MONTHLY PROGRESS REPORT #336
FOR March 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 28 March 2025.

1. SUMMARY OF REMEDIATION ACTIONS

Remediation Actions (RA) Underway at Camp Edwards as of 28 March 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. On 31 March 2025, the flow rate at the Frank Perkins Treatment Facility was reduced from 175 gallons per minute (gpm) to 100 gpm as a result of shutting down extraction well D1-EW-501, leaving only D1-EW-4 pumping as part of the Frank Perkins Road system. As of 28 March 2025, over 3.161 billion gallons of water were treated and re-injected. No Frank Perkins Road system shutdowns occurred in March.

The Base Boundary Mobile Treatment Unit (MTU) continues to operate at a flow rate of 65 gpm. As of 28 March 2025, over 429.4 million gallons of water were treated and re-injected. No Base Boundary system shutdowns occurred in March.

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 28 March 2025, over 449.2 million gallons of water were treated and re-injected. No Leading-Edge system shutdowns occurred in March.

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 28 March 2025, over 2.309 billion gallons of water have been treated and re-injected. The following MTU E and F system shutdowns occurred in March:

- 0501 on 17 March 2025 at MTU F due to a power interruption and was restarted at 1017 on 17 March 2025.

The Northern Treatment Building G continues to operate at a flow rate of 225 gpm. As of 28 March 2025, over 1.805 billion gallons of water have been treated and re-injected. The following MTU G system shutdowns occurred in March:

- 2326 on 17 March 2025 due to a power interruption and was restarted at 0822 on 18 March 2025.
- 1208 on 26 March 2025 due to a power interruption and was restarted at 0812 on 27 March 2025.
- 0912 on 28 March 2025 due to observed mechanical issues. The system will remain off until further diagnostics are performed, and a new pump/motor is installed, or other measures are taken.

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 28 March 2025, over 1.953 billion gallons of water have been treated and re-injected. No MTU H and I system shutdowns occurred in March.

MTU J continues to operate at a flow rate of 120 gpm. As of 28 March 2025, over 916.5 million gallons of water have been treated and re-injected. Tno MTU J shutdowns occurred in March.

MTU K continues to operate at a flow rate of 125 gpm. As of 28 March 2025, over 1.048 billion gallons of water have been treated and re-injected. No MTU K shutdowns occurred in March.

<u>J-3 Range Groundwater RA</u>

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 28 March 2025, over 1.941 billion gallons of water have been treated and re-injected. The following J-3 system shutdowns occurred in March:

- 1345 on 07 March 2025 due to a power interruption and was restarted at 1446 on 07 March 2025.

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 28 February 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 28 March 2025, over 854.1 million gallons of water have been treated and re-injected. No J-1 Range Southern MTU shutdowns occurred in March.

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 28 March 2025, over 1.468 billion gallons of water have been treated and re-injected. No J-1 Range Northern MTU shutdowns occurred in March.

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 28 March 2025, over 3.930 billion gallons of water have been treated and re-injected. No CIA system shutdowns occurred in March.

2. SUMMARY OF ACTIONS TAKEN

Operable Unit (OU) Activity as of 28 March 2025:

CIA

- Source Area investigations
  - UXO teams mobilized to the site.
  - Completed demolition operations at the CSS.
  - Conducted intrusive 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

- No activity.

Demolition Area 2

- No activity.

J-1 Range

- Bag filters changed at J-1 Range Northern on 27 March 2025.

J-2 Range

- Bag filters changed at J-2 Range Northern Treatment Building G on 26 March 2025 and 28 March 2025.
- UXO clearance of J-2 Range Northern drilling locations.

J-3 Range

- UXO clearance of J-3 Range drilling locations.
- Bag filters changed at J-3 Range on 12 March 2025

L Range

- No activity.

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 13 March 2025

Project and Fieldwork Update

Gina Kaso (USACE) provided a groundwater update. She noted that the Central Impact Area (CIA) annual System Performance Monitoring (SPM) event began on 1/27/25 and will continue into March. The J-2 North semi- annual and Demo 1 Annual SPM events will follow. Ms. Kaso (USACE) stated that the March monthly treatment system sampling occurred on 3/6/25 and results are pending. Ms. Kaso (USACE) said the well installation at the J-2 and J-3 Ranges is expected to begin in May. Baltimore District UXO team will arrive next week to begin well pad clearance. The CIA consolidated shot structure (CSS) liner inspection occurred last week. There were minor tears in the liner which were repaired, and the material was put back in. This week the team is conducting demolition shots at the CSS. Elliot Jacobs (MassDEP) asked if PFAS sampling was included in the upcoming J-2 North SPM sampling. Jodi Lyn Cutler (IAGWSP) replied that is.

Ms. Kaso (USACE) continued with the CIA UXO update. She noted that the teams remobilized on 3/3/25 and spent most of the first week performing site training. They staked out approximately 14 gids that will be completed this year. This week they began demolition operations, and the schedule is to continue through 3/18/25. In addition to the consolidated shots, they began intrusive investigations on Tuesday. Ms. Kaso (USACE) noted that it was anticipated that intrusive investigations to continue through late summer. She stated that MassDEP had no comments on the Draft Final 2024 Source Removal Report and responses to EPA comments are being drafted.

Ms. Cutler (IAGWSP) asked if work would be impacted if there were a government shutdown later in the week. Ms. Kaso (USACE) explained that the work has already been funded so it would not be affected.

Document and Project Tracking

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

Central Impact Area (CIA) annual Environmental Monitoring Report (EMR) Presentation

Ryan Hupfer (USACE) began a presentation on the Central Impact Area Annual Environmental Monitoring Report. He noted that the presentation would cover the reporting period of July 2023 through June 2024 and include system operations and performance, annual groundwater sampling results and trends, hydraulic monitoring and groundwater modeling, a comparison to Decision Document criteria, and recommendations. Mr. Hupfer (USACE) began with system performance summaries with statistics for MTUs CIA 1, CIA 2, and CIA 3 by noting that the uptimes for each system was 95.96%, 95.94% and 95.02%, respectively. Mr. Hupfer (USACE) continued with plots of treatment systems influent trends. It was noted that CIA 1 and CIA 3 each had two media changeouts during the reporting period and CIA 2 had one. Mr. Hupfer (USACE) said that during the reporting period, CIA 1 removed 0.77 pounds of RDX and 0.41 pounds of perchlorate, CIA 2 removed 1.00 pounds of RDX, and 0.34 pounds of perchlorate and CIA 3 removed 0.56 pounds of RDX and 0.16 pounds of perchlorate. Mr. Hupfer (USACE) showed a figure with the RDX groundwater monitoring network. He noted that there were 171 well screens sampled and the range of RDX results were non-detect (ND) to 9.1 µg/L (MW-98M1). There were 35 screens greater than the risk-based concentration (RBC) of 0.60 µg/L (RBC), 26 screens greater than the regional screening level (RSL) of 0.97 µg/L, 17 screens greater than the health advisory (HA) of 2.00 µg/L, and there were no screens above 20.0 µg/L. Mr. Hupfer (USACE) displayed trend plots for RDX.

Mr. Hupfer (USACE) continued the presentation by reviewing the perchlorate monitoring network. During the reporting period, there were 38 well screens sampled, and perchlorate results ranged from ND to 2.2 µg/L (MW-209M1). There was one screen that exceeded the Massachusetts Maximum Contaminant Level (MMCL) of 2.00 µg/L and no screens were above the HA of 15.0 µg/L. Mr. Hupfer (USACE) displayed perchlorate trend plots and cross-sections.

Mr. Hupfer (USACE) explained that there was one aquifer hydraulic analysis conducted during this reporting period. In March 2024, water levels in Zone 1 ranged from 65.42 ft MSL at MW-184M1to 53.54 ft MSL at MW-615M1. The horizontal gradient in Zone 1 was approximately 0.00182 ft/ft. In Zone 2, water levels ranged from 54.74 ft MSL at MW-638M1to 43.32 ft MSL at MW-616M2 and the horizontal gradient was approximately 0.00394 ft/ft.

Mr. Hupfer (USACE) displayed a figure of the delineated and model-predicted capture zones for the three extraction wells. Mr. Jacobs (MassDEP) asked why the delineated capture zones do not extend all the way to the source areas. Mr. Hupfer (USACE) showed the hydraulic monitoring wells and noted that the wells only include wells as far southeast as MW-184M2, so it does not extend into the source area. He said both show pretty good agreement up to Pocasset-Sandwich Road. The model-predicted capture zones trend more to the north than the delineated capture zones but they both show that the bulk of the high concentrations within the main plume is being captured and indicates they are working as intended.

Mr. Hupfer (USACE) showed a figure with the observed vs. model-predicted RDX concentrations. He noted that while there were slight differences in the concentrations within the

plume, the extent of the plumes match well, which indicates the model-predictions will be useful in discussing cleanup times. Mr. Hupfer (USACE) showed model-predicted RDX concentrations in years 2025, 2030 and 2042 and noted the changes over time.

Decision Document cleanup timelines were discussed. Mr. Hupfer (USACE) said that the time to cleanup for Zone 1 of the main plume using the model-predicted 2022 plume shell is 2038 for the HA of 2 µg/L and 2054 for the RBC of 0.60 µg/L. Mr. Hupfer (USACE) noted these dates are earlier than what is predicted in the Decision Document by nine and one years, respectively.

Mr. Hupfer (USACE) reviewed the recommendations that are in the report. There are no modifications being recommended for plant operations, sampling, wellfield extraction rates, or the hydraulic monitoring programs at this time. For the explosives monitoring program, the reduction of sampling frequency at 36 screens and removal of five screens from monitoring program is being recommended. In addition, it is being recommended that a one-time sampling is performed at four locations. For perchlorate, 12 screens are being recommended for a reduction in sampling frequency and four screens are being recommended for removal from the monitoring program. Mr. Hupfer (USACE) showed figures with the wells with recommended changes highlighted. He noted that the wells with recommended one-time sampling are in the CIA between the 2,000-meter berm and the northeast plume and are to get a better handle on the delineation of those plume both vertically and laterally. Mr. Hupfer (USACE) finished the presentation by showing a sitewide figure depicting historical vs. current perchlorate and RDX plumes for the site.

Environmental Monitorin gReports (EMR) Streamlining Discussion

Jodi Lyn Cutler (IAGWSP) mentioned that at the last few technical meetings it has been noted that the program is being driven to be more efficient. Ms. Cutler (IAGWSP) explained that she reviewed the annual reports that the Air Force Civil Engineer Center (AFCEC) produces for their sites and noted that they are much more brief “summary letter reports” that rely heavily on figures and tables with limited text. She noted that the IAGWSP is in the phase of the program where we have defined the extent of our plumes and there are no big surprises. The extraction treatment and reinfiltration systems range in startup dates from 12 years ago to 21 years ago. Ms. Cutler (IAGWSP) said it is her goal to institute a more streamlined reporting structure, like what AFCEC is doing. She explained that it was an appropriate time in the program to do streamlined EMRs with improved clarity and readability making it easier to focus on actionable data. Ms. Cutler (IAGWSP) said she proposes that a streamlined report would be presented with the CIA submittal.

Len Pinaud (MassDEP) said that he would defer to Mr. Jacobs (MassDEP) as he is the primary reviewer of these reports, and he reviews them for both the IAGWSP and AFCEC. Mr. Jacobs (MassDEP) said he had no major comments but asked if it would be possible to get a proposed template as a preview to see the general format. He also asked if recommendations for optimizations would be included. Ms. Cutler (IAGWSP) said it would be included in the reports, which is different than AFCEC’s process.

Bob Lim (EPA) noted that on the AFCEC side, they give technical presentations, like IAGWSP, and noted that there is a separate project note issued to summarize recommendations, and the technical presentations are included. Mr. Lim (EPA) noted that AFCEC previously submitted the same type of robust EMRs like IAGWSP currently does, however a transition was made some time ago to the streamlined reports and there have been no issues. Mr. Lim (EPA) asked Ms. Cutler (IAGWSP) to reiterate her proposal for moving forward. Ms. Cutler (IAGWSP) explained that she'd like to use the CIA report submittal as a trial and noted it would essentially be a cross between what AFCEC produces and what the IAGWSP does. It will include the technical presentation, figures and tables, with much less text accompanying it. She added that IAGWSP would still expect agency review and input on any proposed optimizations. Mr. Jacobs (MassDEP) asked if the cross-section figures would still be provided, if needed. Ms. Cutler (IAGWSP) said they would. Mr. Jacobs (MassDEP) noted that the AFCEC reports are submitted in final form, and the agency are not given the opportunity to comment. Ms. Cutler (IAGWSP) said that EPA and MassDEP would still have the opportunity to comment on the IAGWSP reports. Josh Pinaud (EPA) said he agreed that streamlining and finding ways to increase efficiency was appropriate and looked forward to streamlining the comment resolution process as well. Ms. Cutler (IAGWSP) agreed and said she though having more in-depth site-specific discussions during technical meetings could help do that. Mr. Pinaud (EPA) agreed that the idea of making the technical meetings more "working meetings" would be helpful. Mr. Pinaud (MassDEP) agreed. Mr. Jacobs (MassDEP) noted that AFCEC submits their reports in a batch in one month and asked if IAGWSP planned to do the same. Ms. Cutler (IAGWSP) replied that IAGWSP plans to stagger the report submittals. Ms. Cutler (IAGWSP) thanked the group for their input.

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 March 2025. Table 2 summarizes the validated detections of explosives compounds and perchlorate for all groundwater results received from 01 to 31 March 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 March 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 March 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:

• Draft J-1 Range North Environmental Monitoring Report for January 2023 through December 2023	06 March 2025
• Draft Small Arms Ranges 2024 Biennial Environmental Monitoring Report	06 March 2025
• Final J-3 Range Environmental Monitoring Report for September 2022 through August 2023	14 March 2025
• Final Third Five-Year Review 2017-2021	26 March 2025
• Responses to EPA and MassDEP Comments of the Draft 2024 Annual Land Use Controls Monitoring Report	20 March 2025

5. SCHEDULED ACTIONS

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

- Response to Comments on the Impact Area Groundwater Study Program Draft Comprehensive PFAS Report
- Final J-2 Range Northern Environmental Monitoring Report for November 2022 through October 2023
- Response to Comments on J-1 Range South Environmental Monitoring Report for January 2023 through December 2023
- Response to Comments on Small Arms Range Environmental Monitoring Report for July 2023 through June 2024
- Response to Comments on the Central Impact Area Draft Final 2024 Source Removal Annual Report
- Response to Comments on the Demolition Area 1 Environmental Monitoring Report for July 2023 through June 2024
- Response to Comments on the J-1 Range Northern Environmental Monitoring Report for January 2023 through December 2023

TABLE 1
Sampling Progress: 01 to 28 March 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-270D	MW-270D_S25	N	03/26/2025	Ground Water	132	137
Central Impact Area	MW-284M2	MW-284M2_S25	N	03/26/2025	Ground Water	45	55
Northwest Corner	MW-284M2	MW-284M2_S25	N	03/26/2025	Ground Water	45	55
Central Impact Area	MW-284M1	MW-284M1_S25	N	03/26/2025	Ground Water	115	125
Northwest Corner	MW-284M1	MW-284M1_S25	N	03/26/2025	Ground Water	115	125
Former D Range	MW-174S	MW-174S_S25	N	03/26/2025	Ground Water	190	200
Western Boundary	MW-282M2	MW-282M2_S25	N	03/25/2025	Ground Water	206	216
Western Boundary	MW-282M1	MW-282M1_S25	N	03/25/2025	Ground Water	310	320
Western Boundary	MW-267M1	MW-267M1_S25	N	03/25/2025	Ground Water	248	258
Central Impact Area	MW-51M2	MW-51M2_S25	N	03/25/2025	Ground Water	203	213
Central Impact Area	MW-51M1	MW-51M1_S25	N	03/24/2025	Ground Water	234	244
Central Impact Area	MW-51D	MW-51D_S25	N	03/24/2025	Ground Water	264	274
Central Impact Area	MW-623M3	MW-623M3_S25	N	03/24/2025	Ground Water	275	285
Central Impact Area	MW-623M2	MW-623M2_S25	N	03/24/2025	Ground Water	291.8	301.8
Central Impact Area	MW-623M1	MW-623M1_S25	N	03/24/2025	Ground Water	340	350
Central Impact Area	MW-123M2	MW-123M2_S25	N	03/19/2025	Ground Water	236	246
Central Impact Area	MW-123M1	MW-123M1_S25	N	03/19/2025	Ground Water	291	301
Central Impact Area	MW-350M2	MW-350M2_S25	N	03/19/2025	Ground Water	126	136
Central Impact Area	MW-441M2	MW-441M2_S25	N	03/19/2025	Ground Water	109.45	119.45
Central Impact Area	MW-441M1	MW-441M1_S25	N	03/19/2025	Ground Water	204.63	214.63
Central Impact Area	MW-614M2	MW-614M2_S25	MS	03/18/2025	Ground Water	215	225
Central Impact Area	MW-614M2	MW-614M2_S25	N	03/18/2025	Ground Water	215	225
Central Impact Area	MW-614M2	MW-614M2_S25	SD	03/18/2025	Ground Water	215	225
Central Impact Area	MW-614M1	MW-614M1_S25	N	03/18/2025	Ground Water	275	285
Central Impact Area	MW-208M1	MW-208M1_S25	N	03/18/2025	Ground Water	195	205
Central Impact Area	MW-185M1	MW-185M1_S25	N	03/18/2025	Ground Water	247	257
Central Impact Area	MW-203M2	MW-203M2_S25	N	03/18/2025	Ground Water	176	186
Central Impact Area	MW-687M2	MW-687M2_S25	N	03/17/2025	Ground Water	188	198
Central Impact Area	MW-687M1	MW-687M1_S25	N	03/17/2025	Ground Water	232.6	242.6
Central Impact Area	MW-686M2	MW-686M2_S25	N	03/17/2025	Ground Water	194.3	204.3
Central Impact Area	MW-686M1	MW-686M1_S25	N	03/17/2025	Ground Water	243.2	253.2
Central Impact Area	MW-615M2	MW-615M2_S25	N	03/13/2025	Ground Water	200	210
Central Impact Area	MW-615M1	MW-615M1_S25	N	03/13/2025	Ground Water	260	270
Central Impact Area	MW-615M1	MW-615M1_S25D	FD	03/13/2025	Ground Water	260	270
Central Impact Area	MW-176M2	MW-176M2_S25	N	03/13/2025	Ground Water	229	239
Central Impact Area	MW-176M1	MW-176M1_S25	N	03/13/2025	Ground Water	270	280
Central Impact Area	MW-625M1	MW-625M1_S25	N	03/12/2025	Ground Water	260	270
Central Impact Area	MW-616M2	MW-616M2_S25	N	03/12/2025	Ground Water	107.1	117.1
Central Impact Area	MW-616M1	MW-616M1_S25	N	03/12/2025	Ground Water	217.1	227.1
Central Impact Area	MW-617M2	MW-617M2_S25	N	03/12/2025	Ground Water	118.3	128.3
Central Impact Area	MW-617M1	MW-617M1_S25	N	03/12/2025	Ground Water	175.8	185.8
Central Impact Area	MW-95M2	MW-95M2_S25	N	03/11/2025	Ground Water	167	177
Central Impact Area	MW-95M1	MW-95M1_S25	N	03/11/2025	Ground Water	202	212
Central Impact Area	MW-95M1	MW-95M1_S25D	FD	03/11/2025	Ground Water	202	212
Central Impact Area	MW-629M2	MW-629M2_S25	N	03/11/2025	Ground Water	186.9	196.9
Central Impact Area	MW-629M1	MW-629M1_S25	N	03/11/2025	Ground Water	216.9	226.9
Central Impact Area	MW-638M2	MW-638M2_S25	N	03/11/2025	Ground Water	204.2	214.2
Central Impact Area	MW-638M1	MW-638M1_S25	N	03/11/2025	Ground Water	261.2	271.2
Central Impact Area	MW-43M2	MW-43M2_S25	N	03/10/2025	Ground Water	200	210
Central Impact Area	MW-43M1	MW-43M1_S25	N	03/10/2025	Ground Water	223	233
Central Impact Area	MW-86S	MW-86S_S25	N	03/10/2025	Ground Water	143	153
Central Impact Area	MW-86M2	MW-86M2_S25	N	03/10/2025	Ground Water	158	168
Central Impact Area	MW-86M1	MW-86M1_S25	MS	03/10/2025	Ground Water	208	218
Central Impact Area	MW-86M1	MW-86M1_S25	N	03/10/2025	Ground Water	208	218
Central Impact Area	MW-86M1	MW-86M1_S25	SD	03/10/2025	Ground Water	208	218
Central Impact Area	MW-626M2	MW-626M2_S25	N	03/06/2025	Ground Water	237.2	247.2
J2 Range Northern	J2N-EFF-G	J2N-EFF-G-222A	N	03/06/2025	Process Water	0	0
J2 Range Northern	J2N-MID-2G	J2N-MID-2G-222A	N	03/06/2025	Process Water	0	0
J2 Range Northern	J2N-MID-1G	J2N-MID-1G-222A	N	03/06/2025	Process Water	0	0
J2 Range Northern	J2N-INF-G	J2N-INF-G-222A	N	03/06/2025	Process Water	0	0

N = Normal Sample
FD = Field Duplicate

TABLE 1
Sampling Progress: 01 to 28 March 2025

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
J2 Range Northern	J2N-EFF-EF	J2N-EFF-EF-222A	N	03/06/2025	Process Water	0	0
Central Impact Area	MW-626M1	MW-626M1_S25	N	03/06/2025	Ground Water	282.2	292.2
J2 Range Northern	J2N-MID-2F	J2N-MID-2F-222A	N	03/06/2025	Process Water	0	0
J2 Range Northern	J2N-MID-1F	J2N-MID-1F-222A	N	03/06/2025	Process Water	0	0
J2 Range Northern	J2N-INF-EF	J2N-INF-EF-222A	N	03/06/2025	Process Water	0	0
J2 Range Northern	J2N-MID-2E	J2N-MID-2E-222A	N	03/06/2025	Process Water	0	0
J2 Range Northern	J2N-MID-1E	J2N-MID-1E-222A	N	03/06/2025	Process Water	0	0
Central Impact Area	MW-149M1	MW-149M1_S25	N	03/06/2025	Ground Water	237.5	247.5
J1 Range Northern	J1N-EFF	J1N-EFF-137A	N	03/06/2025	Process Water	0	0
J1 Range Northern	J1N-MID2	J1N-MID2-137A	N	03/06/2025	Process Water	0	0
J1 Range Northern	J1N-MID1	J1N-MID1-137A	N	03/06/2025	Process Water	0	0
J1 Range Northern	J1N-INF2	J1N-INF2-137A	N	03/06/2025	Process Water	0	0
Central Impact Area	MW-124M1	MW-124M1_S25	MS	03/06/2025	Ground Water	234	244
Central Impact Area	MW-124M1	MW-124M1_S25	N	03/06/2025	Ground Water	234	244
Central Impact Area	MW-124M1	MW-124M1_S25	SD	03/06/2025	Ground Water	234	244
Central Impact Area	MW-39M1	MW-39M1_S25	MS	03/05/2025	Ground Water	220	230
Central Impact Area	MW-39M1	MW-39M1_S25	N	03/05/2025	Ground Water	220	230
Central Impact Area	MW-39M1	MW-39M1_S25	SD	03/05/2025	Ground Water	220	230
J1 Range Southern	J1S-EFF	J1S-EFF-208A	N	03/05/2025	Process Water	0	0
J1 Range Southern	J1S-MID	J1S-MID-208A	N	03/05/2025	Process Water	0	0
J1 Range Southern	J1S-INF-2	J1S-INF-2-208A	N	03/05/2025	Process Water	0	0
Central Impact Area	MW-88M2	MW-88M2_S25	N	03/05/2025	Ground Water	213	223
Demolition Area 1	FPR-2-EFF-A	FPR-2-EFF-A-228A	N	03/05/2025	Process Water	0	0
Demolition Area 1	FPR-2-GAC-MID1A	FPR-2-GAC-MID1A-228A	N	03/05/2025	Process Water	0	0
Demolition Area 1	FPR2-POST-IX-A	FPR2-POST-IX-A-228A	N	03/05/2025	Process Water	0	0
Demolition Area 1	FPR-2-INF	FPR-2-INF-228A	N	03/05/2025	Process Water	0	0
Central Impact Area	MW-88M1	MW-88M1_S25	N	03/05/2025	Ground Water	233	243
Central Impact Area	MW-89M3	MW-89M3_S25	N	03/05/2025	Ground Water	174	184
Demolition Area 1	D1LE-EFF	D1LE-EFF-104A	N	03/05/2025	Process Water	0	0
Demolition Area 1	D1LE-MID2	D1LE-MID2-104A	N	03/05/2025	Process Water	0	0
Demolition Area 1	D1LE-MID1	D1LE-MID1-104A	N	03/05/2025	Process Water	0	0
Demolition Area 1	D1LE-INF	D1LE-INF-104A	N	03/05/2025	Process Water	0	0
Central Impact Area	MW-89M2	MW-89M2_S25	N	03/05/2025	Ground Water	214	224
Central Impact Area	MW-89M2	MW-89M2_S25D	FD	03/05/2025	Ground Water	214	224
Central Impact Area	MW-89M1	MW-89M1_S25	N	03/05/2025	Ground Water	234	244
Demolition Area 1	D1-EFF	D1-EFF-176A	N	03/05/2025	Process Water	0	0
Demolition Area 1	D1-MID-2	D1-MID-2-176A	N	03/05/2025	Process Water	0	0
Demolition Area 1	D1-MID-1	D1-MID-1-176A	N	03/05/2025	Process Water	0	0
Demolition Area 1	D1-INF	D1-INF-176A	N	03/05/2025	Process Water	0	0
J3 Range	J3-EFF	J3-EFF-222A	N	03/04/2025	Process Water	0	0
J3 Range	J3-MID-2	J3-MID-2-222A	N	03/04/2025	Process Water	0	0
J3 Range	J3-MID-1	J3-MID-1-222A	N	03/04/2025	Process Water	0	0
Central Impact Area	MW-644M2	MW-644M2_S25	N	03/04/2025	Ground Water	230.9	240.9
J3 Range	J3-INF	J3-INF-222A	N	03/04/2025	Process Water	0	0
Central Impact Area	MW-644M1	MW-644M1_S25	N	03/04/2025	Ground Water	275.9	285.9
Central Impact Area	MW-644M1	MW-644M1_S25D	FD	03/04/2025	Ground Water	275.9	285.9
Central Impact Area	MW-608M4	MW-608M4_S25	N	03/04/2025	Ground Water	185.4	195.4
Central Impact Area	CIA2-EFF	CIA2-EFF-134A	N	03/04/2025	Process Water	0	0
Central Impact Area	CIA2-MID2	CIA2-MID2-134A	N	03/04/2025	Process Water	0	0
Central Impact Area	CIA2-MID1	CIA2-MID1-134A	N	03/04/2025	Process Water	0	0
Central Impact Area	CIA2-INF	CIA2-INF-134A	N	03/04/2025	Process Water	0	0
Central Impact Area	MW-608M3	MW-608M3_S25	N	03/04/2025	Ground Water	220.4	230.4
Central Impact Area	CIA1-EFF	CIA1-EFF-134A	N	03/04/2025	Process Water	0	0
Central Impact Area	CIA1-MID2	CIA1-MID2-134A	N	03/04/2025	Process Water	0	0
Central Impact Area	MW-608M2	MW-608M2_S25	N	03/04/2025	Ground Water	253.4	263.4
Central Impact Area	CIA1-MID1	CIA1-MID1-134A	N	03/04/2025	Process Water	0	0
Central Impact Area	CIA1-INF	CIA1-INF-134A	N	03/04/2025	Process Water	0	0
Central Impact Area	MW-608M1	MW-608M1_S25	N	03/04/2025	Ground Water	267.4	277.4
Central Impact Area	CIA3-EFF	CIA3-EFF-105A	N	03/04/2025	Process Water	0	0
Central Impact Area	CIA3-MID2	CIA3-MID2-105A	N	03/04/2025	Process Water	0	0

N = Normal Sample
FD = Field Duplicate

TABLE 1
Sampling Progress: 01 to 28 March 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-MID1	CIA3-MID1-105A	N	03/04/2025	Process Water	0	0
Central Impact Area	CIA3-INF	CIA3-INF-105A	N	03/04/2025	Process Water	0	0
Central Impact Area	MW-323M2	MW-323M2_S25	N	03/03/2025	Ground Water	120	130
Central Impact Area	MW-323M1	MW-323M1_S25	N	03/03/2025	Ground Water	195	205
J2 Range Eastern	J2E-EFF-IH	J2E-EFF-IH-198A	N	03/03/2025	Process Water	0	0
J2 Range Eastern	J2E-MID-2H	J2E-MID-2H-198A	N	03/03/2025	Process Water	0	0
J2 Range Eastern	J2E-MID-1H	J2E-MID-1H-198A	N	03/03/2025	Process Water	0	0
J2 Range Eastern	J2E-MID-2I	J2E-MID-2I-198A	N	03/03/2025	Process Water	0	0
J2 Range Eastern	J2E-MID-1I	J2E-MID-1I-198A	N	03/03/2025	Process Water	0	0
J2 Range Eastern	J2E-INF-I	J2E-INF-I-198A	N	03/03/2025	Process Water	0	0
Central Impact Area	MW-338S	MW-338S_S25	N	03/03/2025	Ground Water	72	82
J2 Range Eastern	J2E-EFF-K	J2E-EFF-K-198A	N	03/03/2025	Process Water	0	0
J2 Range Eastern	J2E-MID-2K	J2E-MID-2K-198A	N	03/03/2025	Process Water	0	0
Central Impact Area	MW-338M2	MW-338M2_S25	N	03/03/2025	Ground Water	119	129
J2 Range Eastern	J2E-MID-1K	J2E-MID-1K-198A	N	03/03/2025	Process Water	0	0
Northwest Corner	MW-338M2	MW-338M2_S25	N	03/03/2025	Ground Water	119	129
J2 Range Eastern	J2E-INF-K	J2E-INF-K-198A	N	03/03/2025	Process Water	0	0
Central Impact Area	MW-338M1	MW-338M1_S25	N	03/03/2025	Ground Water	189	199
J2 Range Eastern	J2E-EFF-J	J2E-EFF-J-198A	N	03/03/2025	Process Water	0	0
Northwest Corner	MW-338M1	MW-338M1_S25	N	03/03/2025	Ground Water	189	199
J2 Range Eastern	J2E-MID-2J	J2E-MID-2J-198A	N	03/03/2025	Process Water	0	0
J2 Range Eastern	J2E-MID-1J	J2E-MID-1J-198A	N	03/03/2025	Process Water	0	0
J2 Range Eastern	J2E-INF-J	J2E-INF-J-198A	N	03/03/2025	Process Water	0	0

N = Normal Sample
FD = Field Duplicate

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received March 2025

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-644M2	MW-644M2_S25	230.9	240.9	03/04/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.24		µg/L	0.60		0.092	0.20
Central Impact Area	MW-608M4	MW-608M4_S25	185.4	195.4	03/04/2025	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-608M3	MW-608M3_S25	220.4	230.4	03/04/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.60		µg/L	0.60		0.092	0.20
Central Impact Area	MW-608M1	MW-608M1_S25	267.4	277.4	03/04/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.12	J	µg/L	0.60		0.092	0.20
Central Impact Area	MW-323M1	MW-323M1_S25	195	205	03/03/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.45		µg/L	0.60		0.092	0.20
Central Impact Area	MW-338M1	MW-338M1_S25	189	199	03/03/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.60		µg/L	0.60		0.092	0.20
Central Impact Area	MW-338M1	MW-338M1_S25	189	199	03/03/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.029	J	µg/L	400		0.013	0.20
Central Impact Area	MW-23M1	MW-23M1_S25	225	235	02/27/2025	SW6850	Perchlorate	2.0		µg/L	2.0		0.047	0.20
Central Impact Area	MW-23M1	MW-23M1_S25	225	235	02/27/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.23		µg/L	0.60		0.092	0.20
Central Impact Area	MW-23D	MW-23D_S25	272	282	02/27/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.17	J	µg/L	0.60		0.092	0.20
Central Impact Area	MW-699M1	MW-699M1_S25	261.5	271.5	02/26/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.52		µg/L	0.60		0.092	0.20
Central Impact Area	MW-628M1	MW-628M1_S25	230.8	240.8	02/26/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.47	J	µg/L	0.60		0.092	0.20
Central Impact Area	MW-609M1	MW-609M1_S25	210.4	220.4	02/25/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.38		µg/L	0.60		0.092	0.20
Central Impact Area	MW-609M1	MW-609M1_S25	210.4	220.4	02/25/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.098	J	µg/L	400		0.013	0.20
Central Impact Area	MW-102M2	MW-102M2_S25	237	247	02/24/2025	SW6850	Perchlorate	0.20		µg/L	2.0		0.047	0.20
Central Impact Area	MW-102M2	MW-102M2_S25	237	247	02/24/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.46		µg/L	0.60		0.092	0.20
Central Impact Area	MW-102M1	MW-102M1_S25	267	277	02/24/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.20		µg/L	0.60		0.092	0.20
Central Impact Area	MW-108M4	MW-108M4_S25	240	250	02/24/2025	SW6850	Perchlorate	0.20		µg/L	2.0		0.047	0.20
Central Impact Area	MW-108M1	MW-108M1_S25	297	307	02/24/2025	SW6850	Perchlorate	0.23		µg/L	2.0		0.047	0.20
Central Impact Area	MW-96M2	MW-96M2_S25	160	170	02/20/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.46		µg/L	0.60		0.092	0.20
Central Impact Area	MW-618M1	MW-618M1_S25	238.5	248.5	02/20/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.24		µg/L	400		0.013	0.20
Central Impact Area	MW-204M1	MW-204M1_S25	141	151	02/19/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.56		µg/L	0.60		0.092	0.20
Central Impact Area	MW-204M1	MW-204M1_S25	141	151	02/19/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.16	J	µg/L	400		0.013	0.20
Central Impact Area	MW-204M1	MW-204M1_S25D	141	151	02/19/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.49		µg/L	0.60		0.092	0.20
Central Impact Area	MW-204M1	MW-204M1_S25D	141	151	02/19/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.16	J	µg/L	400		0.013	0.20
Central Impact Area	MW-209M2	MW-209M2_S25	220	230	02/18/2025	SW6850	Perchlorate	0.10	J	µg/L	2.0		0.047	0.20
Central Impact Area	MW-209M1	MW-209M1_S25	240	250	02/18/2025	SW6850	Perchlorate	1.9		µg/L	2.0		0.047	0.20
Central Impact Area	MW-209M1	MW-209M1_S25	240	250	02/18/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.4		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-209M1	MW-209M1_S25	240	250	02/18/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.40		µg/L	400		0.013	0.20
Central Impact Area	MW-209M1	MW-209M1_S25D	240	250	02/18/2025	SW6850	Perchlorate	2.0		µg/L	2.0		0.047	0.20
Central Impact Area	MW-209M1	MW-209M1_S25D	240	250	02/18/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.3		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-209M1	MW-209M1_S25D	240	250	02/18/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.34		µg/L	400		0.013	0.20
Central Impact Area	MW-607M1	MW-607M1_S25	207.4	217.4	02/13/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.3		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-607M1	MW-607M1_S25	207.4	217.4	02/13/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.075	J	µg/L	400		0.013	0.20
Central Impact Area	MW-607M1	MW-607M1_S25D	207.4	217.4	02/13/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.3		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-607M1	MW-607M1_S25D	207.4	217.4	02/13/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.081	J	µg/L	400		0.013	0.20
Central Impact Area	MW-87M2	MW-87M2_S25	169	179	02/12/2025	SW6850	Perchlorate	0.058	J	µg/L	2.0		0.047	0.20
Central Impact Area	MW-87M1	MW-87M1_S25	194	204	02/12/2025	SW6850	Perchlorate	0.44		µg/L	2.0		0.047	0.20
Central Impact Area	MW-87M1	MW-87M1_S25	194	204	02/12/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.041	J	µg/L	400		0.013	0.20
Central Impact Area	MW-25	MW-25_S25	108	118	02/12/2025	SW8330	4-Amino-2,6-dinitrotoluene	0.12	J	µg/L	7.3		0.094	0.20
Central Impact Area	MW-25	MW-25_S25	108	118	02/12/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.4		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-25	MW-25_S25	108	118	02/12/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.26		µg/L	400		0.013	0.20
Central Impact Area	MW-728M1	MW-728M1_S25	153.4	163.4	02/12/2025	SW6850	Perchlorate	0.062	J	µg/L	2.0		0.047	0.20

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

MCL/HA= Either the MCL or Lowest Health Advisory Limit

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received March 2025

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-184M1	MW-184M1_S25	186	196	02/12/2025	SW6850	Perchlorate	0.52		µg/L	2.0		0.047	0.20
Central Impact Area	MW-184M1	MW-184M1_S25	186	196	02/12/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.6		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-184M1	MW-184M1_S25	186	196	02/12/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.55		µg/L	400		0.013	0.20
Central Impact Area	MW-38M4	MW-38M4_S25	132	142	02/11/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.32		µg/L	0.60		0.092	0.20
Central Impact Area	MW-38M3	MW-38M3_S25	170	180	02/11/2025	SW6850	Perchlorate	0.069	J	µg/L	2.0		0.047	0.20
Central Impact Area	MW-38M3	MW-38M3_S25	170	180	02/11/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.84		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-38M3	MW-38M3_S25	170	180	02/11/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.034	J	µg/L	400		0.013	0.20
Central Impact Area	MW-477M2	MW-477M2_S25	145.62	155.62	02/11/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.98		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-477M2	MW-477M2_S25	145.62	155.62	02/11/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.21		µg/L	400		0.013	0.20
Central Impact Area	MW-477M2	MW-477M2_S25D	145.62	155.62	02/11/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.0		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-477M2	MW-477M2_S25D	145.62	155.62	02/11/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.21		µg/L	400		0.013	0.20
Central Impact Area	MW-485M1	MW-485M1_S25	125.32	135.32	02/10/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	3.8		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-485M1	MW-485M1_S25	125.32	135.32	02/10/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.91		µg/L	400		0.013	0.20
Central Impact Area	MW-485M1	MW-485M1_S25D	125.32	135.32	02/10/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	4.1		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-485M1	MW-485M1_S25D	125.32	135.32	02/10/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.96		µg/L	400		0.013	0.20
Central Impact Area	MW-107M2	MW-107M2_S25	125	135	02/10/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.24		µg/L	0.60		0.092	0.20
Central Impact Area	MW-40M1	MW-40M1_S25	132.5	142	02/10/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.30		µg/L	0.60		0.092	0.20
Central Impact Area	MW-37M2	MW-37M2_S25	145	155	02/10/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.18	J	µg/L	0.60		0.092	0.20
Central Impact Area	MW-01M2	MW-01M2_S25	160	165	02/06/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	4.3		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-01M2	MW-01M2_S25	160	165	02/06/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.55		µg/L	400		0.013	0.20
Central Impact Area	MW-90S	MW-90S_S25	118	128	02/06/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.48		µg/L	0.60		0.092	0.20
Central Impact Area	MW-90S	MW-90S_S25	118	128	02/06/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.044	J	µg/L	400		0.013	0.20
Central Impact Area	MW-235M1	MW-235M1_S25	154	164	02/05/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.12	J	µg/L	0.60		0.092	0.20
Central Impact Area	MW-729M1	MW-729M1_S25	231.5	241.5	02/05/2025	SW6850	Perchlorate	0.74		µg/L	2.0		0.047	0.20
Central Impact Area	MW-729M1	MW-729M1_S25	231.5	241.5	02/05/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	3.7		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-729M1	MW-729M1_S25	231.5	241.5	02/05/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.13	J	µg/L	400		0.013	0.20
Central Impact Area	OW-1	OW-1_S25	126	136	02/04/2025	SW8330	1,3,5-Trinitrobenzene	0.15	J	µg/L	1090		0.13	0.20
Central Impact Area	OW-1	OW-1_S25	126	136	02/04/2025	SW8330	2,4,6-Trinitrotoluene	3.4		µg/L	2.0	X	0.13	0.20
Central Impact Area	OW-1	OW-1_S25	126	136	02/04/2025	SW8330	2-Amino-4,6-dinitrotoluene	0.40		µg/L	7.3		0.094	0.20
Central Impact Area	OW-1	OW-1_S25	126	136	02/04/2025	SW8330	4-Amino-2,6-dinitrotoluene	0.55		µg/L	7.3		0.094	0.20
Central Impact Area	OW-1	OW-1_S25	126	136	02/04/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.32	J	µg/L	0.60		0.092	0.20
Central Impact Area	OW-1	OW-1_S25D	126	136	02/04/2025	SW8330	1,3,5-Trinitrobenzene	0.15	J	µg/L	1090		0.13	0.20
Central Impact Area	OW-1	OW-1_S25D	126	136	02/04/2025	SW8330	2,4,6-Trinitrotoluene	3.5		µg/L	2.0	X	0.13	0.20
Central Impact Area	OW-1	OW-1_S25D	126	136	02/04/2025	SW8330	2-Amino-4,6-dinitrotoluene	0.38		µg/L	7.3		0.094	0.20
Central Impact Area	OW-1	OW-1_S25D	126	136	02/04/2025	SW8330	4-Amino-2,6-dinitrotoluene	0.53		µg/L	7.3		0.094	0.20
Central Impact Area	OW-1	OW-1_S25D	126	136	02/04/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.42	J	µg/L	0.60		0.092	0.20
Central Impact Area	OW-1	OW-1_S25D	126	136	02/04/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.026	J	µg/L	400		0.013	0.20
Central Impact Area	MW-91S	MW-91S_S25	124	134	02/04/2025	SW8330	1,3,5-Trinitrobenzene	0.22		µg/L	1090		0.13	0.20
Central Impact Area	MW-91S	MW-91S_S25	124	134	02/04/2025	SW8330	2,4,6-Trinitrotoluene	2.1		µg/L	2.0	X	0.13	0.20
Central Impact Area	MW-91S	MW-91S_S25	124	134	02/04/2025	SW8330	2-Amino-4,6-dinitrotoluene	0.18	J	µg/L	7.3		0.094	0.20
Central Impact Area	MW-91S	MW-91S_S25	124	134	02/04/2025	SW8330	4-Amino-2,6-dinitrotoluene	0.12	J	µg/L	7.3		0.094	0.20
Central Impact Area	MW-91S	MW-91S_S25	124	134	02/04/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.6	J	µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-91S	MW-91S_S25	124	134	02/04/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.38		µg/L	400		0.013	0.20

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

MCL/HA= Either the MCL or Lowest Health Advisory Limit
April 08, 2025

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received March 2025

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-91S	MW-91S_S25D	124	134	02/04/2025	SW8330	1,3,5-Trinitrobenzene	0.20		µg/L	1090		0.13	0.20
Central Impact Area	MW-91S	MW-91S_S25D	124	134	02/04/2025	SW8330	2,4,6-Trinitrotoluene	2.1		µg/L	2.0	X	0.13	0.20
Central Impact Area	MW-91S	MW-91S_S25D	124	134	02/04/2025	SW8330	2-Amino-4,6-dinitrotoluene	0.18	J	µg/L	7.3		0.094	0.20
Central Impact Area	MW-91S	MW-91S_S25D	124	134	02/04/2025	SW8330	4-Amino-2,6-dinitrotoluene	0.13	J	µg/L	7.3		0.094	0.20
Central Impact Area	MW-91S	MW-91S_S25D	124	134	02/04/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.5	J	µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-91S	MW-91S_S25D	124	134	02/04/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.31		µg/L	400		0.013	0.20
Central Impact Area	MW-91M1	MW-91M1_S25	170	180	02/04/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.9		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-91M1	MW-91M1_S25	170	180	02/04/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.30		µg/L	400		0.013	0.20
Central Impact Area	MW-105M1	MW-105M1_S25	205	215	02/04/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.27		µg/L	0.60		0.092	0.20
Central Impact Area	MW-93M2	MW-93M2_S25	145	155	02/03/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.85		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-101M1	MW-101M1_S25	158	168	02/03/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	4.4		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-101M1	MW-101M1_S25	158	168	02/03/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.18	J	µg/L	400		0.013	0.20
Central Impact Area	MW-101M1	MW-101M1_S25D	158	168	02/03/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	4.4		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-101M1	MW-101M1_S25D	158	168	02/03/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.22		µg/L	400		0.013	0.20
Central Impact Area	MW-726S	MW-726S_S25	135.5	145.5	02/03/2025	SW8330	2,4,6-Trinitrotoluene	0.27		µg/L	2.0		0.13	0.20
Central Impact Area	MW-726S	MW-726S_S25	135.5	145.5	02/03/2025	SW8330	2-Amino-4,6-dinitrotoluene	0.37		µg/L	7.3		0.094	0.20
Central Impact Area	MW-726S	MW-726S_S25	135.5	145.5	02/03/2025	SW8330	4-Amino-2,6-dinitrotoluene	0.29		µg/L	7.3		0.094	0.20
Central Impact Area	MW-42M3	MW-42M3_S25	165.8	176	01/30/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	5.3		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-42M3	MW-42M3_S25	165.8	176	01/30/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.16	J	µg/L	400		0.013	0.20
Central Impact Area	MW-42M2	MW-42M2_S25	185.8	196	01/30/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.46		µg/L	0.60		0.092	0.20
Central Impact Area	MW-42M1	MW-42M1_S25	205.8	216	01/30/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.9		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-42M1	MW-42M1_S25	205.8	216	01/30/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.14	J	µg/L	400		0.013	0.20
Central Impact Area	MW-42M1	MW-42M1_S25D	205.8	216	01/30/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.8		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-42M1	MW-42M1_S25D	205.8	216	01/30/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.12	J	µg/L	400		0.013	0.20
Central Impact Area	MW-98S	MW-98S_S25	137	147	01/29/2025	SW8330	2,4,6-Trinitrotoluene	0.36		µg/L	2.0		0.13	0.20
Central Impact Area	MW-98S	MW-98S_S25	137	147	01/29/2025	SW8330	2-Amino-4,6-dinitrotoluene	0.30		µg/L	7.3		0.094	0.20
Central Impact Area	MW-98S	MW-98S_S25	137	147	01/29/2025	SW8330	4-Amino-2,6-dinitrotoluene	0.44		µg/L	7.3		0.094	0.20
Central Impact Area	MW-98M1	MW-98M1_S25	164	174	01/29/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	6.2		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-98M1	MW-98M1_S25	164	174	01/29/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.46		µg/L	400		0.013	0.20
Central Impact Area	MW-695S	MW-695S_S25	130	140	01/28/2025	SW6850	Perchlorate	0.076	J	µg/L	2.0		0.047	0.20
Central Impact Area	MW-695S	MW-695S_S25	130	140	01/28/2025	SW8330	1,3,5-Trinitrobenzene	0.14	J	µg/L	1090		0.13	0.20
Central Impact Area	MW-695S	MW-695S_S25	130	140	01/28/2025	SW8330	2,4,6-Trinitrotoluene	2.8		µg/L	2.0	X	0.13	0.20
Central Impact Area	MW-695S	MW-695S_S25	130	140	01/28/2025	SW8330	2,4-Dinitrotoluene	0.15	J	µg/L	5.0		0.13	0.20
Central Impact Area	MW-695S	MW-695S_S25	130	140	01/28/2025	SW8330	2-Amino-4,6-dinitrotoluene	0.33		µg/L	7.3		0.094	0.20
Central Impact Area	MW-695S	MW-695S_S25	130	140	01/28/2025	SW8330	4-Amino-2,6-dinitrotoluene	0.23		µg/L	7.3		0.094	0.20
Central Impact Area	MW-695S	MW-695S_S25	130	140	01/28/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	4.0	J	µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-695S	MW-695S_S25	130	140	01/28/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.31		µg/L	400		0.013	0.20
Central Impact Area	MW-695S	MW-695S_S25D	130	140	01/28/2025	SW6850	Perchlorate	0.066	J	µg/L	2.0		0.047	0.20
Central Impact Area	MW-695S	MW-695S_S25D	130	140	01/28/2025	SW8330	1,3,5-Trinitrobenzene	0.14	J	µg/L	1090		0.13	0.20
Central Impact Area	MW-695S	MW-695S_S25D	130	140	01/28/2025	SW8330	2,4,6-Trinitrotoluene	2.7		µg/L	2.0	X	0.13	0.20
Central Impact Area	MW-695S	MW-695S_S25D	130	140	01/28/2025	SW8330	2,4-Dinitrotoluene	0.15	J	µg/L	5.0		0.13	0.20
Central Impact Area	MW-695S	MW-695S_S25D	130	140	01/28/2025	SW8330	2-Amino-4,6-dinitrotoluene	0.32		µg/L	7.3		0.094	0.20
Central Impact Area	MW-695S	MW-695S_S25D	130	140	01/28/2025	SW8330	4-Amino-2,6-dinitrotoluene	0.23		µg/L	7.3		0.094	0.20

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

MCL/HA= Either the MCL or Lowest Health Advisory Limit
April 08, 2025

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received March 2025

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_S25D	130	140	01/28/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	4.0	J	µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-695S	MW-695S_S25D	130	140	01/28/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.32		µg/L	400		0.013	0.20
Central Impact Area	MW-725M1	MW-725M1_S25	145.2	155.2	01/28/2025	SW6850	Perchlorate	1.5		µg/L	2.0		0.047	0.20
Central Impact Area	MW-725M1	MW-725M1_S25	145.2	155.2	01/28/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.3		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-725M1	MW-725M1_S25	145.2	155.2	01/28/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.29		µg/L	400		0.013	0.20
Central Impact Area	MW-725M1	MW-725M1_S25D	145.2	155.2	01/28/2025	SW6850	Perchlorate	1.4		µg/L	2.0		0.047	0.20
Central Impact Area	MW-725M1	MW-725M1_S25D	145.2	155.2	01/28/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.2		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-725M1	MW-725M1_S25D	145.2	155.2	01/28/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.28		µg/L	400		0.013	0.20
Central Impact Area	MW-727M1	MW-727M1_S25	145.4	155.4	01/28/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.70		µg/L	0.60	X	0.092	0.20
Central Impact Area	MW-727M1	MW-727M1_S25	145.4	155.4	01/28/2025	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.024	J	µg/L	400		0.013	0.20
Central Impact Area	MW-112M1	MW-112M1_S25	195	205	01/27/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.14	J	µg/L	0.60		0.092	0.20
Central Impact Area	MW-179M1	MW-179M1_S25	187	197	01/27/2025	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.13	J	µg/L	0.60		0.092	0.20

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

MCL/HA= Either the MCL or Lowest Health Advisory Limit
April 08, 2025