.50	11.3	<25	<0.10
	TMW49042019	04/23/2019	<200	<2.5	<1.3	9.9 J	<1.0	<1.0	79,100	<1.0	<1.0	<5.0	<250	<0.50	14,100	16.4	<2.5	1,520 J	20.3	<1.0	613,000	<1.0	11.3	<50	<0.10

NOTES & ABBREVIATIONS:

- µg/L = micrograms per liter
- < = less than cited Detection Limit; less than Limit of Detection for October 2020 and newer data
- NA = not analyzed
- J = estimated value
- Q = One or more quality control criteria failed
- = not established or not applicable
- SL = Screening levels (USEPA, 2020)
- Bold** = Result exceeds cited SL
- Numbers**

APPENDIX C

Field Forms



Lab Info	
Lab	EMAX Laboratories
Address	1835 W. 205th St, Torrance, CA 90501
POC	Richard Beauvil
Email	info@emaxlabs.com Ph 310-618-8889

Project Info		Company Contact Info	
Company	Eco & Associates, Inc.	PM / POC	Paul Peterson
Project Name	USACE Wingate	Email	ppeterson@ecoinc.info
Project No	Eco-18-1237	Phone	(714) 289-0995
Site Name	Northern Area	Email (Rpt)	chem@ecoinc.info (Reports only)
Site Address	Fort Wingate Depot Activity	Sampler(s)	
	McKinley County, NM		

Analysis Requested													Comments
													TAT*: ☐ Rush __ hrs ☐ Std __ days

#	Sample ID	Date	Time	NOC*	SOC*	Matrix
1						
2						

[illegible]

Relinquished By	Date	Time	Signature	Received By	Date	Time	Signature

NOTES:

- 1) $HN=HNO_3$, $HC=HCl$
- 2) NOC - Number of Containers
- 3) SOC - Size of Containers
- 4) TAT - Turn Around Time

* NOC - Number of Containers, SOC - Size of Container, TAT - Turn Around Time

APPENDIX D

PDF Accessibility Report

PDF ACCESSIBILITY REPORT PLACEHOLDER

The PDF Accessibility Report will be placed here for the final submittal to NMED.