

**MONTHLY PROGRESS REPORT #334
FOR JANUARY 2025**

EPA REGION I ADMINISTRATIVE ORDERS SDWA 1-97-1019 and 1-2000-0014

**JOINT BASE CAPE COD (JBCC)
TRAINING RANGE AND IMPACT AREA**

The following summary of progress is for the period from 01 to 31 January 2025.

1. SUMMARY OF REMEDIATION ACTIONS

Remediation Actions (RA) Underway at Camp Edwards as of 31 January 2025:

Demolition Area 1 Comprehensive Groundwater RA

The Demolition Area 1 Comprehensive Groundwater RA consists of the removal and treatment of contaminated groundwater to control further migration of explosives compounds and perchlorate. Extraction, treatment, and recharge (ETR) systems at Frank Perkins Road, Base Boundary, and the Leading Edge include extraction wells, an ex-situ treatment process to remove explosives compounds and perchlorate from the groundwater, and injection wells to return treated water to the aquifer.

The Frank Perkins Road Treatment Facility has been optimized as part of the Environmental and System Performance Monitoring (ESPM) program at Demolition Area 1. The treatment facility continues to operate at a flow rate of 175 gallons per minute (gpm), with over 3.147 billion gallons of water treated and re-injected as of 31 January 2025. No Frank Perkins Road system shutdowns occurred in January.

The Base Boundary Mobile Treatment Unit (MTU) continues to operate at a flow rate of 65 gpm. As of 31 January 2025, over 424.2 million gallons of water were treated and re-injected. No Base Boundary system shutdowns occurred in January.

The flow rate at the Leading-Edge system was increased from 100 gpm to 125 gpm on 26 September 2024 based on regulatory agency concurrence with the 26 September 2024 Demolition Area 1 Extraction Well 5 (EW-5) Optimization presentation. As of 31 January 2025, over 441.1 million gallons of water were treated and re-injected. The following Leading Edge system shutdowns occurred in January:

- 0835 on 29 January 2025 due to a leaking hose on the GAC#2 influent line. A new hose was installed, and the system was restarted at 0910 on 29 January 2025.

The Pew Road MTU was turned off with regulatory approval on 08 March 2021 (formerly operated at a flow rate of 65 gpm). Over 672.9 million gallons of water were treated and re-injected during the RA.

J-2 Range Groundwater RA

Northern

The J-2 Range Northern Treatment facility consists of removal and treatment of contaminated groundwater to control further migration of explosives compounds and perchlorate. The Extraction, Treatment, and Re-infiltration system includes three extraction wells, an ex-situ treatment process to remove explosives compounds and perchlorate from the groundwater, and an infiltration basin to return treated water to the aquifer.

The Northern MTUs E and F continue to operate at a flow rate of 250 gpm. As of 31 January 2025, over 2.289 billion gallons of water have been treated and re-injected. No MTU E and F system shutdowns occurred in January.

The Northern Treatment Building G continues to operate at a flow rate of 225 gpm. As of 31 January 2025, over 1.788 billion gallons of water have been treated and re-injected. No MTU G system shutdowns occurred in January.

Eastern

The J-2 Range Eastern Treatment system consists of removal and treatment of groundwater to minimize downgradient migration of explosives compounds and perchlorate. The ETI system includes the following components: three extraction wells in an axial array, an ex-situ treatment process consisting of an ion exchange (IX) resin and granular activated carbon (GAC) media to treat perchlorate and explosives compounds, and three infiltration trenches located along the lateral boundaries of the plume where treated water enters the vadose zone and infiltrates into the aquifer. The J-2 Range Eastern system is running at a combined total flow rate of 495 gpm.

The MTUs H and I continue to operate at a flow rate of 250 gpm. As of 31 January 2025, over 1.933 billion gallons of water have been treated and re-injected. The following MTU H and I system shutdowns occurred in January:

- 0700 on 21 January 2025 due to a loss of the PLC program. Satuit Automation was on site to reinstall the program on 23 January 2025 and the system was restarted at 0920 on 23 January 2025.
- 1016 on 23 January 2025 due to a leak at the firefighting fitting caused by a ball valve that cracked because of freezing. A new valve and fittings were installed on the effluent line and the system was restarted at 1020 on 30 January 2025.

MTU J continues to operate at a flow rate of 120 gpm. As of 31 January 2025, over 907.1 million gallons of water have been treated and re-injected. The following MTU J shutdowns occurred in January:

- 0820 on 21 January 2025 to collect a carbon profile sample from GAC vessel #1 and was restarted at 0935 on 21 January 2025.

MTU K continues to operate at a flow rate of 125 gpm. As of 31 January 2025, over 1.038 billion gallons of water have been treated and re-injected. No MTU K shutdowns occurred in January.

J-3 Range Groundwater RA

The J-3 Range Groundwater RA consists of removal and treatment of contaminated groundwater to control further migration of explosives compounds and perchlorate. The ETR system includes four extraction wells, an ex-situ treatment process to remove explosives compounds and perchlorate from the groundwater and utilizes the existing Fuel Spill-12 (FS-12) infiltration gallery to return treated water to the aquifer.

The J-3 system is currently operating at a flow rate of 255 gpm. As of 31 January 2025, over 1.922 billion gallons of water have been treated and re-injected. No J-3 system shutdowns occurred in January.

J-1 Range Groundwater RA

Southern

The J-1 Range Southern Groundwater RA consists of removal and treatment of contaminated groundwater to control further migration of explosives compounds. The ETR system includes two extraction wells, an ex-situ treatment process to remove explosives compounds from the groundwater, and an infiltration trench to return treated water to the aquifer.

The Southern MTU has been optimized as part of the ESPM program at J-1 Range Southern. The on-base extraction well J1SEW0001 was turned off with regulatory approval on 31 January 2017 (formerly operated at a flow of 35 gpm), and flow was increased from 90 gpm to 125 gpm at the Leading-Edge extraction well J1SEW0002. The Leading-Edge extraction well continues to operate at a flow rate of 125 gpm. As of 31 January 2025, over 844.1 million gallons of water have been treated and re-injected. The following J-1 Range Southern MTU shutdowns occurred in January:

- 1138 on 22 January 2025 due to a “high inlet pressure” alarm. The bag filters were changed, and the system was restarted at 1500 on 22 January 2025.

Northern

The J-1 Range Northern Groundwater RA consists of removal and treatment of contaminated groundwater to control further migration of explosives compounds and perchlorate. The ETR system includes two extraction wells, an ex-situ treatment process to remove explosives compounds and perchlorate from the groundwater, and an infiltration trench to return treated water to the aquifer.

The Northern MTU continues to operate at a total system flow rate of 250 gpm. The flow rates at for the two extraction wells at J-1 Northern were modified on 28 October 2024 based on regulatory agency concurrence with the J-1 Range Northern Data Presentation for January 2023 to December 2023. The flow rate at J1NEW0001 was reduced from 125 gpm to 85 gpm and the flow rate at J1NEW0002 was increased from 125 gpm to 165 gpm. As of 31 January 2025, over 1.448 billion gallons of water have been treated and re-injected. No J-1 Range Northern MTU shutdowns occurred in January.

Central Impact Area RA

The Central Impact Area (CIA) Groundwater treatment system consists of removal and treatment of groundwater to minimize downgradient migration of explosives compounds and perchlorate. The ETR system includes the following components: three extraction wells, an ex-situ treatment process consisting of an ion exchange resin and granular activated carbon media to treat explosives compounds, and three infiltration galleries to return treated water to the aquifer. The CIA systems 1, 2, and 3 continue to run at a combined total flow rate of 750 gpm.

As of 31 January 2025, over 3.868 billion gallons of water have been treated and re-injected. No CIA system shutdowns occurred in January.

2. SUMMARY OF ACTIONS TAKEN

Operable Unit (OU) Activity as of 31 January 2025:

CIA

- Source Area investigations
 - Conducted routine visual checks of Consolidated Shot Structure (CSS) soil cover and surface area around the perimeter of the CSS
- Groundwater sampling within the CIA SPM Program.

Demolition Area 1

- Bag filters changed at the Leading-Edge System on 03 January 2025.

Demolition Area 2

- No activity.

J-1 Range

- Bag filters were changed at the J-1 Range Southern System on 22 January 2025.

J-2 Range

- Groundwater sampling within the J-2 Range Northern PFAS Program.
- Groundwater sampling within the J-2 Range Eastern SPM Program.

J-3 Range

- Groundwater sampling within the J-3 Range SPM Program.

L Range

- Groundwater sampling within the L Range LTM Program.

Small Arms Ranges

- No activity

Northwest Corner

- No activity

Training Areas

- No activity

Impact Area Roads

- No activity

Other

- Collected process water samples from Central Impact Area, Demolition Area 1, J-1 Range Northern, J-1 Range Southern, J-2 Range Eastern, J-2 Range Northern, and J-3 Range treatment systems.

JBCC Impact Area Groundwater Study Program (IAGWSP) Tech Update Meeting Minutes for 16 January 2025

Project and Fieldwork Update

Darrin Smith (USACE) stated that KGS sampling crews completed the following: Semi-annual sampling at Demo-1 (14 screens) on 12/18/24; semi-annual sampling at J-2 East (3 screens) on 1/2/25; PFAS semi-annual sampling at J- 2 North (9 screens, plus 1 added) on 1/8/25; and annual long-term monitoring (LTM) at L Range (8 screens) on 1/13/25. He also reported that semi-annual sampling at J-3 (12 screens and the FS-12 influent) began on 1/15/25 and is ongoing. The next sampling event will be at the CIA (163 screens) with hydro (30 screens).

Mr. Smith (USACE) stated that the January monthly treatment system sampling was completed on 1/9/24 and results are pending. The December monthly treatment system sampling was completed on 12/5/24 and the results showed no exceedances. The J-2N F influent and effluent quarterly PFAS sampling was performed on 1/7/25. The next round is scheduled for April 2025.

Gina Kaso (USACE) stated that currently there is no field work happening in the CIA. Weston crews are scheduled to remobilize on March 3rd and intrusive work is scheduled to begin on March 10th (weather dependent).

Ms. Kaso (USACE) also stated that the Army is reviewing the internal backcheck draft of the 2024 Annual Source Report. She expects submittal to agencies by the end of the month.

Document and Project Tracking

Mr. Dvorak (USACE) reviewed the list of deliverables (provided in advance of the meeting).

Small Arms Ranges Annual Environmental Monitoring Report Presentation

Mike Kulbersh (USACE) provided a presentation for the biennial Small Arms Ranges (SAR) Environmental Monitoring Report (EMR) for the reporting period of March 2022 through April 2024. He pointed out the location of the small arms ranges and, specifically, the operationally-inactive ranges (Bravo (B), Charlie (C), Golf (G), Juliet (J), Kilo (K), and GA/GB), where the IAGWSP collects groundwater samples. There are 40 former and current active operational ranges on Joint Base Cape Cod.

Mr. Kulbersh (USACE) stated that 18 monitoring wells were sampled at six operationally-inactive ranges: five from B Range (MW-455S/MW-490S/MW-537M1/MW-539M1/MW-72S), three from C Range (MW- 123S/MW-456S/MW-491S), three from G Range (MW-35S/MW-36S/MW-470S), four from GA/GB Range (03MW0122A/03MW0709/03MW0710/MW-690S), two from J Range (MW-471S/MW-472), and one from K Range (MW-474S). MW-538M1 at B Range was dry. All of the samples were analyzed for antimony, copper and lead. Samples from B, C, and G ranges were also tested for tungsten. Groundwater samples were analyzed

for antimony and tungsten by EPA Method SW-6020B and for copper and lead by EPA Method 6010D.

Mr. Kulbersh (USACE) reported that the results of the biennial sampling event showed no exceedances of antimony above the federal MCL of 6 µg/L. Seventeen of the 18 samples were non-detect (ND) and there is one estimated concentration of 0.47J µg/L (J value) at MW-470S (G Range).

Mr. Kulbersh (USACE) reported that there were no exceedances of the federal MCL of 1,300 µg/L for copper. Fourteen of the 18 samples were ND. The detections are estimated J value concentrations ranging from 1.2J µg/L to 2.9J µg/L.

Mr. Kulbersh (USACE) reported that there were no exceedances of the federal action level of 10 µg/L for lead. All 18 samples were ND.

Mr. Kulbersh (USACE) reported that there were no exceedances of the MassDEP Interim Drinking Water Guideline of 20 µg/L for tungsten. Ten of 11 samples were ND and there is one estimated (J value) concentration of 4.9J µg/L at MW-72S (B Range).

Mr. Kulbersh (USACE) summarized tungsten sampling results from 2006–2024 noting that 235 of 236 samples (99.6%) had no exceedances of the MassDEP Interim Drinking Water Guideline of 20 µg/L. One sample had a slight exceedance in October 2006 at 22 µg/L at MW-470S (G Range). Tungsten has been ND at MW-470S since July 2007. After that one exceedance, the next highest tungsten concentrations ever detected were 14.3 µg/L at MW-538M1 in April 2010 (B Range) and 6.1 µg/L at MW-72S in June 2013 (B Range). Tungsten samples at MW-538M1 declined from 14.3 µg/L in 2010 to 0.66J µg/L in 2012. Mr. Kulbersh (USACE) noted that samples were not collected from 2016–2019, 2022, and 2024 because the well was dry. However, results were ND from 2013–2015, in 2020, and in 2021. Tungsten concentrations at MW-72S have oscillated between ND and 6.10 µg/L since sampling began in 2007. It was last measured at 4.9J µg/L in April 2024, which is well below the guideline of 20 µg/L.

Mr. Kulbersh (USACE) reiterated that sampling results indicate that metals are not an issue in groundwater at the SAR. Long-term monitoring results at the operationally-inactive ranges showed 59 out of 65 metal analyses samples were ND. Six of the 65 were estimated (J) values and were well below applicable drinking water standards. There has never been a copper exceedance (248 samples) from 2006-2024. There has been one exceedance of tungsten (236 samples) at G Range in April 2006. There was one exceedance of lead (out of 267 samples) at B Range in April 2010. There was one exceedance (out of 248 samples) of antimony at B Range in April 2010. Mr. Kulbersh (USACE) stated that there was no timeframe specified for remedy completion in the Decision Document (DD) but he pointed out that sampling results for metals have been below cleanup standards, or ND, since 2010.

Mr. Kulbersh (USACE) reviewed the Land Use Controls, which include:

- Camp Edwards – Massachusetts Air National Guard continues managing infrastructure and requiring approval for all construction or digging/ subsurface

soil disturbance.

- The Dig Safe Program – Added layer of protection for monitoring wells and other environmental sampling equipment at the Small Arms Ranges.
- Camp Edwards Range Control – Maintains and implements range safety and ensures training units do not conduct digging activities outside of approved dig sites without authorization.

Based on a robust groundwater dataset, collected principally since 2006, antimony, copper, lead, and tungsten have remained one to two orders of magnitude below the EPA Maximum Contaminant Levels, EPA Health Advisories, and the MassDEP Interim Drinking Water Guideline (tungsten) at the B, C, G, GA/GB, J and K ranges. Since contaminants detected in at SAR have not resulted in groundwater contamination above action levels, and the risk of future impacts has been reduced by soil removal actions, IAGWSP recommends that metals' monitoring be discontinued at the SAR. Table 5-1 from the EMR depicts the current and proposed sample frequency (i.e., discontinuation).

Len Pinaud (MassDEP) noted that these are currently operationally-inactive ranges, so the sampling results are not surprising. He stated that if the Massachusetts National Guard were to decide to reactivate any of these ranges, soil and groundwater sampling would need to be implemented. He hopes these wells will not be disabled or closed out in any way in case they are needed in the future. Mr. Pinaud (MassDEP) asked for the IAGWSP to present this data at the spring Environmental Management Commission (EMC) and EMC Advisory Council meetings. Jodi Lyn Cutler (IAGWSP) replied that the IAGWSP would be happy to present at those meetings. She also noted that the IAGWSP does not plan to close out any of the wells. She confirmed that Mike Ciaranca from the Environmental and Readiness Center (E&RC) had reviewed the presentation and that the programs would coordinate sampling if the ranges were to become active again. Ms. Cutler (IAGWSP) then asked if there is concurrence on the proposed current discontinuation of sampling. Bob Lim (EPA) replied that he had no comments on the presentation and he appreciates that none of the wells will be disabled or removed.

Mr. Kulbersh (USACE) noted that the EMR includes trend plots for each well for metals. Mr. Lim (EPA) asked if any fate and transport modeling had been done from the firing lines. Mr. Kulbersh (USACE) replied that it is expected that the groundwater sampling would have shown contamination coming from the firing lines, moving quickly through the vadose zone to the water table. Mr. Lim (EPA) acknowledged understanding of that point.

JBCC Cleanup Team Meeting

The next JBCC Cleanup Team (JBCCCT) is scheduled for 09 April 2025 (previous meeting was 13 November 2024). Meeting details and presentation materials from previous meetings can be found on the IAGWSP web site at <http://jbcc-iagwsp.org/community/impact/presentations/>. The Cleanup Team meeting discusses late breaking news and responses to action items, as well as updates from the IAGWSP and the Installation Restoration Program (IRP). The JBCCCT meetings provide a forum for community input regarding issues related to both the IRP and the IAGWSP.

3. SUMMARY OF DATA RECEIVED

Table 1 summarizes sampling for all media from 01 to 31 January 2025. Table 2 summarizes the validated detections of explosives compounds and perchlorate for all groundwater results received from 01 to 31 January 2025. These results are compared to the Maximum Contaminant Levels/Health Advisory (MCL/HA) values for respective analytes. Explosives and perchlorate are the primary contaminants of concern (COC) at Camp Edwards. Table 3 summarizes the validated detections of per- and polyfluoroalkyl substances (PFAS) for influent and groundwater results analyzed by EPA draft Method 1633 and received from 01 to 31 January 2025. Table 3 PFAS results are compared to the Regional Screening Levels (RSLs) published by EPA in November 2023. No PFAS validation was completed during January 2025, therefore, Table 3 is not included.

The operable units (OUs) under investigation and cleanup at Camp Edwards are the Central Impact Area, Demolition Area 1, Demolition Area 2, J-1 Range, J-2 Range, J-3 Range, L Range, Northwest Corner, Small Arms Ranges, and Training Areas. Environmental monitoring reports for each OU are generated each year to evaluate the current year groundwater results. These reports are available on the site Environmental Data Management System (EDMS) and at the project document repositories (IAGWSP office and Jonathan Bourne Library).

4. SUBMITTED DELIVERABLES

Deliverables submitted during the reporting period include the following:

- Monthly Progress Report No. 333 for December 2024 10 January 2025
- Memorandum of Resolution on the Draft J-3 Range Environmental Monitoring Report for September 2022 through August 2023 31 January 2025
- Draft Final 2024 Source Removal Annual Report 31 January 2025

5. SCHEDULED ACTIONS

The following actions and/or documents are being prepared in February 2025.

- Draft Central Impact Area Environmental Monitoring Report for July 2023 through June 2024
- Draft Demolition Area 1 Environmental Monitoring Report for July 2023 through June 2024
- Comment Resolution for the J-2 Range Northern Environmental Monitoring Report for November 2022 through October 2023
- Response to Comments on the J-1 Range Southern Environmental Monitoring Report for January 2023 to December 2023
- Draft J-1 Range Northern Environmental Monitoring Report for January 2023 to December 2023
- Draft Small Arms Range Environmental Monitoring Report for July 2023 through June 2024
- Draft Demolition Area 2 PFAS Technical Memorandum
- Draft Land Use Controls Monitoring Report 2024

TABLE 1
Sampling Progress: 01 to 31 January 2025

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
Central Impact Area	MW-633M2	MW-633M2_S25	N	01/30/2025	Ground Water	197	207
Central Impact Area	MW-633M1	MW-633M1_S25	N	01/30/2025	Ground Water	282	292
Central Impact Area	MW-42M3	MW-42M3_S25	N	01/30/2025	Ground Water	165.8	176
Central Impact Area	MW-42M2	MW-42M2_S25	N	01/30/2025	Ground Water	185.8	196
Central Impact Area	MW-42M1	MW-42M1_S25	N	01/30/2025	Ground Water	205.8	216
Central Impact Area	MW-42M1	MW-42M1_S25D	FD	01/30/2025	Ground Water	205.8	216
Former A Range	MW-42M1	MW-42M1_S25	N	01/30/2025	Ground Water	205.8	216
Former A Range	MW-42M1	MW-42M1_S25D	FD	01/30/2025	Ground Water	205.8	216
Central Impact Area	MW-100M2	MW-100M2_S25	N	01/29/2025	Ground Water	164	174
Central Impact Area	MW-100M1	MW-100M1_S25	N	01/29/2025	Ground Water	179	189
Central Impact Area	MW-99S	MW-99S_S25	N	01/29/2025	Ground Water	133	143
Central Impact Area	MW-99M1	MW-99M1_S25	N	01/29/2025	Ground Water	195	205
Central Impact Area	MW-98S	MW-98S_S25	N	01/29/2025	Ground Water	137	147
Central Impact Area	MW-98M1	MW-98M1_S25	N	01/29/2025	Ground Water	164	174
Central Impact Area	MW-695S	MW-695S_S25	N	01/28/2025	Ground Water	130	140
Central Impact Area	MW-695S	MW-695S_S25D	FD	01/28/2025	Ground Water	130	140
Central Impact Area	MW-725M1	MW-725M1_S25	N	01/28/2025	Ground Water	145.2	155.2
Central Impact Area	MW-725M1	MW-725M1_S25D	FD	01/28/2025	Ground Water	145.2	155.2
Central Impact Area	MW-727M1	MW-727M1_S25	N	01/28/2025	Ground Water	145.4	155.4
Central Impact Area	MW-02M2	MW-02M2_S25	N	01/28/2025	Ground Water	170	175
Central Impact Area	MW-02M1	MW-02M1_S25	N	01/28/2025	Ground Water	212	217
Central Impact Area	MW-92S	MW-92S_S25	N	01/27/2025	Ground Water	139	149
Central Impact Area	MW-112M2	MW-112M2_S25	N	01/27/2025	Ground Water	165	175
Central Impact Area	MW-112M1	MW-112M1_S25	N	01/27/2025	Ground Water	195	205
Central Impact Area	MW-113M2	MW-113M2_S25	N	01/27/2025	Ground Water	190	200
Central Impact Area	MW-113M1	MW-113M1_S25	N	01/27/2025	Ground Water	240	250
Central Impact Area	MW-179M1	MW-179M1_S25	N	01/27/2025	Ground Water	187	197
J3 Range	90PLT01006	90PLT01006_S25	N	01/23/2025	Process Water	0	0
J3 Range	MW-653M2	MW-653M2_S25	N	01/22/2025	Ground Water	59.3	69.3
J3 Range	MW-653M1	MW-653M1_S25	N	01/22/2025	Ground Water	147.5	157.5
J3 Range	MW-197M1	MW-197M1_S25	N	01/22/2025	Ground Water	120	125
J3 Range	J3EWIP2	J3EWIP2_S25	N	01/16/2025	Process Water	150.5	170.5
J3 Range	J3EWIP2	J3EWIP2_S25D	FD	01/16/2025	Process Water	150.5	170.5
J3 Range	J3EWIP1	J3EWIP1_S25	N	01/16/2025	Process Water	153	193
J3 Range	J3EW0032	J3EW0032_S25	N	01/16/2025	Process Water	102	152
J3 Range	90EW0001	90EW0001_S25	N	01/16/2025	Process Water	83.1	143.8
J3 Range	MW-636M2	MW-636M2_S25	N	01/15/2025	Ground Water	110.5	120.5
J3 Range	MW-636M1	MW-636M1_S25	MS	01/15/2025	Ground Water	141.6	151.6
J3 Range	MW-636M1	MW-636M1_S25	N	01/15/2025	Ground Water	141.6	151.6
J3 Range	MW-636M1	MW-636M1_S25	SD	01/15/2025	Ground Water	141.6	151.6
J3 Range	MW-637M3	MW-637M3_S25	N	01/15/2025	Ground Water	174.1	184.1
J3 Range	MW-637M2	MW-637M2_S25	N	01/15/2025	Ground Water	214.1	224.1
J3 Range	MW-637M1	MW-637M1_S25	N	01/15/2025	Ground Water	236.1	246.1
Lima Range	MW-242M1	MW-242M1_S25	N	01/13/2025	Ground Water	235	245
Lima Range	MW-651M1	MW-651M1_S25	N	01/13/2025	Ground Water	242.3	252.3
Lima Range	90MW0031	90MW0031_S25	N	01/13/2025	Ground Water	195.3	200.2
Lima Range	MW-650M1	MW-650M1_S25	N	01/09/2025	Ground Water	260	270
Lima Range	MW-595M2	MW-595M2_S25	N	01/09/2025	Ground Water	205.3	215.3
Lima Range	MW-595M1	MW-595M1_S25	N	01/09/2025	Ground Water	255.3	265.3
Lima Range	MW-595M1	MW-595M1_S25D	FD	01/09/2025	Ground Water	255.3	265.3
Central Impact Area	CIA2-EFF	CIA2-EFF-132A	N	01/09/2025	Process Water	0	0
Central Impact Area	CIA2-MID2	CIA2-MID2-132A	N	01/09/2025	Process Water	0	0
Central Impact Area	CIA2-MID1	CIA2-MID1-132A	N	01/09/2025	Process Water	0	0
Lima Range	MW-596M1	MW-596M1_S25	N	01/09/2025	Ground Water	231.1	241.1
Central Impact Area	CIA2-INF	CIA2-INF-132A	N	01/09/2025	Process Water	0	0
Central Impact Area	CIA1-EFF	CIA1-EFF-132A	N	01/09/2025	Process Water	0	0
Central Impact Area	CIA1-MID2	CIA1-MID2-132A	N	01/09/2025	Process Water	0	0
Central Impact Area	CIA1-MID1	CIA1-MID1-132A	N	01/09/2025	Process Water	0	0
Central Impact Area	CIA1-INF	CIA1-INF-132A	N	01/09/2025	Process Water	0	0
Lima Range	90MW0034	90MW0034_S25	N	01/09/2025	Ground Water	94	99

N = Normal Sample
FD = Field Duplicate

TABLE 1
Sampling Progress: 01 to 31 January 2025

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
Central Impact Area	CIA3-EFF	CIA3-EFF-103A	N	01/09/2025	Process Water	0	0
Central Impact Area	CIA3-MID2	CIA3-MID2-103A	N	01/09/2025	Process Water	0	0
Central Impact Area	CIA3-MID1	CIA3-MID1-103A	N	01/09/2025	Process Water	0	0
Central Impact Area	CIA3-INF	CIA3-INF-103A	N	01/09/2025	Process Water	0	0
J1 Range Southern	J1S-EFF	J1S-EFF-206A	N	01/08/2025	Process Water	0	0
J1 Range Southern	J1S-MID	J1S-MID-206A	N	01/08/2025	Process Water	0	0
J1 Range Southern	J1S-INF-2	J1S-INF-2-206A	N	01/08/2025	Process Water	0	0
J2 Range Eastern	J2E-EFF-K	J2E-EFF-K-196A	N	01/08/2025	Process Water	0	0
J2 Range Eastern	J2E-MID-2K	J2E-MID-2K-196A	N	01/08/2025	Process Water	0	0
J2 Range Eastern	J2E-MID-1K	J2E-MID-1K-196A	N	01/08/2025	Process Water	0	0
J2 Range Eastern	J2E-INF-K	J2E-INF-K-196A	N	01/08/2025	Process Water	0	0
J2 Range Northern	MW-293M1	MW-293M1_FALL24	N	01/08/2025	Ground Water	296.26	306.27
J2 Range Eastern	J2E-EFF-J	J2E-EFF-J-196A	N	01/08/2025	Process Water	0	0
J2 Range Eastern	J2E-MID-2J	J2E-MID-2J-196A	N	01/08/2025	Process Water	0	0
J2 Range Eastern	J2E-MID-1J	J2E-MID-1J-196A	N	01/08/2025	Process Water	0	0
J2 Range Eastern	J2E-INF-J	J2E-INF-J-196A	N	01/08/2025	Process Water	0	0
J2 Range Northern	J2EW0002	J2EW0002_FALL24	N	01/08/2025	Process Water	198	233
J2 Range Eastern	J2E-EFF-IH	J2E-EFF-IH-196A	N	01/08/2025	Process Water	0	0
J2 Range Eastern	J2E-MID-2H	J2E-MID-2H-196A	N	01/08/2025	Process Water	0	0
J2 Range Eastern	J2E-MID-1H	J2E-MID-1H-196A	N	01/08/2025	Process Water	0	0
J2 Range Eastern	J2E-MID-2I	J2E-MID-2I-196A	N	01/08/2025	Process Water	0	0
J2 Range Eastern	J2E-MID-1I	J2E-MID-1I-196A	N	01/08/2025	Process Water	0	0
J2 Range Eastern	J2E-INF-I	J2E-INF-I-196A	N	01/08/2025	Process Water	0	0
J3 Range	J3-EFF	J3-EFF-220A	N	01/07/2025	Process Water	0	0
J3 Range	J3-MID-2	J3-MID-2-220A	N	01/07/2025	Process Water	0	0
J3 Range	J3-MID-1	J3-MID-1-220A	N	01/07/2025	Process Water	0	0
J3 Range	J3-INF	J3-INF-220A	N	01/07/2025	Process Water	0	0
J2 Range Northern	MW-05D	MW-05D_FALL24	N	01/07/2025	Ground Water	335	340
J2 Range Northern	MW-337D	MW-337D_FALL24	N	01/07/2025	Ground Water	310	320
J2 Range Northern	J2N-EFF-G	J2N-EFF-G-220A	N	01/07/2025	Process Water	0	0
J2 Range Northern	J2N-MID-2G	J2N-MID-2G-220A	N	01/07/2025	Process Water	0	0
J2 Range Northern	J2N-MID-1G	J2N-MID-1G-220A	N	01/07/2025	Process Water	0	0
J2 Range Northern	J2N-INF-G	J2N-INF-G-220A	N	01/07/2025	Process Water	0	0
J2 Range Northern	MW-340D	MW-340D_FALL24	N	01/07/2025	Ground Water	329.6	339.6
J2 Range Northern	MW-345M2	MW-345M2_FALL24	N	01/07/2025	Ground Water	236.62	246.62
J2 Range Northern	J2N-EFF-EF	J2N-EFF-EF-220A	N	01/07/2025	Process Water	0	0
J2 Range Northern	J2N-MID-2F	J2N-MID-2F-220A	N	01/07/2025	Process Water	0	0
J2 Range Northern	J2N-MID-1F	J2N-MID-1F-220A	N	01/07/2025	Process Water	0	0
J2 Range Northern	J2N-INF-EF	J2N-INF-EF-220A	N	01/07/2025	Process Water	0	0
J2 Range Northern	J2N-MID-2E	J2N-MID-2E-220A	N	01/07/2025	Process Water	0	0
J2 Range Northern	J2N-EFF-F	J2N-EFF-F_JAN25	N	01/07/2025	Process Water	0	0
J2 Range Northern	J2N-MID-1E	J2N-MID-1E-220A	N	01/07/2025	Process Water	0	0
J2 Range Northern	J2N-INF-F	J2N-INF-F_JAN25D	FD	01/07/2025	Process Water	0	0
J2 Range Northern	J2N-INF-F	J2N-INF-F_JAN25	N	01/07/2025	Process Water	0	0
Demolition Area 1	D1LE-EFF	D1LE-EFF-102A	N	01/06/2025	Process Water	0	0
Demolition Area 1	D1LE-MID2	D1LE-MID2-102A	N	01/06/2025	Process Water	0	0
Demolition Area 1	D1LE-MID1	D1LE-MID1-102A	N	01/06/2025	Process Water	0	0
J2 Range Northern	MW-345M1	MW-345M1_FALL24	MS	01/06/2025	Ground Water	311.5	321.5
J2 Range Northern	MW-345M1	MW-345M1_FALL24	N	01/06/2025	Ground Water	311.5	321.5
J2 Range Northern	MW-345M1	MW-345M1_FALL24	SD	01/06/2025	Ground Water	311.5	321.5
Demolition Area 1	D1LE-INF	D1LE-INF-102A	N	01/06/2025	Process Water	0	0
J2 Range Northern	MW-330M3	MW-330M3_FALL24	N	01/06/2025	Ground Water	154.97	164.99
Demolition Area 1	D1-EFF	D1-EFF-174A	N	01/06/2025	Process Water	0	0
Demolition Area 1	D1-MID-2	D1-MID-2-174A	N	01/06/2025	Process Water	0	0
Demolition Area 1	D1-MID-1	D1-MID-1-174A	N	01/06/2025	Process Water	0	0
Demolition Area 1	D1-INF	D1-INF-174A	N	01/06/2025	Process Water	0	0
J2 Range Northern	MW-330M2	MW-330M2_FALL24	N	01/06/2025	Ground Water	238.01	248.04
Demolition Area 1	FPR-2-EFF-A	FPR-2-EFF-A-226A	N	01/06/2025	Process Water	0	0
Demolition Area 1	FPR-2-GAC-MID1A	FPR-2-GAC-MID1A-226A	N	01/06/2025	Process Water	0	0
Demolition Area 1	FPR2-POST-IX-A	FPR2-POST-IX-A-226A	N	01/06/2025	Process Water	0	0

N = Normal Sample
FD = Field Duplicate

TABLE 1
Sampling Progress: 01 to 31 January 2025

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
Demolition Area 1	FPR-2-INF	FPR-2-INF-226A	N	01/06/2025	Process Water	0	0
J2 Range Northern	MW-330M1	MW-330M1_FALL24	N	01/06/2025	Ground Water	313.1	323.13
J2 Range Northern	MW-330M1	MW-330M1_FALL24D	FD	01/06/2025	Ground Water	313.1	323.13
J1 Range Northern	J1N-EFF	J1N-EFF-135A	N	01/06/2025	Process Water	0	0
J1 Range Northern	J1N-MID2	J1N-MID2-135A	N	01/06/2025	Process Water	0	0
J1 Range Northern	J1N-MID1	J1N-MID1-135A	N	01/06/2025	Process Water	0	0
J1 Range Northern	J1N-INF2	J1N-INF2-135A	N	01/06/2025	Process Water	0	0
J2 Range Eastern	MW-368M2	MW-368M2_S25D	FD	01/02/2025	Ground Water	202.73	212.73
J2 Range Eastern	MW-368M2	MW-368M2_S25	N	01/02/2025	Ground Water	202.73	212.73
J2 Range Eastern	MW-324M2	MW-324M2_S25	N	01/02/2025	Ground Water	203.74	214.74
J2 Range Eastern	MW-324M1	MW-324M1_S25	N	01/02/2025	Ground Water	234.85	244.85

**TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received January 2024**

Area of Concern	Location ID	Field Sample ID	Top Depth (ft bgs)	Bottom Depth (ft bgs)	Date Sampled	Test Method	Analyte	Result Value	Qualifier	Units	MCL/HA	> MCL/HA	MDL	RL
Demolition Area 1	MW-19S	MW-19S_F24	38	48	12/18/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.6		µg/L	0.60	X	0.092	0.20
Demolition Area 1	MW-19S	MW-19S_F24	38	48	12/18/2024	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.72		µg/L	400		0.013	0.20
Demolition Area 1	MW-19S	MW-19S_F24D	38	48	12/18/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.4		µg/L	0.60	X	0.092	0.20
Demolition Area 1	MW-19S	MW-19S_F24D	38	48	12/18/2024	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.66		µg/L	400		0.013	0.20
Demolition Area 1	XX9514	XX9514_F24	0	0	12/18/2024	SW6850	Perchlorate	1.2		µg/L	2.0		0.047	0.20
Demolition Area 1	MW-663D	MW-663D_F24	240.6	250.6	12/17/2024	SW6850	Perchlorate	1.4		µg/L	2.0		0.047	0.20
Demolition Area 1	MW-663D	MW-663D_F24	240.6	250.6	12/17/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.28		µg/L	0.60		0.092	0.20
Demolition Area 1	EW-658	EW-658_F24	96	136	12/17/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.14	J	µg/L	0.60		0.092	0.20
Demolition Area 1	MW-544M1	MW-544M1_F24	162	172	12/16/2024	SW6850	Perchlorate	4.9		µg/L	2.0	X	0.047	0.20
Demolition Area 1	MW-544M1	MW-544M1_F24	162	172	12/16/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.84		µg/L	0.60	X	0.092	0.20
Demolition Area 1	MW-545M3	MW-545M3_F24	101.5	111.5	12/16/2024	SW6850	Perchlorate	0.30		µg/L	2.0		0.047	0.20
Demolition Area 1	MW-545M2	MW-545M2_F24	142	152	12/16/2024	SW6850	Perchlorate	2.1		µg/L	2.0	X	0.047	0.20
Demolition Area 1	MW-545M2	MW-545M2_F24D	142	152	12/16/2024	SW6850	Perchlorate	2.3		µg/L	2.0	X	0.047	0.20
Demolition Area 1	MW-545M1	MW-545M1_F24	162	172	12/16/2024	SW6850	Perchlorate	0.67		µg/L	2.0		0.047	0.20
Demolition Area 1	MW-533M1	MW-533M1_F24	160	170	12/12/2024	SW6850	Perchlorate	4.6		µg/L	2.0	X	0.047	0.20
Demolition Area 1	MW-533M1	MW-533M1_F24	160	170	12/12/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.6		µg/L	0.60	X	0.092	0.20
Demolition Area 1	MW-730M3	MW-730M3_F24	115.46	125.46	12/12/2024	SW6850	Perchlorate	2.0		µg/L	2.0		0.047	0.20
Demolition Area 1	MW-730M2	MW-730M2_F24	165.87	175.87	12/12/2024	SW6850	Perchlorate	5.6		µg/L	2.0	X	0.047	0.20
Demolition Area 1	MW-730M2	MW-730M2_F24	165.87	175.87	12/12/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	3.7		µg/L	0.60	X	0.092	0.20
Demolition Area 1	MW-730M2	MW-730M2_F24D	165.87	175.87	12/12/2024	SW6850	Perchlorate	5.7		µg/L	2.0	X	0.047	0.20
Demolition Area 1	MW-730M2	MW-730M2_F24D	165.87	175.87	12/12/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	3.7		µg/L	0.60	X	0.092	0.20
Demolition Area 1	MW-730M1	MW-730M1_F24	185.82	195.82	12/12/2024	SW6850	Perchlorate	5.3		µg/L	2.0	X	0.047	0.20
Demolition Area 1	MW-31S	MW-31S_F24	98	103	12/11/2024	SW8330	2,4,6-Trinitrotoluene	0.42		µg/L	2.0		0.13	0.20
Demolition Area 1	MW-31S	MW-31S_F24	98	103	12/11/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.3		µg/L	0.60	X	0.092	0.20
Demolition Area 1	MW-31S	MW-31S_F24	98	103	12/11/2024	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.58		µg/L	400		0.013	0.20
Demolition Area 1	MW-732M2	MW-732M2_F24	96.2	106.2	12/10/2024	SW6850	Perchlorate	0.17	J	µg/L	2.0		0.047	0.20
Demolition Area 1	MW-732M1	MW-732M1_F24	156	166	12/10/2024	SW6850	Perchlorate	0.13	J	µg/L	2.0		0.047	0.20
Demolition Area 1	MW-731M3	MW-731M3_F24	160.1	170.1	12/10/2024	SW6850	Perchlorate	0.71		µg/L	2.0		0.047	0.20
Demolition Area 1	MW-731M3	MW-731M3_F24	160.1	170.1	12/10/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.38		µg/L	0.60		0.092	0.20
Demolition Area 1	MW-731M3	MW-731M3_F24	160.1	170.1	12/10/2024	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.031	J	µg/L	400		0.013	0.20
Demolition Area 1	MW-731M2	MW-731M2_F24	190.9	200.9	12/10/2024	SW6850	Perchlorate	2.6		µg/L	2.0	X	0.047	0.20
Demolition Area 1	MW-731M2	MW-731M2_F24	190.9	200.9	12/10/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.33		µg/L	0.60		0.092	0.20
Demolition Area 1	MW-731M1	MW-731M1_F24	220.8	230.8	12/10/2024	SW6850	Perchlorate	0.71		µg/L	2.0		0.047	0.20
Central Impact Area	MW-625M1	MW-625M1_F24	260	270	12/09/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.37		µg/L	0.60		0.092	0.20
Central Impact Area	MW-616M1	MW-616M1_F24	217.1	227.1	12/09/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.82		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-617M1	MW-617M1_F24	175.8	185.8	12/09/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.38		µg/L	0.60		0.092	0.20
J1 Range Northern	MW-590M2	MW-590M2_F24	238	248	12/05/2024	SW6850	Perchlorate	1.6		µg/L	2.0		0.047	0.20
J1 Range Northern	MW-590M2	MW-590M2_F24	238	248	12/05/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.35	J	µg/L	0.60		0.092	0.20
J1 Range Northern	MW-590M2	MW-590M2_F24D	238	248	12/05/2024	SW6850	Perchlorate	1.5		µg/L	2.0		0.047	0.20
J1 Range Northern	MW-590M2	MW-590M2_F24D	238	248	12/05/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.35		µg/L	0.60		0.092	0.20
J1 Range Northern	MW-430M1	MW-430M1_F24	245.23	255.23	12/04/2024	SW6850	Perchlorate	0.047	J	µg/L	2.0		0.047	0.20
Central Impact Area	MW-695S	MW-695S_F24	130	140	12/04/2024	SW8330	2,4,6-Trinitrotoluene	2.4		µg/L	2.0	X	0.13	0.20
Central Impact Area	MW-695S	MW-695S_F24	130	140	12/04/2024	SW8330	2,4-Dinitrotoluene	0.15	J	µg/L	5.0		0.13	0.20

J = Estimated Result
MDL = Method Detection Limit
RL = Reporting Limit
ND = Non-Detect

**TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received January 2024**

Area of Concern	Location ID	Field Sample ID	Top Depth (ft bgs)	Bottom Depth (ft bgs)	Date Sampled	Test Method	Analyte	Result Value	Qualifier	Units	MCL/HA	> MCL/HA	MDL	RL
Central Impact Area	MW-695S	MW-695S_F24	130	140	12/04/2024	SW8330	2-Amino-4,6-dinitrotoluene	0.33		µg/L	7.3		0.094	0.20
Central Impact Area	MW-695S	MW-695S_F24	130	140	12/04/2024	SW8330	4-Amino-2,6-dinitrotoluene	0.27		µg/L	7.3		0.094	0.20
Central Impact Area	MW-695S	MW-695S_F24	130	140	12/04/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	3.8	J	µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-695S	MW-695S_F24	130	140	12/04/2024	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.19	J	µg/L	400		0.013	0.20
Central Impact Area	MW-695S	MW-695S_F24D	130	140	12/04/2024	SW8330	2,4,6-Trinitrotoluene	2.3		µg/L	2.0	X	0.13	0.20
Central Impact Area	MW-695S	MW-695S_F24D	130	140	12/04/2024	SW8330	2,4-Dinitrotoluene	0.14	J	µg/L	5.0		0.13	0.20
Central Impact Area	MW-695S	MW-695S_F24D	130	140	12/04/2024	SW8330	2-Amino-4,6-dinitrotoluene	0.32		µg/L	7.3		0.094	0.20
Central Impact Area	MW-695S	MW-695S_F24D	130	140	12/04/2024	SW8330	4-Amino-2,6-dinitrotoluene	0.28		µg/L	7.3		0.094	0.20
Central Impact Area	MW-695S	MW-695S_F24D	130	140	12/04/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	3.9	J	µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-695S	MW-695S_F24D	130	140	12/04/2024	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.23	J	µg/L	400		0.013	0.20
J1 Range Northern	MW-584M1	MW-584M1_F24	248	258	12/03/2024	SW6850	Perchlorate	0.59		µg/L	2.0		0.047	0.20
J1 Range Northern	MW-566M1	MW-566M1_F24	232	242	12/02/2024	SW6850	Perchlorate	0.51		µg/L	2.0		0.047	0.20
J1 Range Northern	MW-547M1	MW-547M1_F24	237	247	11/26/2024	SW6850	Perchlorate	2.8		µg/L	2.0	X	0.047	0.20
J1 Range Northern	MW-547M1	MW-547M1_F24	237	247	11/26/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.046	J	µg/L	0.60		0.043	0.20
J1 Range Northern	MW-349M1	MW-349M1_F24	228.6	238.6	11/26/2024	SW6850	Perchlorate	0.055	J	µg/L	2.0		0.047	0.20
J1 Range Northern	MW-349M1	MW-349M1_F24	228.6	238.6	11/26/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.7		µg/L	0.60	X	0.043	0.20
J1 Range Northern	MW-349M1	MW-349M1_F24D	228.6	238.6	11/26/2024	SW6850	Perchlorate	0.071	J	µg/L	2.0		0.047	0.20
J1 Range Northern	MW-349M1	MW-349M1_F24D	228.6	238.6	11/26/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.6		µg/L	0.60	X	0.043	0.20
J1 Range Northern	MW-346M3	MW-346M3_F24	175.3	185.3	11/25/2024	SW6850	Perchlorate	0.15	J	µg/L	2.0		0.047	0.20
J1 Range Northern	MW-346M2	MW-346M2_F24	205.3	215.3	11/25/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.75		µg/L	0.60	X	0.043	0.20
J1 Range Northern	MW-346M2	MW-346M2_F24	205.3	215.3	11/25/2024	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.94		µg/L	400		0.091	0.20
J1 Range Northern	MW-346M1	MW-346M1_F24	244.7	254.7	11/25/2024	SW6850	Perchlorate	9.0		µg/L	2.0	X	0.047	0.20
J1 Range Northern	MW-346M1	MW-346M1_F24	244.7	254.7	11/25/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	12.0		µg/L	0.60	X	0.043	0.20
J1 Range Northern	MW-346M1	MW-346M1_F24	244.7	254.7	11/25/2024	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.40		µg/L	400		0.091	0.20
J1 Range Northern	MW-346M1	MW-346M1_F24D	244.7	254.7	11/25/2024	SW6850	Perchlorate	9.3		µg/L	2.0	X	0.047	0.20
J1 Range Northern	MW-346M1	MW-346M1_F24D	244.7	254.7	11/25/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	11.0		µg/L	0.60	X	0.043	0.20
J1 Range Northern	MW-346M1	MW-346M1_F24D	244.7	254.7	11/25/2024	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.40		µg/L	400		0.091	0.20
J1 Range Northern	MW-564M1	MW-564M1_F24	227	237	11/21/2024	SW6850	Perchlorate	0.17	J	µg/L	2.0		0.047	0.20
J1 Range Northern	MW-564M1	MW-564M1_F24	227	237	11/21/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.17	J	µg/L	0.60		0.043	0.20
J1 Range Northern	MW-564M1	MW-564M1_F24	227	237	11/21/2024	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.12	J	µg/L	400		0.091	0.20
J1 Range Northern	MW-564M1	MW-564M1_F24D	227	237	11/21/2024	SW6850	Perchlorate	0.17	J	µg/L	2.0		0.047	0.20
J1 Range Northern	MW-564M1	MW-564M1_F24D	227	237	11/21/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.16	J	µg/L	0.60		0.043	0.20
J1 Range Northern	MW-564M1	MW-564M1_F24D	227	237	11/21/2024	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.11	J	µg/L	400		0.091	0.20
J1 Range Northern	MW-656M1	MW-656M1_F24	244.1	254.1	11/21/2024	SW6850	Perchlorate	0.31		µg/L	2.0		0.047	0.20
J1 Range Northern	MW-245M2	MW-245M2_F24	204	214	11/19/2024	SW6850	Perchlorate	8.0		µg/L	2.0	X	0.047	0.20
J1 Range Northern	MW-245M2	MW-245M2_F24	204	214	11/19/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	29.0		µg/L	0.60	X	0.086	0.40
J1 Range Northern	MW-245M2	MW-245M2_F24	204	214	11/19/2024	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	11.0		µg/L	400		0.091	0.20
J1 Range Northern	MW-245M2	MW-245M2_F24D	204	214	11/19/2024	SW6850	Perchlorate	7.7		µg/L	2.0	X	0.047	0.20
J1 Range Northern	MW-245M2	MW-245M2_F24D	204	214	11/19/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	27.0		µg/L	0.60	X	0.086	0.40
J1 Range Northern	MW-245M2	MW-245M2_F24D	204	214	11/19/2024	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	11.0		µg/L	400		0.091	0.20
J1 Range Northern	MW-245M1	MW-245M1_F24	244	254	11/19/2024	SW6850	Perchlorate	2.7		µg/L	2.0	X	0.047	0.20
J1 Range Northern	MW-245M1	MW-245M1_F24	244	254	11/19/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.9		µg/L	0.60	X	0.043	0.20
J1 Range Northern	MW-326M2	MW-326M2_F24	196.27	206.28	11/19/2024	SW6850	Perchlorate	0.30		µg/L	2.0		0.047	0.20

J = Estimated Result
MDL = Method Detection Limit
RL = Reporting Limit
ND = Non-Detect

**TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received January 2024**

Area of Concern	Location ID	Field Sample ID	Top Depth (ft bgs)	Bottom Depth (ft bgs)	Date Sampled	Test Method	Analyte	Result Value	Qualifier	Units	MCL/HA	> MCL/HA	MDL	RL
J1 Range Northern	MW-326M2	MW-326M2_F24	196.27	206.28	11/19/2024	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	5.1		µg/L	0.60	X	0.043	0.20
J1 Range Northern	MW-326M2	MW-326M2_F24	196.27	206.28	11/19/2024	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	4.5		µg/L	400		0.091	0.20
J1 Range Northern	MW-326M1	MW-326M1_F24	250.01	260.01	11/19/2024	SW6850	Perchlorate	3.7		µg/L	2.0	X	0.047	0.20
J1 Range Northern	MW-549M1	MW-549M1_F24	227.4	237.4	11/18/2024	SW6850	Perchlorate	0.63		µg/L	2.0		0.047	0.20
J1 Range Northern	MW-253M1	MW-253M1_F24	265.4	275.4	11/18/2024	SW6850	Perchlorate	0.19	J	µg/L	2.0		0.047	0.20
J1 Range Northern	MW-315M1	MW-315M1_F24	245.49	255.49	11/18/2024	SW6850	Perchlorate	2.3		µg/L	2.0	X	0.047	0.20

J = Estimated Result
MDL = Method Detection Limit
RL = Reporting Limit
ND = Non-Detect