

**MONTHLY PROGRESS REPORT #214  
FOR JANUARY 2015**

**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 1 January to 31 January 2015.

**1. SUMMARY OF REMEDIATION ACTIONS**

The following is a description of Remediation Actions (RA) underway at Camp Edwards as of January 2015. Remediation Actions may include Rapid Response Actions (RRA). An RRA is an interim action that may be conducted prior to risk assessments or remedial investigations to address a known, ongoing threat of contamination to groundwater and/or soil.

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, Pew Road, and the Base Boundary include extraction wells, ex-situ treatment processes 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 was operating at a flow rate of 250 gpm with over 2.172 billion gallons of water treated and re-injected as of 30 January 2015. The following shut downs of the Frank Perkins Road facility occurred in January:

- Shut down on 26 January 2015 at 1503 in preparation of a snow storm and was restarted on 29 January 2015 at 1020.

The Pew Road Mobile Treatment Unit (MTU) will continue to operate at a flow rate of 105 gpm (when restarted) with over 397 million gallons of water treated and re-injected as of 23 January 2015. The following Pew Road MTU shut downs occurred in January:

- Shut down on 26 January 2015 in preparation of a snow storm. The system remained off for snow removal to access MTU; and
- Shut down on 27 January 2015 at 0240 and was restarted on 4 February 2015 at 0910.

The Base Boundary RA will continue to operate at a flow rate of 65 gpm (when restarted) with over 101.3 million gallons of water treated and re-injected as of 23 January 2015. The following Base Boundary MTU shut downs occurred in January:

- Shut down on 26 January 2015 at 1124 for system maintenance and was restarted on 26 January 2015 at 1142.

### J-1 Range Groundwater RA

#### Southern Plant

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, 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 continues to operate at a flow rate of 50 gpm (EW-2 off). As of 30 January 2015, over 246 million gallons of water have been treated and re-injected. The following J-1 Range Southern system shut downs occurred in January:

- Shut down on 20 January 2015 at 1411 due to a system alarm. EW-1 was restarted on 21 January 2015 at 1125. EW-2 remains off due to potential motor damage; and
- Shut down on 26 January 2015 at 1410 in preparation of a snow storm and was restarted on 2 February 2015 at 1317. EW-2 remains off due to potential motor damage.

#### Northern Plant

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, 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 will continue to operate at a total system flow rate of 250 gpm (when restarted). As of 23 January 2015, over 129 million gallons of water have been treated and re-injected. The following J-1 Range Northern MTU shut downs occurred in January:

- Shut down on 26 January 2015 in preparation of a snow storm. The system was restarted on 3 February 2015 at 1421.

### J-3 Range Groundwater RRA

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

The J-3 system is will continue operating at a flow rate of 195 gpm (when restarted). As of 23 January 2015, over 780 million gallons of water have been treated and re-injected. The following J-3 system shut downs occurred in January:

- EW-0001 was shut down on 31 December 2014 at 1527 due to power interruption and was restarted on 2 January 2015 at 1252;
- Shut down on 26 January 2015 at 1404 in preparation of a snow storm and was restarted on 29 January 2015 at 1454; and

- Shut down on 31 January 2015 at 1758 due to a system alarm. Extraction well (EW-IP1) was restarted on 5 February at 1005. Extraction wells EW0001 and EW0032 were restarted on 5 February 2015 at 1153.

### J-2 Range Groundwater RA

#### Northern Plant

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 Infiltration (ETI) system includes three extraction wells, 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 Treatment Building will continue to operate at a flow rate of 225 gpm (when restarted). As of 23 January 2015, over 570 million gallons of water have been treated and re-injected. The following Northern Treatment Building shut downs occurred in January:

- Shut down on 26 January 2015 at 1404 in preparation of a snow storm. The system was restarted on 3 February 2015.

The Northern MTUs E and F will continue to operate at a flow rate of 250 gpm (when restarted). As of 23 January 2015, over 962 million gallons of water have been treated and re-injected. The following J-2 Range Northern MTUs shut downs occurred in January:

- MTU E was shut down on 17 January 2015 at 0710 due to a system alarm and was restarted on 20 January 2015 at 0727;
- MTU F was shut down on 17 January 2015 at 0710 due to a system alarm and was restarted on 20 January 2015 at 0724; and
- MTUs E and F were shut down on 26 January 2015 at 1353 in preparation of a snow storm, and were restarted on 3 February 2015 at 1528 and 1523, respectively.

#### Eastern Plant

The J-2 Range Eastern Treatment facility 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 will enter the vadose zone and infiltrate 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 will continue to operate at a flow rate of 250 gpm (when restarted). As of 23 January 2015, over 649 million gallons of water have been treated and re-injected. The following shut downs of MTUs H and I occurred in January:

- MTUs H and I were shut down on 26 January 2015 at 1415 in preparation of a snow storm, and were restarted on 3 February 2015 at 1250.

MTU J continues to operate at a flow rate of 120 gpm. As of 30 January 2015, over 306 million gallons of water have been treated and re-injected. The following shut downs of MTU J occurred in January:

- MTU J was shut down on 7 January 2015 at 1937 due to a system alarm and was restarted on 8 January 2015 at 1205; and
- MTU J was shut down on 26 January 2015 in preparation of a snow storm and was restarted on 2 February 2015 at 1419.

MTU K continues to operate at a flow rate of 125 gpm. As of 30 January 2015, over 369.5 million gallons of water have been treated and re-injected. The following shut downs of MTU K occurred in January:

- MTU K was shut down on 26 January 2015 at 1420 in preparation of a snow storm and was restarted on 29 January 2015 at 1056; and
- MTU K was shut down on 31 January 2015 at 1754 due to a system alarm and was restarted on 2 February 2015 at 1409.

### Central Impact Area RA

The Central Impact Area (CIA) Groundwater treatment facility consists of removal and treatment of groundwater to minimize downgradient migration of explosives compounds and perchlorate. The ETR system includes the following components: two extraction wells, an ex-situ treatment process consisting of an ion exchange (IX) resin and granular activated carbon (GAC) media to treat explosives compounds and two infiltration galleries to return treated water to the aquifer. The CIA systems 1 and 2 continue to run at a combined total flow rate of 500 gpm. As of 30 January 2015, over 265 million gallons of water have been treated and re-injected. The following CIA treatment facility shutdowns occurred in January:

- Systems 1 and 2 were shut down on 26 January in preparation of a snow storm and were restarted on 30 January 2015.

### **SUMMARY OF ACTIONS TAKEN**

Samples collected during the reporting period are summarized in Table 1.

Process water samples were collected at Frank Perkins Road, Pew Road, Base Boundary, J-1 Range Southern, J-1 Range Northern, J-2 Range Northern, J-2 Range Eastern, J-3 Range, and Central Impact Area (CIA).

Environmental and system performance monitoring groundwater samples were collected from J-2 Range Northern, J-2 Range Eastern, J-3 Range, and L Range.

Completed soil sampling at the J-2 Range.

Staked-out soil sampling grids at the Small Arms Ranges.

Began soil sampling at the Training Areas.

Completed Munitions and Explosives of Concern (MEC) investigation at the meandering paths and designated grids for the field season; investigations will resume next field season.

## **JBCC IAGWSP Tech Update Meeting Minutes 15 January 2015**

### **CIA Source Work Update**

USACE said that there were no new updates for CIA fieldwork. IAGWSP noted that they had forwarded the results from the consolidated shot sampling to the agencies.

### **Demo 1**

USACE reported that the biologist and archeologist had performed their site visit on the Mendes property. USACE stated the environmental paperwork to Coastal Zone Management and the State Historic Preservation Office is being submitted this week. It was noted that the site is considered an area of moderate to high archeological sensitivity as well as a priority habitat for the box turtle. USACE explained that they are on schedule for a record of environmental consideration by the end of February. IAGWSP will continue to provide updates at tech meetings. The design project note was submitted to the agencies yesterday and comments have already been received. IAGWSP will work on responses to comments.

### **General Fieldwork**

USACE reported that the contractor is preparing to start delineation sampling at the Small Arms Ranges. If ground conditions are favorable (i.e. the ground is not frozen) they will stake the locations next week and conduct sampling shortly thereafter. Excavation and associated field work is anticipated to begin in mid-March.

Sampling in the Training Areas has been suspended due to frozen ground conditions. Sampling at the IBC has been completed and about half of the samples were collected at the U Range. The sampling team will try and resume fieldwork next week.

USACE Baltimore will mobilize toward the end of February to perform geophysical investigations in the Training Areas.

At the J-2 Range, all MIS samples (62 grids) were completed the first week in January. Meandering path MEC investigations and 5 of 13 full grids have been completed. Crews are currently working in grid M19. The MEC tracking log was forwarded to the agencies on Monday; approximately 150 MEC items (mostly 30MM HEIs) have been found to date.

### **Action Items**

The action items were discussed and updated.

### **J-2 Range Monitoring Presentations**

Monitoring presentations were provided on the J-2 Range Northern and Eastern plumes annual monitoring reports. For the eastern plume, it was noted that during the reporting period (June 2013 to September 2014), one new well (MW-627) was installed to confirm contamination to the east of the main plume and there was a change in the pumping rates for the treatment system. The J-2 Range Eastern plume ETI systems have operated as designed and have treated a combined 303 million gallons to date. Influent perchlorate concentrations ranged from 0.29 ppb to 2.01 ppb; RDX ranged from ND to 0.89 ppb. Monitoring results, trends and hydraulic analysis conducted during the reporting period were reviewed

and discussed. The maximum detection was 71.3 ppb for perchlorate and 13.9 ppb for RDX. At this time, no changes are recommended for plant operations, extraction well rates or the hydraulic well field. For the chemical monitoring program, IAGWSP is recommending to remove several wells that have been non-detect for some time, reduce the monitoring frequency for two wells and add one well to the program. It was noted that model predicted cleanup timelines are consistent with those presented in the Decision Document.

For the Northern plume, it was noted that during the reporting period (June 2013 to September 2014), priority one (installation of four new wells) and priority two data gap drilling (installation of eight new wells) was completed. In addition, the extraction well rates were optimized. The J-2 Range Northern plume ETI systems have operated as designed and have treated a combined 298 million gallons to date. Influent perchlorate concentrations ranged from 0.89 ppb to 10.8 ppb; RDX was not detected. Monitoring results, trends and hydraulic analysis conducted during the reporting period were reviewed and discussed. The maximum detection was 70.1 ppb for perchlorate and 2.8 ppb for RDX. At this time, no changes are recommended for plant operations or extraction well rates. IAGWSP recommends adding eight wells to the hydraulic monitoring program. For the chemical monitoring program, IAGWSP is recommending removing six wells, reducing the frequency for seven wells and adding 20 wells to the perchlorate monitoring well network; For RDX monitoring, removing six wells and reducing the frequency of six wells is recommended. For wells used for both perchlorate and RDX monitoring, IAGWSP is recommending removing two wells, reducing the frequency of one well and adding thirteen wells. It was noted that model predicted cleanup timelines are consistent with those presented in the Decision Document.

EPA and MassDEP will provide comments on the report.

## **JBCC IAGWSP Tech Update Meeting Minutes 29 January 2015**

### **CIA Source Work Update**

USACE said that there were no new updates for CIA fieldwork – the snowstorm has shut everything down. The team reviewed a map and spreadsheet describing the work conducted to date. EPA requested that the spreadsheet include the number of grids per area.

### **Demo 1**

USACE reported that the environmental paperwork for Coastal Zone Management and the State Historic Preservation Office is under review. USACE explained that they are on schedule for a record of environmental consideration by the end of February. IAGWSP will continue to provide updates at tech meetings. The design project note was submitted to the agencies and comments have already been received. IAGWSP and the USACE have prepared responses to comments and will work with the agencies to finalize the well-field design project note.

### **General Fieldwork**

The IAGWSP treatment plants were shut down on Monday, January 26, 2015 in anticipation of the upcoming blizzard to prevent damage to the system due to uncontrolled power outages. Now that the storm is over, access roads will be plowed and the treatment plants will be brought back on line.

USACE reported that the contractor has been working to stake out the locations for the Small Arms Ranges delineation sampling. About 50% of the locations were staked before the storm. Work will resume once the snow melts.

Sampling in the Training Areas has been suspended due to frozen ground conditions. Sampling at the IBC has been completed and one grid each remains at U Range and KD Range. The sampling team will resume fieldwork when they can. Geophysical work will be conducted in March, after J-2 Range is finished.

At the J-2 Range, all MIS samples (62 grids) were completed the first week in January. MEC investigations continue with 7 full grids and 3 polygons remaining to be investigated. Crews have been de-mobilized. Work will resume in March. MEC finds will be reviewed at the completion of the geophysical work and decisions will be made on additional geophysical work and/or soil sampling.

### **JBCC Cleanup Team Meeting**

The JBCC Cleanup Team (JBCCCT), formerly the MMR Cleanup Team (MMRCT), is next scheduled to meet on April 8, 2015. 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.

### **SUMMARY OF DATA RECEIVED**

Table 2 summarizes the validated detections of explosives compounds and perchlorate for all groundwater results received from 1 January through 31 January 2015. 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.

There are currently twelve operable units (OU) under investigation and cleanup at Camp Edwards. The OUs include: Central Impact Area, Demolition Area 1, Demolition Area 2, Former A Range, J-1 Range, J-2 Range, J-3 Range, L Range, Northwest Corner, Small Arms Ranges, Training Areas and Western Boundary. 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, Jonathan Bourne Library, Falmouth Public Library, and Sandwich Public Library).

## 2. DELIVERABLES SUBMITTED

Deliverables submitted during the reporting period include the following:

- Monthly Progress Report No. 213 for December 2014 1/10/2015
- Final Northwest corner 2014 Annual Environmental Monitoring Report 1/05/2015

## 3. SCHEDULED ACTIONS

The following documents are being prepared or revised during February 2015:

- CIA Project Note for ESTCP Metal Mapper Results;
- CIA Design Package Project Note;
- CIA 2014 Interim Environmental Monitoring Report;
- CIA BEM Project Note;
- J-2 Range Project Note for Additional Wells to Evaluate Source Response;
- J-3 Range Decision Document;
- J-3 Range Draft Post-Decision Document Field Work Project Notes;
- Small Arms Ranges Decision Document;
- Training Areas Draft Investigation Report;
- Demolition Area 1 Well Field Design Project Note;
- Demolition Area 2 2014 Annual Environmental Monitoring Report;
- Demolition Area 2 Plume Shell Reassessment Tech Memo;
- Demolition Area 2 Decision Document Addendum;
- 2013 BIP Report;
- J-1 Range Northern and J-1 Range Southern Environmental Monitoring Work Plan;
- J-3 Range 2014 Environmental Monitoring Report; and
- J-2 Range Eastern and J-2 Range Northern 2014 Environmental Monitoring Report.



**TABLE 1**  
**Sampling Progress: 1 January to 31 January 2015**

| 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   | J2EW3-MW-2-B    | J2EW3-MW-2-B_S15     | N           | 01/26/2015   | Ground Water  | 216.2                  | 226.2                     |
| J2 Range Northern   | J2EW0001        | J2EW0001_S15         | N           | 01/26/2015   | Ground Water  | 179                    | 234                       |
| J2 Range Northern   | J2EW0003        | J2EW0003_S15         | N           | 01/26/2015   | Ground Water  | 202                    | 232                       |
| J2 Range Northern   | MW-327M3        | MW-327M3_S15         | N           | 01/26/2015   | Ground Water  | 220.2                  | 230.2                     |
| J2 Range Northern   | MW-337M1        | MW-337M1_S15         | N           | 01/26/2015   | Ground Water  | 243.7                  | 253.7                     |
| L Range             | MW-153M2        | MW-153M2_S15         | N           | 01/21/2015   | Ground Water  | 144                    | 154                       |
| L Range             | MW-153M1        | MW-153M1_S15         | N           | 01/21/2015   | Ground Water  | 199                    | 209                       |
| L Range             | 90WT0013        | 90WT0013_S15         | N           | 01/21/2015   | Ground Water  | 92                     | 102                       |
| L Range             | 90MW0031        | 90MW0031_S15         | N           | 01/21/2015   | Ground Water  | 195.3                  | 200.2                     |
| J2 Range Eastern    | MW-627M1        | MW-627M1_R3          | N           | 01/20/2015   | Ground Water  | 269.5                  | 279.5                     |
| J2 Range Northern   | MW-622M2        | MW-622M2_R3          | N           | 01/20/2015   | Ground Water  | 220.4                  | 230.4                     |
| J2 Range Northern   | MW-622M1        | MW-622M1_R3          | N           | 01/20/2015   | Ground Water  | 245.4                  | 255.4                     |
| L Range             | MW-242M3        | MW-242M3_S15         | N           | 01/15/2015   | Ground Water  | 124                    | 134                       |
| L Range             | MW-242M2        | MW-242M2_S15         | N           | 01/15/2015   | Ground Water  | 165                    | 175                       |
| L Range             | MW-242M1        | MW-242M1_S15         | N           | 01/15/2015   | Ground Water  | 235                    | 245                       |
| L Range             | MW-242M1        | MW-242M1_S15D        | FD          | 01/15/2015   | Ground Water  | 235                    | 245                       |
| L Range             | MW-288M1        | MW-288M1_S15         | N           | 01/15/2015   | Ground Water  | 190                    | 200                       |
| J2 Range Northern   | MW-631M2        | MW-631M2_R3          | N           | 01/14/2015   | Ground Water  | 200.1                  | 210.1                     |
| J2 Range Northern   | MW-631M1        | MW-631M1_R3          | N           | 01/14/2015   | Ground Water  | 233.1                  | 243.1                     |
| J2 Range Northern   | MW-630M1        | MW-630M1_R3          | N           | 01/14/2015   | Ground Water  | 217                    | 227                       |
| J2 Range Northern   | MW-634M3        | MW-634M3_R3          | N           | 01/13/2015   | Ground Water  | 170.6                  | 180.6                     |
| J2 Range Northern   | MW-634M3        | MW-634M3_R3D         | FD          | 01/13/2015   | Ground Water  | 170.6                  | 180.6                     |
| J2 Range Northern   | MW-634M2        | MW-634M2_R3          | N           | 01/13/2015   | Ground Water  | 200.6                  | 210.6                     |
| J2 Range Northern   | MW-634M2        | MW-634M2_R3D         | FD          | 01/13/2015   | Ground Water  | 200.6                  | 210.6                     |
| J2 Range Northern   | MW-634M1        | MW-634M1_R3          | N           | 01/13/2015   | Ground Water  | 305.6                  | 315.6                     |
| J3 Range            | MW-636M2        | MW-636M2_R3          | N           | 01/13/2015   | Ground Water  | 110.5                  | 120.5                     |
| J3 Range            | MW-636M1        | MW-636M1_R3          | N           | 01/13/2015   | Ground Water  | 141.6                  | 151.6                     |
| J3 Range            | MW-576M3        | MW-576M3_R3          | N           | 01/12/2015   | Ground Water  | 89.9                   | 108.9                     |
| J3 Range            | MW-576M2        | MW-576M2_R3          | N           | 01/12/2015   | Ground Water  | 133.9                  | 143.9                     |
| J3 Range            | MW-576M2        | MW-576M2_R3D         | FD          | 01/12/2015   | Ground Water  | 133.9                  | 143.9                     |
| J3 Range            | MW-576M1        | MW-576M1_R3          | N           | 01/12/2015   | Ground Water  | 173.9                  | 183.9                     |
| J3 Range            | MW-637M3        | MW-637M3_R3          | N           | 01/12/2015   | Ground Water  | 174.1                  | 184.1                     |
| J3 Range            | MW-637M2        | MW-637M2_R3          | N           | 01/12/2015   | Ground Water  | 214.1                  | 224.1                     |
| J3 Range            | MW-637M1        | MW-637M1_R3          | N           | 01/12/2015   | Ground Water  | 236.1                  | 246.1                     |
| J1 Range Southern   | J1S-EFF         | J1S-EFF-86A          | N           | 01/08/2015   | Process Water | 0                      | 0                         |
| J1 Range Southern   | J1S-MID-2       | J1S-MID-2-86A        | N           | 01/08/2015   | Process Water | 0                      | 0                         |
| J1 Range Southern   | J1S-INF-2       | J1S-INF-2-86A        | N           | 01/08/2015   | Process Water | 0                      | 0                         |
| L Range             | 90MW0007        | 90MW0007_S15         | N           | 01/08/2015   | Ground Water  | 179                    | 184                       |
| L Range             | 90MW0034        | 90MW0034_S15         | N           | 01/08/2015   | Ground Water  | 94                     | 99                        |
| Demolition Area 1   | D1-EFF          | D1-EFF-54A           | N           | 01/08/2015   | Process Water | 0                      | 0                         |
| Demolition Area 1   | D1-MID-2        | D1-MID-2-54A         | N           | 01/08/2015   | Process Water | 0                      | 0                         |
| Demolition Area 1   | D1-MID-1        | D1-MID-1-54A         | N           | 01/08/2015   | Process Water | 0                      | 0                         |
| Demolition Area 1   | D1-INF          | D1-INF-54A           | N           | 01/08/2015   | Process Water | 0                      | 0                         |
| Demolition Area 1   | PR-EFF          | PR-EFF-106A          | N           | 01/08/2015   | Process Water | 0                      | 0                         |
| Demolition Area 1   | PR-MID-2        | PR-MID-2-106A        | N           | 01/08/2015   | Process Water | 0                      | 0                         |
| Demolition Area 1   | PR-MID-1        | PR-MID-1-106A        | N           | 01/08/2015   | Process Water | 0                      | 0                         |
| Demolition Area 1   | PR-INF          | PR-INF-106A          | N           | 01/08/2015   | Process Water | 0                      | 0                         |
| Demolition Area 1   | FPR-2-EFF-B     | FPR-2-EFF-B-106A     | N           | 01/08/2015   | Process Water | 0                      | 0                         |
| Demolition Area 1   | FPR-2-GAC-MID3B | FPR-2-GAC-MID3B-106A | N           | 01/08/2015   | Process Water | 0                      | 0                         |
| Demolition Area 1   | FPR2-POST-IX-B  | FPR2-POST-IX-B-106A  | N           | 01/08/2015   | Process Water | 0                      | 0                         |
| Demolition Area 1   | FPR-2-INF       | FPR-2-INF-106A       | N           | 01/08/2015   | Process Water | 0                      | 0                         |
| Central Impact Area | CIA2-EFF        | CIA2-EFF-12A         | N           | 01/07/2015   | Process Water | 0                      | 0                         |
| Central Impact Area | CIA2-MID2       | CIA2-MID2-12A        | N           | 01/07/2015   | Process Water | 0                      | 0                         |
| Central Impact Area | CIA2-MID1       | CIA2-MID1-12A        | N           | 01/07/2015   | Process Water | 0                      | 0                         |
| Central Impact Area | CIA2-INF        | CIA2-INF-12A         | N           | 01/07/2015   | Process Water | 0                      | 0                         |
| Central Impact Area | CIA1-EFF        | CIA1-EFF-12A         | N           | 01/07/2015   | Process Water | 0                      | 0                         |
| Central Impact Area | CIA1-MID2       | CIA1-MID2-12A        | N           | 01/07/2015   | Process Water | 0                      | 0                         |
| L Range             | MW-595M2        | MW-595M2_S15         | N           | 01/07/2015   | Ground Water  | 205.3                  | 215.3                     |
| Central Impact Area | CIA1-MID1       | CIA1-MID1-12A        | N           | 01/07/2015   | Process Water | 0                      | 0                         |
| Central Impact Area | CIA1-INF        | CIA1-INF-12A         | N           | 01/07/2015   | Process Water | 0                      | 0                         |
| L Range             | MW-595M1        | MW-595M1_S15         | N           | 01/07/2015   | Ground Water  | 255.3                  | 265.3                     |
| L Range             | MW-596M1        | MW-596M1_S15         | N           | 01/07/2015   | Ground Water  | 231.1                  | 241.1                     |
| J3 Range            | J3-EFF          | J3-EFF-100A          | N           | 01/07/2015   | Process Water | 0                      | 0                         |
| J3 Range            | J3-MID-2        | J3-MID-2-100A        | N           | 01/07/2015   | Process Water | 0                      | 0                         |
| J3 Range            | J3-MID-1        | J3-MID-1-100A        | N           | 01/07/2015   | Process Water | 0                      | 0                         |
| J3 Range            | J3-INF          | J3-INF-100A          | N           | 01/07/2015   | Process Water | 0                      | 0                         |
| L Range             | MW-325M1        | MW-325M1_S15         | N           | 01/06/2015   | Ground Water  | 172                    | 182                       |
| L Range             | MW-530S         | MW-530S_S15          | N           | 01/06/2015   | Ground Water  | 97                     | 107                       |

N = Normal Sample  
 FD = Field Duplicate

**TABLE 1**  
**Sampling Progress: 1 January to 31 January 2015**

| Area Of Concern   | Location   | Field Sample ID | Sample Type | Date Sampled | Matrix        | Top of Screen (ft bgs) | Bottom of Screen (ft bgs) |
|-------------------|------------|-----------------|-------------|--------------|---------------|------------------------|---------------------------|
| J2 Range Eastern  | J2E-EFF-IH | J2E-EFF-IH-76A  | N           | 01/06/2015   | Process Water | 0                      | 0                         |
| J2 Range Eastern  | J2E-MID-2H | J2E-MID-2H-76A  | N           | 01/06/2015   | Process Water | 0                      | 0                         |
| J2 Range Eastern  | J2E-MID-1H | J2E-MID-1H-76A  | N           | 01/06/2015   | Process Water | 0                      | 0                         |
| J2 Range Eastern  | J2E-MID-2I | J2E-MID-2I-76A  | N           | 01/06/2015   | Process Water | 0                      | 0                         |
| J2 Range Eastern  | J2E-MID-1I | J2E-MID-1I-76A  | N           | 01/06/2015   | Process Water | 0                      | 0                         |
| J2 Range Northern | SSJ2J11    | J2J11C          | FR          | 01/06/2015   | Soil          | 0                      | 0.25                      |
| J2 Range Eastern  | J2E-INF-I  | J2E-INF-I-76A   | N           | 01/06/2015   | Process Water | 0                      | 0                         |
| L Range           | MW-529M1   | MW-529M1_S15    | N           | 01/06/2015   | Ground Water  | 107                    | 117                       |
| J2 Range Eastern  | J2E-EFF-K  | J2E-EFF-K-76A   | N           | 01/06/2015   | Process Water | 0                      | 0                         |
| J2 Range Eastern  | J2E-MID-2K | J2E-MID-2K-76A  | N           | 01/06/2015   | Process Water | 0                      | 0                         |
| J2 Range Eastern  | J2E-MID-1K | J2E-MID-1K-76A  | N           | 01/06/2015   | Process Water | 0                      | 0                         |
| J2 Range Northern | SSJ2J11    | J2J11B          | FR          | 01/06/2015   | Soil          | 0                      | 0.25                      |
| J2 Range Eastern  | J2E-INF-K  | J2E-INF-K-76A   | N           | 01/06/2015   | Process Water | 0                      | 0                         |
| J2 Range Eastern  | J2E-EFF-J  | J2E-EFF-J-76A   | N           | 01/06/2015   | Process Water | 0                      | 0                         |
| J2 Range Eastern  | J2E-MID-2J | J2E-MID-2J-76A  | N           | 01/06/2015   | Process Water | 0                      | 0                         |
| J2 Range Northern | SSJ2J11    | J2J11A          | N           | 01/06/2015   | Soil          | 0                      | 0.25                      |
| L Range           | MW-241M1   | MW-241M1_S15    | N           | 01/06/2015   | Ground Water  | 97                     | 107                       |
| J2 Range Eastern  | J2E-MID-1J | J2E-MID-1J-76A  | N           | 01/06/2015   | Process Water | 0                      | 0                         |
| J2 Range Eastern  | J2E-INF-J  | J2E-INF-J-76A   | N           | 01/06/2015   | Process Water | 0                      | 0                         |
| J2 Range Northern | SSJ2K11    | J2K11A          | N           | 01/06/2015   | Soil          | 0                      | 0.25                      |
| J2 Range Northern | SSJ2JK13   | J2JK13A         | N           | 01/05/2015   | Soil          | 0                      | 0.25                      |
| J2 Range Northern | SSJ2I14    | J2I14A          | N           | 01/05/2015   | Soil          | 0                      | 0.25                      |
| J3 Range          | 90EW0001   | 90EW0001_S15    | N           | 01/05/2015   | Ground Water  | 83.1                   | 143.8                     |
| J2 Range Northern | SSJ2K14    | J2K14A          | N           | 01/05/2015   | Soil          | 0                      | 0.25                      |
| J3 Range          | J3EW0032   | J3EW0032_S15    | N           | 01/05/2015   | Ground Water  | 102                    | 152                       |
| J2 Range Northern | J2J14A     | J2J14A          | N           | 01/05/2015   | Soil          | 0                      | 0.25                      |
| J3 Range          | J3EWIP1    | J3EWIP1_S15     | N           | 01/05/2015   | Ground Water  | 153                    | 193                       |
| J2 Range Northern | J2N-EFF-G  | J2N-EFF-G-100A  | N           | 01/05/2015   | Process Water | 0                      | 0                         |
| J2 Range Northern | J2N-MID-2G | J2N-MID-2G-100A | N           | 01/05/2015   | Process Water | 0                      | 0                         |
| J2 Range Northern | J2N-MID-1G | J2N-MID-1G-100A | N           | 01/05/2015   | Process Water | 0                      | 0                         |
| J2 Range Northern | J2N-INF-G  | J2N-INF-G-100A  | N           | 01/05/2015   | Process Water | 0                      | 0                         |
| J2 Range Northern | MW-632M2   | MW-632M2_R3     | N           | 01/05/2015   | Ground Water  | 229.5                  | 239.5                     |
| J2 Range Northern | J2N-EFF-EF | J2N-EFF-EF-100A | N           | 01/05/2015   | Process Water | 0                      | 0                         |
| J2 Range Northern | J2N-MID-2F | J2N-MID-2F-100A | N           | 01/05/2015   | Process Water | 0                      | 0                         |
| J2 Range Northern | J2N-MID-1F | J2N-MID-1F-100A | N           | 01/05/2015   | Process Water | 0                      | 0                         |
| J2 Range Northern | J2N-INF-EF | J2N-INF-EF-100A | N           | 01/05/2015   | Process Water | 0                      | 0                         |
| J2 Range Northern | SSJ2H17    | J2H17C          | FR          | 01/05/2015   | Soil          | 0                      | 0.25                      |
| J2 Range Northern | J2N-MID-2E | J2N-MID-2E-100A | N           | 01/05/2015   | Process Water | 0                      | 0                         |
| J2 Range Northern | J2N-MID-1E | J2N-MID-1E-100A | N           | 01/05/2015   | Process Water | 0                      | 0                         |
| J2 Range Northern | MW-632M1   | MW-632M1_R3     | N           | 01/05/2015   | Ground Water  | 254.5                  | 264.5                     |
| J2 Range Northern | SSJ2H17    | J2H17B          | FR          | 01/05/2015   | Soil          | 0                      | 0.25                      |
| J1 Range Northern | J1N-EFF    | J1N-EFF-15A     | N           | 01/05/2015   | Process Water | 0                      | 0                         |
| J1 Range Northern | J1N-MID2   | J1N-MID2-15A    | N           | 01/05/2015   | Process Water | 0                      | 0                         |
| J1 Range Northern | J1N-MID1   | J1N-MID1-15A    | N           | 01/05/2015   | Process Water | 0                      | 0                         |
| J1 Range Northern | J1N-INF2   | J1N-INF2-15A    | N           | 01/05/2015   | Process Water | 0                      | 0                         |
| J2 Range Northern | SSJ2H17    | J2H17A          | N           | 01/05/2015   | Soil          | 0                      | 0.25                      |
| J2 Range Northern | MW-635M1   | MW-635M1_R3     | N           | 01/05/2015   | Ground Water  | 265.4                  | 275.4                     |
| J2 Range Northern | SSJ2K17    | J2K17A          | N           | 01/05/2015   | Soil          | 0                      | 0.25                      |

**TABLE 2**  
**VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS**  
 Data Received January 2015

| 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   |
|-------------------|-------------|-----------------|--------------------|-----------------------|--------------|-------------|--|--------------|-----------|-------|--------|----------|-------|------|
| L Range           | MW-595M1    | MW-595M1_S15    | 255.3              | 265.3                 | 01/07/2015   | SW6850      | Perchlorate  | 0.11         | J         | UG/L  | 2.0    |          | 0.019 | 0.20 |
| L Range           | MW-595M1    | MW-595M1_S15    | 255.3              | 265.3                 | 01/07/2015   | SW8330      | Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)          | 1.3          |           | UG/L  | 0.60   | X        | 0.026 | 0.20 |
| L Range           | MW-530S     | MW-530S_S15     | 97                 | 107                   | 01/06/2015   | SW6850      | Perchlorate  | 0.039        | J         | UG/L  | 2.0    |          | 0.019 | 0.20 |
| L Range           | MW-529M1    | MW-529M1_S15    | 107                | 117                   | 01/06/2015   | SW6850      | Perchlorate  | 0.039        | J         | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-76M2     | MW-76M2_F14     | 105                | 115                   | 12/29/2014   | SW8330      | 4-Amino-2,6-Dinitrotoluene                             | 0.25         |           | UG/L  | 7.3    |          | 0.017 | 0.20 |
| Demolition Area 1 | MW-76M2     | MW-76M2_F14     | 105                | 115                   | 12/29/2014   | SW8330      | Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX) | 0.40         |           | UG/L  | 400    |          | 0.023 | 0.20 |
| Demolition Area 1 | MW-76M2     | MW-76M2_F14     | 105                | 115                   | 12/29/2014   | SW8330      | Hexahydro-1,3,5,7-Trinitro-1,3,5-Triazine (RDX)        | 0.53         |           | UG/L  | 0.60   |          | 0.026 | 0.20 |
| Demolition Area 1 | MW-77M2     | MW-77M2_F14     | 120                | 130                   | 12/29/2014   | SW8330      | Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX) | 0.94         |           | UG/L  | 400    |          | 0.023 | 0.20 |
| Demolition Area 1 | MW-77M2     | MW-77M2_F14     | 120                | 130                   | 12/29/2014   | SW8330      | Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)          | 0.98         |           | UG/L  | 0.60   | X        | 0.026 | 0.20 |
| Demolition Area 1 | MW-31S      | MW-31S_F14      | 98                 | 103                   | 12/29/2014   | SW8330      | 4-Amino-2,6-Dinitrotoluene                             | 0.29         |           | UG/L  | 7.3    |          | 0.017 | 0.20 |
| Demolition Area 1 | MW-31S      | MW-31S_F14      | 98                 | 103                   | 12/29/2014   | SW8330      | 2-Amino-4,6-dinitrotoluene                             | 0.56         |           | UG/L  | 7.3    |          | 0.016 | 0.20 |
| Demolition Area 1 | MW-31S      | MW-31S_F14      | 98                 | 103                   | 12/29/2014   | SW8330      | Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX) | 0.80         |           | UG/L  | 400    |          | 0.023 | 0.20 |
| Demolition Area 1 | MW-31S      | MW-31S_F14      | 98                 | 103                   | 12/29/2014   | SW8330      | 2,4,6-Trinitrotoluene                                  | 0.93         |           | UG/L  | 2.0    |          | 0.029 | 0.20 |
| Demolition Area 1 | MW-31S      | MW-31S_F14      | 98                 | 103                   | 12/29/2014   | SW8330      | Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)          | 1.7          |           | UG/L  | 0.60   | X        | 0.026 | 0.20 |
| Demolition Area 1 | MW-31S      | MW-31S_F14D     | 98                 | 103                   | 12/29/2014   | SW8330      | 4-Amino-2,6-Dinitrotoluene                             | 0.31         |           | UG/L  | 7.3    |          | 0.017 | 0.20 |
| Demolition Area 1 | MW-31S      | MW-31S_F14D     | 98                 | 103                   | 12/29/2014   | SW8330      | 2-Amino-4,6-dinitrotoluene                             | 0.58         |           | UG/L  | 7.3    |          | 0.016 | 0.20 |
| Demolition Area 1 | MW-31S      | MW-31S_F14D     | 98                 | 103                   | 12/29/2014   | SW8330      | Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX) | 0.85         |           | UG/L  | 400    |          | 0.023 | 0.20 |
| Demolition Area 1 | MW-31S      | MW-31S_F14D     | 98                 | 103                   | 12/29/2014   | SW8330      | 2,4,6-Trinitrotoluene                                  | 1.0          |           | UG/L  | 2.0    |          | 0.029 | 0.20 |
| Demolition Area 1 | MW-31S      | MW-31S_F14D     | 98                 | 103                   | 12/29/2014   | SW8330      | Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)          | 1.8          |           | UG/L  | 0.60   | X        | 0.026 | 0.20 |
| Demolition Area 1 | MW-31M      | MW-31M_F14      | 113                | 123                   | 12/29/2014   | SW8330      | 2-Amino-4,6-dinitrotoluene                             | 0.31         | J         | UG/L  | 7.3    |          | 0.016 | 0.20 |
| Demolition Area 1 | MW-31M      | MW-31M_F14      | 113                | 123                   | 12/29/2014   | SW8330      | Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX) | 0.58         | J         | UG/L  | 400    |          | 0.023 | 0.20 |
| Demolition Area 1 | MW-31M      | MW-31M_F14      | 113                | 123                   | 12/29/2014   | SW8330      | Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)          | 1.0          | J         | UG/L  | 0.60   | X        | 0.026 | 0.20 |
| J2 Range Northern | MW-621M2    | MW-621M2_R3     | 219.4              | 229.4                 | 12/22/2014   | SW6850      | Perchlorate  | 3.8          |           | UG/L  | 2.0    | X        | 0.019 | 0.20 |
| J2 Range Northern | MW-621M2    | MW-621M2_R3D    | 219.4              | 229.4                 | 12/22/2014   | SW6850      | Perchlorate  | 3.9          |           | UG/L  | 2.0    | X        | 0.019 | 0.20 |
| J2 Range Northern | MW-621M1    | MW-621M1_R3     | 249.4              | 259.4                 | 12/22/2014   | SW6850      | Perchlorate  | 0.027        | J         | UG/L  | 2.0    |          | 0.019 | 0.20 |
| J2 Range Northern | MW-640M2    | MW-640M2_R2     | 216                | 226                   | 12/22/2014   | SW6850      | Perchlorate  | 0.73         |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| J2 Range Northern | MW-640M1    | MW-640M1_R2     | 246                | 256                   | 12/22/2014   | SW6850      | Perchlorate  | 0.63         |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-545M4    | MW-545M4_F14    | 72                 | 82                    | 12/17/2014   | SW6850      | Perchlorate  | 0.43         |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-545M3    | MW-545M3_F14    | 101.5              | 111.5                 | 12/17/2014   | SW6850      | Perchlorate  | 0.23         |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-545M2    | MW-545M2_F14    | 142                | 152                   | 12/17/2014   | SW6850      | Perchlorate  | 2.2          |           | UG/L  | 2.0    | X        | 0.019 | 0.20 |
| Demolition Area 1 | MW-545M1    | MW-545M1_F14    | 162                | 172                   | 12/17/2014   | SW6850      | Perchlorate  | 1.5          |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-19S      | MW-19S_F14      | 52.7               | 62.7                  | 12/16/2014   | SW8330      | 2-Amino-4,6-dinitrotoluene                             | 0.26         |           | UG/L  | 7.3    |          | 0.016 | 0.20 |
| Demolition Area 1 | MW-19S      | MW-19S_F14      | 52.7               | 62.7                  | 12/16/2014   | SW8330      | 4-Amino-2,6-Dinitrotoluene                             | 0.37         |           | UG/L  | 7.3    |          | 0.017 | 0.20 |
| Demolition Area 1 | MW-19S      | MW-19S_F14      | 52.7               | 62.7                  | 12/16/2014   | SW8330      | Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX) | 2.2          |           | UG/L  | 400    |          | 0.023 | 0.20 |
| Demolition Area 1 | MW-19S      | MW-19S_F14      | 52.7               | 62.7                  | 12/16/2014   | SW8330      | Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)          | 5.8          |           | UG/L  | 0.60   | X        | 0.026 | 0.20 |
| Demolition Area 1 | MW-19S      | MW-19S_F14D     | 52.7               | 62.7                  | 12/16/2014   | SW8330      | 2-Amino-4,6-dinitrotoluene                             | 0.25         |           | UG/L  | 7.3    |          | 0.016 | 0.20 |
| Demolition Area 1 | MW-19S      | MW-19S_F14D     | 52.7               | 62.7                  | 12/16/2014   | SW8330      | 4-Amino-2,6-Dinitrotoluene                             | 0.37         |           | UG/L  | 7.3    |          | 0.017 | 0.20 |
| Demolition Area 1 | MW-19S      | MW-19S_F14D     | 52.7               | 62.7                  | 12/16/2014   | SW8330      | Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX) | 2.3          |           | UG/L  | 400    |          | 0.023 | 0.20 |
| Demolition Area 1 | MW-19S      | MW-19S_F14D     | 52.7               | 62.7                  | 12/16/2014   | SW8330      | Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)          | 6.3          |           | UG/L  | 0.60   | X        | 0.026 | 0.20 |
| Demolition Area 1 | MW-431      | MW-431_F14      | 88                 | 188                   | 12/16/2014   | SW6850      | Perchlorate  | 0.15         | J         | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-431      | MW-431_F14      | 88                 | 188                   | 12/16/2014   | SW8330      | Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX) | 0.37         |           | UG/L  | 400    |          | 0.023 | 0.20 |
| Demolition Area 1 | MW-431      | MW-431_F14      | 88                 | 188                   | 12/16/2014   | SW8330      | Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)          | 0.39         |           | UG/L  | 0.60   |          | 0.026 | 0.20 |
| Demolition Area 1 | MW-432      | MW-432_F14      | 88                 | 188                   | 12/16/2014   | SW8330      | Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)          | 0.31         |           | UG/L  | 0.60   |          | 0.026 | 0.20 |
| Demolition Area 1 | MW-432      | MW-432_F14      | 88                 | 188                   | 12/16/2014   | SW6850      | Perchlorate  | 0.47         |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-341M3    | MW-341M3_F14    | 209.5              | 219.5                 | 12/16/2014   | SW6850      | Perchlorate  | 0.051        | J         | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | XX9514      | XX9514_F14      | 102                | 112                   | 12/15/2014   | SW6850      | Perchlorate  | 1.9          |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-544M3    | MW-544M3_F14    | 77.5               | 87.5                  | 12/15/2014   | SW6850      | Perchlorate  | 0.072        | J         | UG/L  | 2.0    |          | 0.019 | 0.20 |

J = Estimated Result  
 MDL = Method Detection Limit  
 RL = Reporting Limit

**TABLE 2  
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS  
Data Received January 2015**

| 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-544M2    | MW-544M2_F14     | 112                | 122                   | 12/15/2014   | SW6850      | Perchlorate  | 0.35         |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-544M1    | MW-544M1_F14     | 162                | 172                   | 12/15/2014   | SW6850      | Perchlorate  | 0.89         |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Western Boundary  | 4036000-04G | 4036000-04G_14Q4 | 55                 | 65                    | 12/11/2014   | SW6850      | Perchlorate  | 0.20         |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Western Boundary  | 4036000-03G | 4036000-03G_14Q4 | 50                 | 60                    | 12/11/2014   | SW6850      | Perchlorate  | 0.16         | J         | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Western Boundary  | 4036000-06G | 4036000-06G_14Q4 | 108                | 128                   | 12/11/2014   | SW6850      | Perchlorate  | 0.11         | J         | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Western Boundary  | 4036000-01G | 4036000-01G_14Q4 | 38                 | 70                    | 12/11/2014   | SW6850      | Perchlorate  | 0.14         | J         | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-610M2    | MW-610M2_F14     | 85                 | 95                    | 12/10/2014   | SW6850      | Perchlorate  | 1.5          |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-610M1    | MW-610M1_F14     | 110                | 120                   | 12/10/2014   | SW6850      | Perchlorate  | 1.5          |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-598M2    | MW-598M2_F14     | 88                 | 98                    | 12/10/2014   | SW6850      | Perchlorate  | 2.1          |           | UG/L  | 2.0    | X        | 0.019 | 0.20 |
| Demolition Area 1 | MW-598M1    | MW-598M1_F14     | 122                | 132                   | 12/10/2014   | SW6850      | Perchlorate  | 0.45         |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-556M2    | MW-556M2_F14     | 111                | 121                   | 12/09/2014   | SW6850      | Perchlorate  | 1.9          |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-556M1    | MW-556M1_F14     | 153                | 163                   | 12/09/2014   | SW8330      | Hexahydro-1,3,5,7-Trinitro-1,3,5,7-Triazine (RDX)      | 0.20         |           | UG/L  | 0.60   |          | 0.026 | 0.20 |
| Demolition Area 1 | MW-556M1    | MW-556M1_F14     | 153                | 163                   | 12/09/2014   | SW6850      | Perchlorate  | 2.8          |           | UG/L  | 2.0    | X        | 0.019 | 0.20 |
| Demolition Area 1 | MW-554M2    | MW-554M2_F14     | 89.1               | 99.1                  | 12/09/2014   | SW6850      | Perchlorate  | 0.15         | J         | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-554M1    | MW-554M1_F14     | 120                | 130                   | 12/09/2014   | SW6850      | Perchlorate  | 0.40         |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-558M2    | MW-558M2_F14     | 98                 | 108                   | 12/09/2014   | SW6850      | Perchlorate  | 0.48         |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-558M1    | MW-558M1_F14     | 134                | 144                   | 12/08/2014   | SW6850      | Perchlorate  | 2.2          |           | UG/L  | 2.0    | X        | 0.019 | 0.20 |
| Demolition Area 1 | MW-559M2    | MW-559M2_F14     | 87                 | 97                    | 12/08/2014   | SW6850      | Perchlorate  | 0.36         |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-559M1    | MW-559M1_F14     | 135.6              | 145.6                 | 12/08/2014   | SW6850      | Perchlorate  | 2.4          |           | UG/L  | 2.0    | X        | 0.019 | 0.20 |
| Demolition Area 1 | MW-641M2    | MW-641M2_F14     | 86.2               | 96.2                  | 12/08/2014   | SW6850      | Perchlorate  | 0.37         |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-641M1    | MW-641M1_F14     | 113.2              | 123.2                 | 12/08/2014   | SW6850      | Perchlorate  | 0.76         |           | UG/L  | 2.0    |          | 0.019 | 0.20 |
| Demolition Area 1 | MW-211M1    | MW-211M1_F14     | 200                | 210                   | 12/03/2014   | SW8330      | Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX) | 0.53         |           | UG/L  | 400    |          | 0.023 | 0.20 |
| Demolition Area 1 | MW-211M1    | MW-211M1_F14     | 200                | 210                   | 12/03/2014   | SW8330      | Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)          | 0.93         |           | UG/L  | 0.60   | X        | 0.026 | 0.20 |
| Demolition Area 1 | MW-211M1    | MW-211M1_F14     | 200                | 210                   | 12/03/2014   | SW6850      | Perchlorate  | 2.4          |           | UG/L  | 2.0    | X        | 0.019 | 0.20 |
| Demolition Area 1 | MW-211M1    | MW-211M1_F14D    | 200                | 210                   | 12/03/2014   | SW8330      | Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX) | 0.51         |           | UG/L  | 400    |          | 0.023 | 0.20 |
| Demolition Area 1 | MW-211M1    | MW-211M1_F14D    | 200                | 210                   | 12/03/2014   | SW8330      | Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)          | 0.87         |           | UG/L  | 0.60   | X        | 0.026 | 0.20 |
| Demolition Area 1 | MW-211M1    | MW-211M1_F14D    | 200                | 210                   | 12/03/2014   | SW6850      | Perchlorate  | 2.3          |           | UG/L  | 2.0    | X        | 0.019 | 0.20 |
| Demolition Area 1 | MW-258M1    | MW-258M1_F14     | 109                | 119                   | 12/03/2014   | SW6850      | Perchlorate  | 10.3         |           | UG/L  | 2.0    | X        | 0.038 | 0.40 |
| Demolition Area 1 | MW-258M1    | MW-258M1_F14D    | 109                | 119                   | 12/03/2014   | SW6850      | Perchlorate  | 10.4         |           | UG/L  | 2.0    | X        | 0.038 | 0.40 |
| Demolition Area 1 | MW-532M2    | MW-532M2_F14     | 138                | 148                   | 12/03/2014   | SW8330      | Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)          | 1.2          |           | UG/L  | 0.60   | X        | 0.026 | 0.20 |
| Demolition Area 1 | MW-532M2    | MW-532M2_F14     | 138                | 148                   | 12/03/2014   | SW6850      | Perchlorate  | 11.7         |           | UG/L  | 2.0    | X        | 0.038 | 0.40 |
| Demolition Area 1 | MW-532M2    | MW-532M2_F14D    | 138                | 148                   | 12/03/2014   | SW6850      | Perchlorate  | 12.1         |           | UG/L  | 2.0    | X        | 0.038 | 0.40 |
| Demolition Area 1 | MW-532M1    | MW-532M1_F14     | 168                | 178                   | 12/03/2014   | SW6850      | Perchlorate  | 0.91         |           | UG/L  | 2.0    |          | 0.019 | 0.20 |

J = Estimated Result  
MDL = Method Detection Limit  
RL = Reporting Limit