

**MONTHLY PROGRESS REPORT #220
FOR JULY 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 July to 31 July 2015.

1. SUMMARY OF REMEDIATION ACTIONS

The following is a description of Remediation Actions (RA) underway at Camp Edwards as of July 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 2.25 billion gallons of water treated and re-injected as of 31 July 2015. The following shut downs of the Frank Perkins Road facility occurred in July:

- Shut down on 14 July 2015 at 0755 due to a power interruption and was restarted on 14 July 2015 at 0802.

The Pew Road Mobile Treatment Unit (MTU) continues to operate at a flow rate of 105 gpm with over 423 million gallons of water treated and re-injected as of 31 July 2015. The following Pew Road MTU shut downs occurred in July:

- Shut down on 1 July 2015 at 0917 due to a system alarm and was restarted on 1 July 2015 at 0947;
- Shut down on 19 July 2015 at 1255 due to a power interruption and was restarted on 20 July 2015 at 0745; and
- Shut down on 24 July 2015 at 1032 due to a power interruption and was restarted on 24 July 2015 at 1109.

The Base Boundary RA continues to operate at a flow rate of 65 gpm with over 119.5 million gallons of water treated and re-injected as of 31 July 2015. The following Base Boundary MTU shut downs occurred in July:

- Shut down on 17 July 2015 at 1138 for maintenance and was restarted on 17 July 2015 at 1213.

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 125 gpm. As of 31 July 2015, over 268 million gallons of water have been treated and re-injected. The following J-1 Range Southern system shut downs occurred in July:

- Shut down on 13 July 2015 at 0508 due to a system alarm and was restarted on 15 July 2015 at 1036.

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. As of 31 July 2015, over 180 million gallons of water have been treated and re-injected. The following J-1 Range Northern MTU shut down occurred in July:

- Shut down on 7 July 2015 at 1426 due to system alarms and was restarted on 8 July 2015 at 1426.

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 continues to operate at a flow rate of 195 gpm. As of 29 May, over 830 million gallons of water have been treated and re-injected. The following J-3 Range system shut downs occurred in July:

- Shut down on 14 July 2015 at 1723 for an energy curtailment request and was restarted on 15 July 2015 at 0905; and
- EW-0001 and EW-IP1 shut down on 20 July 2015 at 0559 due to a system alarm and were restarted on 20 July 2015 at 0947.

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 continues to operate at a flow rate of 225 gpm. As of 31 July 2015, over 616 million gallons of water have been treated and re-injected. No Northern Treatment Building shut downs occurred in July.

The Northern MTUs E and F continue to operate at a flow rate of 250 gpm. As of 31 July 2015, over 1.014 million gallons of water have been treated and re-injected. The following J-2 Range Northern MTUs shut downs occurred in July:

- MTU E shut down on 30 June 2015 at 1223 due to a system alarm (the system remained off for media change-out) and was restarted on 2 July 2015 at 1250;
- MTU E shut down on 19 July 2015 at 1259 due to a power interruption and was restarted on 20 July 2015 at 0830; and
- MTU F shut down on 19 July 2015 at 1300 due to a power interruption and was restarted on 20 July 2015 at 0825.

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 continue to operate at a flow rate of 250 gpm. As of 31 July 2015, over 700 million gallons of water have been treated and re-injected. No shut downs of MTUs H and I occurred in July.

MTU J continues to operate at a flow rate of 120 gpm. As of 31 July 2015, over 332 million gallons of water have been treated and re-injected. No shut downs of MTU J occurred in July.

MTU K continues to operate at a flow rate of 125 gpm. As of 31 July 2015, over 395 million gallons of water have been treated and re-injected. The following shut downs of MTU K occurred in July:

- MTU K shut down on 30 June 2015 at 1432 for media change-out and was restarted on 2 July 2015 at 1050; and
- MTU K shut down on 26 July 2015 at 1234 due to UPS failure. UPS was replaced and the system was restarted on 27 July 2015 at 1315.

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 31 July 2015, over 395 million gallons of water have been treated and re-injected. No CIA treatment facility shutdowns occurred in July.

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-3 Range and L Range.

A surface water sample was collected at J-3 Range.

Groundwater profile samples were collected at J-1 Range Southern.

Continued drilling in J-1 Range South and Demolition Area 1.

Began archeological survey at Demolition Area 1 (off-site), Demolition Area 2, and the CIA.

Performed MEC investigation at grids in accordance with Project Note at J-2 Range.

Collected additional delineation soil samples at Former B and Former C Ranges at the Small Arms Ranges.

Collected cued Metalmapper data in Phase II area 1 (10 acres), and continued intrusive investigation of the 16-acre area (phase I blue grids) at the CIA.

Completed surface clearance and performed EM-61 geophysical survey in Phase II area 2 at the CIA.

Performed daily inspection of the BEM cover to ensure cover is intact/secure.

JBCC IAGWSP Tech Update Meeting Minutes 9 July 2015

Project and Field Work Update

In the CIA, robotics vegetation clearance has been completed in Phase II area 2. EM-61 survey will likely begin at the end of July. Metal Mapper continues to work in areas 1 and 2. Three UXO teams are digging in the 16-acre area. The BEM soil was sampled and results are expected soon. The second excavation at the consolidated shot location is being scheduled and a BEM is being scheduled for the end of July or early August.

In the Small Arms Ranges, follow-up soil sampling was completed at the Former C and Former B Ranges.

The J-2 MEC investigations resumed last week and three of seven grids were completed.

Drilling at J-1 South off-base in Forestdale continues with no issues to date. Drilling was completed at MW-645, which was the "P1" location. They started at the "P2" location today. USACE noted that their hydrogeologist for J-1 South would be observing the drilling tomorrow.

The groundwater sampling team is working in the J-3 Range performing annual sampling.

USACE explained that they are still waiting for approval from the State Historic Preservation Office (SHPO) for the Demolition Area 1 off-base archeological survey. USACE noted that they anticipate the survey will be scheduled in the next two to three weeks. They explained that they have been asked to give representatives of the Mashpee Wampanoag tribe a week's notice so that they can observe the survey.

Action Items

The action items were discussed and updated

Small Arms Ranges – Annual Monitoring Report Presentation

A presentation was provided on the annual monitoring report for the Small Arms Ranges. It was noted that the report covered sampling results collected from March 2014 through March 2015. The only new work conducted during the reporting period was soil sampling. Groundwater sampling results were discussed. It was noted that Tungsten was detected in only one well, metals were detected however not above MCLs, and perchlorate was detected at 0.26 ppb in one well. No changes are recommended to either the metals or perchlorate sampling program. In their comment letter, MassDEP suggested revising the groundwater screening value for zinc to the MCP GW-3 standard of 900 ppb, since in this case, the GW-3 Standard is lower than the GW-1 Standard. EPA has not provided comments yet.

JBCC IAGWSP Tech Update Meeting Minutes 30 July 2015

Project and Field Work Update

In the CIA, Dawson is currently working in the 16-acre area, which is the last of the Phase I 30-acre area. During this field season, there have been 5,399 digs and 145 UXO discovered so far. Vegetation and surface clearance has been completed in Phase II area 2 and EM-61 survey work has begun. Metal Mapper continues to work in areas 1 and 2. The second excavation at the consolidated shot location was completed yesterday and BEM is being tentatively scheduled for some time in the fall after the 30-acres are completed.

USACE reported that a 4.2" white phosphorus round was discovered during intrusive investigations in the CIA. The item was inspected and it did not appear to be cracked or leaking so it was transported to the MEC/BEM holding area and stored with other previously uncovered white phosphorus rounds per established protocols. On 24 July, USACE UXO team members noticed smoke in the storage area and determined it was white phosphorous. USACE evacuated site personnel from the CIA and notified Range Control. Range Control contacted the JBCC fire department who responded to the site. USACE UXO informed Range Control personnel that the fire was most likely from a previously recovered UXO.

The Fire Department was met at the gate by USACE personnel and advised to proceed to the USACE Connex where OESS would meet and escort them. The Fire Department proceeded past the Connex to

the BEM location. OESS followed and advised them to back off to a safe distance. USACE OESS met with the Fire Department personnel at a safe distance in the CIA and smoke was no longer observed. Range Control informed USACE that an Army Aviation Unit was preparing a helicopter equipped with a water bucket. The helicopter flew over the CIA at the recommended safe elevation and reported that no smoke was visible and therefore left the site.

The item was inspected and submerged in a drum of water and along with another white phosphorus round that appeared to have white phosphorus residue. Remaining white phosphorus rounds were segregated in the MEC/BEM holding area surrounded by earthen berms. The items remain in the holding area and will be included in the next BEM. USACE explained that the UXO staff surmised that the item may have been compromised as it sat in the holding area either during the heating and cooling of the item or it was potentially disturbed by wildlife.

EPA asked if white phosphorus rounds should immediately be put into water. USACE explained that they are typically not placed in water as if there are any dirt or white phosphorus chunks lodged in the item, they could dissolve thus creating a potential safety hazard when it is removed from the water.

EPA asked why they weren't immediately notified of the incident. USACE and IAGWSP explained that while it was concerning that the Fire Department was able to respond directly to a UXO work site, the incident was not unexpected and was not a result of any deficiency. Standard protocol for a White Phosphorus item was being followed at all times. Furthermore IAGWSP has been coordinating over the last few days with USACE and Range Control to obtain the details of the incident in order to accurately relay it to the agencies.

MassDEP asked if the Fire Department understood that their response could have resulted in a more hazardous event. USACE explained that their UXO personnel met informally with the Fire Department earlier this week to discuss their protocols when responding to incidents in the Impact Area. IAGWSP has suggested a meeting between IAGWSP, USACE, Camp Edwards and JBCC Fire Department personnel to review the SOPs for Impact Area fires where there is a UXO risk. In addition, IAGWSP noted that they had talked with Jake McCumber and he would be using the incident as a catalyst to discuss with the base about securing approvals and funding for prescribed fires.

The Small Arms soil sampling at Former B and Former C Ranges were reviewed and discussed. Maps showing the recent sampling areas and results were displayed. At the Former C Range, the average concentration for the top 1 foot is slightly over 100 mg/Kg (less than the 200 mg/Kg standard) and therefore delineation is complete. One area will be excavated.

In the Former B Range, grids with elevated concentrations still remain and additional sampling is needed to determine the extent. The IAGWSP will propose three new sampling grids.

At the J-2 Range, a small burial pit was uncovered two feet deep in grid N21. It contained 12 mortars however it was not clear if they were actual high explosive rounds or if they were components that had been reused because although the items were marked "HE", there were holes drilled in them which is more consistent with inert rounds. The items will be moved to the holding area and disposed of in the BEM. The soil will be sampled for explosives and perchlorate.

This grid is being 100% investigated and while there is EM-61 signal data showing a response, the signal at this particular location is lower than those that were acted on in the past. IAGWSP is reviewing the entire range for additional areas with similar EM-61 features. The J-2 Range fieldwork should be

completed this week and IAGWSP will provide a summary project note including findings and recommendations.

Demo 1 Off-Site Real Estate Update

USACE explained that the archeological survey was completed and nothing was uncovered. The long-eared bat survey was completed and a significant number of bats were found. USACE is waiting for reports detailing the results of both surveys which will be included with the REC for resubmittal and finalization. Once the REC is completed, the real estate easement can be completed. The results of the surveys will not require a change to the design and therefore the wellfield design project note can be finalized. IAGWSP noted that due to the discovery of long-eared bats on the site, construction cannot begin until 1 October.

Drilling Update

Currently the rig is installing MW-647. Once complete it will move to the Demo 1 pilot boring for the new source area extraction well. Surface clearance has been completed at the U Range and it is anticipated the rig can move to that location in a couple of weeks. USACE is going to try and get the IBC well location ready so that the rig can move there during this mobilization.

Action Items

The action items were discussed and updated.

JBCC Cleanup Team Meeting

The JBCC Cleanup Team (JBCCCT), formerly the MMR Cleanup Team (MMRCT) is next scheduled to meet on October 14, 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 July through 31 July 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. 219 for June 2015 7/10/2015
- Final J-2 Range Eastern 2014 Environmental Monitoring Work Plan and J-2 Range Northern 2014 Environmental Monitoring Work Plan 7/06/2015
- Final Small Arms Ranges 2015 Annual Interim Environmental Monitoring Report 7/15/2015
- J-2 Range Phase 2 Confirmatory Sampling For Areas 1, 2 and 3 Project Note 7/30/2015

3. SCHEDULED ACTIONS

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

- CIA 2014 Source Report;
- CIA Phase II Work Plan;
- CIA Groundwater Treatment Design;
- Demolition Area 1 Startup Plan;
- Demolition Area 1 2015 Environmental Monitoring Report;
- Demolition Area 2 2015 Environmental Monitoring Report;
- Demolition Area 2 Decision Document Addendum;
- J-2 Range Project Note for Additional Wells to Evaluate Source Response;
- J-3 Range Decision Document;
- Small Arms Ranges Decision Document;
- Training Areas Draft Investigation Report;
- J-1 Range Northern and J-1 Range Southern 2015 Environmental Monitoring Report;
- Gun & Mortar Firing Positions Groundwater Monitoring Well Abandonment Project Note;
- Corrective Action Memo for BEM; and
- Land Use Controls Annual Report.

TABLE 1
Sampling Progress: 1 July to 31 July 2015

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
J3 Range	90PZ0211	90PZ0211_F15	N	07/30/2015	Ground Water	80	110
J3 Range	MW-576M3	MW-576M3_F15	N	07/30/2015	Ground Water	98.9	108.9
J3 Range	MW-576M2	MW-576M2_F15	N	07/30/2015	Ground Water	133.9	143.9
J3 Range	MW-576M2	MW-576M2_F15D	FD	07/30/2015	Ground Water	133.9	143.9
J3 Range	MW-576M1	MW-576M1_F15	N	07/30/2015	Ground Water	173.9	183.9
J3 Range	LKSNK0006	LKSNK0006_F15	N	07/28/2015	Ground Water	0	1
J3 Range	LKSNK0005	LKSNK0005_F15	N	07/28/2015	Surface Water	0	4
J3 Range	LKSNK0007	LKSNK0007_F15	N	07/28/2015	Ground Water	0	4
J3 Range	MW-232M2	MW-232M2_F15	N	07/27/2015	Ground Water	61	66
J3 Range	MW-232M1	MW-232M1_F15	N	07/27/2015	Ground Water	77.5	82.5
L Range	MW-242M1	MW-242M1_F15	N	07/27/2015	Ground Water	235	245
L Range	MW-595M2	MW-595M2_F15	N	07/27/2015	Ground Water	205.3	215.3
L Range	MW-595M1	MW-595M1_F15	N	07/27/2015	Ground Water	255.3	265.3
L Range	MW-596M1	MW-596M1_F15	N	07/27/2015	Ground Water	231.1	241.1
J1 Range Southern	BH-647	J1SP-3_301-306	N	07/24/2015	GW Profile	301	306
J1 Range Southern	BH-647	J1SP-3_281-286	N	07/23/2015	GW Profile	281	286
J1 Range Southern	BH-647	J1SP-3_271-276	N	07/23/2015	GW Profile	271	276
J3 Range	MW-636M2	MW-636M2_F15	N	07/22/2015	Ground Water	110.5	120.5
J3 Range	MW-636M1	MW-636M1_F15	N	07/22/2015	Ground Water	141.6	151.6
J1 Range Southern	BH-647	J1SP-3_251-256	N	07/22/2015	GW Profile	251	256
J3 Range	MW-171M2	MW-171M2_F15	N	07/22/2015	Ground Water	81	86
J1 Range Southern	BH-647	J1SP-3_241-246	N	07/21/2015	GW Profile	241	246
J1 Range Southern	BH-647	J1SP-3_231-236	N	07/21/2015	GW Profile	231	236
J3 Range	MW-217M3	MW-217M3_F15	N	07/21/2015	Ground Water	101	106
J3 Range	MW-217M2	MW-217M2_F15	N	07/21/2015	Ground Water	138	143
J1 Range Southern	BH-647	J1SP-3_221-226	N	07/21/2015	GW Profile	221	226
J3 Range	90PZ0204	90PZ0204_F15	N	07/21/2015	Ground Water	80	85
J1 Range Southern	BH-647	J1SP-3_211-216	N	07/21/2015	GW Profile	211	216
J1 Range Southern	BH-647	J1SP-3_201-206	N	07/20/2015	GW Profile	201	206
J1 Range Southern	BH-647	J1SP-3_201-206D	FD	07/20/2015	GW Profile	201	206
J1 Range Southern	BH-647	J1SP-3_191-196	N	07/20/2015	GW Profile	191	196
J1 Range Southern	BH-647	J1SP-3_191-196D	FD	07/20/2015	GW Profile	191	196
J3 Range	MW-329M2	MW-329M2_F15	N	07/20/2015	Ground Water	150.1	160.1
J1 Range Southern	BH-647	J1SP-3_181-186	N	07/20/2015	GW Profile	181	186
J3 Range	MW-329M1	MW-329M1_F15	N	07/20/2015	Ground Water	180	190
J1 Range Southern	BH-647	J1SP-3_171-176	N	07/20/2015	GW Profile	171	176
J1 Range Southern	BH-647	J1SP-3_161-166	N	07/20/2015	GW Profile	161	166
J3 Range	MW-343M3	MW-343M3_F15	N	07/20/2015	Ground Water	110.1	120.1
J1 Range Southern	BH-647	J1SP-3_151-156	N	07/20/2015	GW Profile	151	156
J3 Range	MW-343M2	MW-343M2_F15	N	07/20/2015	Ground Water	166.8	171.8
J1 Range Southern	BH-647	J1SP-3_141-146	N	07/20/2015	GW Profile	141	146
J3 Range	MW-343M1	MW-343M1_F15	N	07/20/2015	Ground Water	214.8	224.8
J1 Range Southern	BH-647	J1SP-3_131-136	N	07/20/2015	GW Profile	131	136
J1 Range Southern	BH-647	J1SP-3_121-126	N	07/20/2015	GW Profile	121	126
J3 Range	90MP0059B	90MP0059B_F15	N	07/16/2015	Ground Water	116.4	118.9
J3 Range	MW-218M3	MW-218M3_F15	N	07/16/2015	Ground Water	78	83
J3 Range	MW-143M3	MW-143M3_F15	N	07/16/2015	Ground Water	107	112
J3 Range	MW-143M2	MW-143M2_F15	N	07/16/2015	Ground Water	117	122
J1 Range Southern	BH-646	J1SP-2_301-306	N	07/16/2015	GW Profile	301	306
J3 Range	MW-143M1	MW-143M1_F15	N	07/16/2015	Ground Water	144	154
J3 Range	MW-227M3	MW-227M3_F15	N	07/15/2015	Ground Water	65	75
J3 Range	MW-227M2	MW-227M2_F15	N	07/15/2015	Ground Water	110	120
J3 Range	MW-227M1	MW-227M1_F15	N	07/15/2015	Ground Water	130	140
J1 Range Southern	BH-646	J1SP-2_281-286	N	07/15/2015	GW Profile	281	286
J3 Range	MW-163S	MW-163S_F15	N	07/15/2015	Ground Water	38	48
J3 Range	MW-163S	MW-163S_F15D	FD	07/15/2015	Ground Water	38	48
J1 Range Southern	BH-646	J1SP-2_271-276	N	07/15/2015	GW Profile	271	276

N = Normal Sample
 FD = Field Duplicate

TABLE 1
Sampling Progress: 1 July to 31 July 2015

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
J3 Range	MW-197M3	MW-197M3_F15	N	07/15/2015	Ground Water	60.2	65.2
J3 Range	MW-197M2	MW-197M2_F15	N	07/15/2015	Ground Water	80.2	85.2
J1 Range Southern	BH-646	J1SP-2_261-266	N	07/14/2015	GW Profile	261	266
J3 Range	MW-144M2	MW-144M2_F15	N	07/14/2015	Ground Water	130	140
J1 Range Southern	BH-646	J1SP-2_251-256	N	07/14/2015	GW Profile	251	256
J3 Range	MW-243M2	MW-243M2_F15	N	07/14/2015	Ground Water	84.5	94.5
J3 Range	MW-243M1	MW-243M1_F15	N	07/14/2015	Ground Water	114.5	124.5
J1 Range Southern	BH-646	J1SP-2_241-246	N	07/14/2015	GW Profile	241	246
J3 Range	MW-295M2	MW-295M2_F15	N	07/14/2015	Ground Water	117	127
J1 Range Southern	BH-646	J1SP-2_231-236	N	07/14/2015	GW Profile	231	236
J3 Range	MW-295M1	MW-295M1_F15	N	07/14/2015	Ground Water	145	155
J3 Range	MW-359M2	MW-359M2_F15	N	07/14/2015	Ground Water	148.6	158.6
J1 Range Southern	BH-646	J1SP-2_221-226	N	07/14/2015	GW Profile	221	226
J1 Range Southern	BH-646	J1SP-2_211-216	N	07/13/2015	GW Profile	211	216
J3 Range	MW-250M3	MW-250M3_F15	N	07/13/2015	Ground Water	95	105
J3 Range	MW-250M2	MW-250M2_F15	N	07/13/2015	Ground Water	145	155
J3 Range	MW-250M2	MW-250M2_F15D	FD	07/13/2015	Ground Water	145	155
J1 Range Southern	BH-646	J1SP-2_201-206	N	07/13/2015	GW Profile	201	206
J1 Range Southern	BH-646	J1SP-2_201-206D	FD	07/13/2015	GW Profile	201	206
J3 Range	MW-250M1	MW-250M1_F15	N	07/13/2015	Ground Water	185	195
J1 Range Southern	BH-646	J1SP-2_191-196	N	07/13/2015	GW Profile	191	196
J1 Range Southern	BH-646	J1SP-2_191-196D	FD	07/13/2015	GW Profile	191	196
J3 Range	MW-247M3	MW-247M3_F15	N	07/13/2015	Ground Water	95	105
J1 Range Southern	BH-646	J1SP-2_181-186	N	07/13/2015	GW Profile	181	186
J3 Range	MW-247M2	MW-247M2_F15	N	07/13/2015	Ground Water	125	135
J3 Range	MW-247M1	MW-247M1_F15	N	07/13/2015	Ground Water	180	190
J1 Range Southern	BH-646	J1SP-2_171-176	N	07/13/2015	GW Profile	171	176
J1 Range Southern	BH-646	J1SP-2_161-166	N	07/10/2015	GW Profile	161	166
J1 Range Southern	BH-646	J1SP-2_151-156	N	07/10/2015	GW Profile	151	156
J1 Range Southern	BH-646	J1SP-2_141-146	N	07/10/2015	GW Profile	141	146
J1 Range Southern	BH-646	J1SP-2_131-136	N	07/10/2015	GW Profile	131	136
J1 Range Southern	BH-646	J1SP-2_121-126	N	07/10/2015	GW Profile	121	126
J3 Range	MW-193S	MW-193S_F15	N	07/09/2015	Ground Water	32.5	37.5
J3 Range	MW-198M4	MW-198M4_F15	N	07/09/2015	Ground Water	70	75
J3 Range	MW-198M4	MW-198M4_F15D	FD	07/09/2015	Ground Water	70	75
Demolition Area 1	D1-EFF	D1-EFF-60A	N	07/09/2015	Process Water	0	0
Demolition Area 1	D1-MID-2	D1-MID-2-60A	N	07/09/2015	Process Water	0	0
Demolition Area 1	D1-MID-1	D1-MID-1-60A	N	07/09/2015	Process Water	0	0
Demolition Area 1	D1-INF	D1-INF-60A	N	07/09/2015	Process Water	0	0
J3 Range	MW-198M3	MW-198M3_F15	N	07/09/2015	Ground Water	100	105
J3 Range	MW-198M3	MW-198M3_F15D	FD	07/09/2015	Ground Water	100	105
Demolition Area 1	FPR-2-EFF-A	FPR-2-EFF-A-112A	N	07/09/2015	Process Water	0	0
Demolition Area 1	FPR-2-GAC-MID3A	FPR-2-GAC-MID3A-112A	N	07/09/2015	Process Water	0	0
J3 Range	MW-198M2	MW-198M2_F15	N	07/09/2015	Ground Water	120	125
Demolition Area 1	FPR2-POST-IX-A	FPR2-POST-IX-A-112A	N	07/09/2015	Process Water	0	0
Demolition Area 1	FPR-2-INF	FPR-2-INF-112A	N	07/09/2015	Process Water	0	0
Demolition Area 1	PR-EFF	PR-EFF-112A	N	07/09/2015	Process Water	0	0
Demolition Area 1	PR-MID-2	PR-MID-2-112A	N	07/09/2015	Process Water	0	0
Demolition Area 1	PR-MID-1	PR-MID-1-112A	N	07/09/2015	Process Water	0	0
Demolition Area 1	PR-INF	PR-INF-112A	N	07/09/2015	Process Water	0	0
J3 Range	MW-198M1	MW-198M1_F15	N	07/09/2015	Ground Water	150	155
J3 Range	MW-193M1	MW-193M1_F15	N	07/08/2015	Ground Water	57.5	62.5
J3 Range	MW-193M1	MW-193M1_F15D	FD	07/08/2015	Ground Water	57.5	62.5
J3 Range	J3-EFF	J3-EFF-106A	N	07/08/2015	Process Water	0	0
J3 Range	J3-MID-2	J3-MID-2-106A	N	07/08/2015	Process Water	0	0
J3 Range	J3-MID-1	J3-MID-1-106A	N	07/08/2015	Process Water	0	0
J3 Range	J3-INF	J3-INF-106A	N	07/08/2015	Process Water	0	0

N = Normal Sample
 FD = Field Duplicate

TABLE 1
Sampling Progress: 1 July to 31 July 2015

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
J3 Range	MW-157M3	MW-157M3_F15	N	07/08/2015	Ground Water	70	80
J1 Range Southern	J1S-EFF	J1S-EFF-92A	N	07/08/2015	Process Water	0	0
J3 Range	MW-157M2	MW-157M2_F15	N	07/08/2015	Ground Water	110	120
J1 Range Southern	J1S-MID-2	J1S-MID-2-92A	N	07/08/2015	Process Water	0	0
J1 Range Southern	J1S-INF-2	J1S-INF-2-92A	N	07/08/2015	Process Water	0	0
J3 Range	MW-157M1	MW-157M1_F15	N	07/08/2015	Ground Water	154	164
Central Impact Area	CIA2-EFF	CIA2-EFF-18A	N	07/08/2015	Process Water	0	0
Central Impact Area	CIA2-MID2	CIA2-MID2-18A	N	07/08/2015	Process Water	0	0
Central Impact Area	CIA2-MID1	CIA2-MID1-18A	N	07/08/2015	Process Water	0	0
Central Impact Area	CIA2-INF	CIA2-INF-18A	N	07/08/2015	Process Water	0	0
J3 Range	MW-142M2	MW-142M2_F15	N	07/08/2015	Ground Water	140	150
Central Impact Area	CIA1-EFF	CIA1-EFF-18A	N	07/08/2015	Process Water	0	0
Central Impact Area	CIA1-MID2	CIA1-MID2-18A	N	07/08/2015	Process Water	0	0
Central Impact Area	CIA1-MID1	CIA1-MID1-18A	N	07/08/2015	Process Water	0	0
Central Impact Area	CIA1-INF	CIA1-INF-18A	N	07/08/2015	Process Water	0	0
J3 Range	MW-155M1	MW-155M1_F15	N	07/08/2015	Ground Water	124	134
J3 Range	90MW0054	90MW0054_F15	N	07/07/2015	Ground Water	107	112
J3 Range	90MW0054	90MW0054_F15D	FD	07/07/2015	Ground Water	107	112
J2 Range Eastern	J2E-EFF-IH	J2E-EFF-IH-82A	N	07/07/2015	Process Water	0	0
J2 Range Eastern	J2E-MID-2H	J2E-MID-2H-82A	N	07/07/2015	Process Water	0	0
J2 Range Eastern	J2E-MID-1H	J2E-MID-1H-82A	N	07/07/2015	Process Water	0	0
J3 Range	J3EW0032	J3EW0032_F15	N	07/07/2015	Ground Water	102	152
J3 Range	J3EW0032	J3EW0032_F15D	FD	07/07/2015	Ground Water	102	152
J2 Range Eastern	J2E-MID-2I	J2E-MID-2I-82A	N	07/07/2015	Process Water	0	0
J2 Range Eastern	J2E-MID-1I	J2E-MID-1I-82A	N	07/07/2015	Process Water	0	0
J2 Range Eastern	J2E-INF-I	J2E-INF-I-82A	N	07/07/2015	Process Water	0	0
J3 Range	90EW0001	90EW0001_F15	N	07/07/2015	Ground Water	83.1	143.8
J3 Range	J3EWIP1	J3EWIP1_F15	N	07/07/2015	Ground Water	153	193
J3 Range	J3EWIP1	J3EWIP1_F15D	FD	07/07/2015	Ground Water	153	193
J3 Range	J3-MW-1-B	J3-MW-1-B_F15	N	07/07/2015	Ground Water	175.6	185.6
J2 Range Eastern	J2E-EFF-K	J2E-EFF-K-82A	N	07/07/2015	Process Water	0	0
J2 Range Eastern	J2E-MID-2K	J2E-MID-2K-82A	N	07/07/2015	Process Water	0	0
J2 Range Eastern	J2E-MID-1K	J2E-MID-1K-82A	N	07/07/2015	Process Water	0	0
J2 Range Eastern	J2E-INF-K	J2E-INF-K-82A	N	07/07/2015	Process Water	0	0
J2 Range Eastern	J2E-EFF-J	J2E-EFF-J-82A	N	07/07/2015	Process Water	0	0
J2 Range Eastern	J2E-MID-2J	J2E-MID-2J-82A	N	07/07/2015	Process Water	0	0
J2 Range Eastern	J2E-MID-1J	J2E-MID-1J-82A	N	07/07/2015	Process Water	0	0
J2 Range Eastern	J2E-INF-J	J2E-INF-J-82A	N	07/07/2015	Process Water	0	0
J3 Range	J3-MW-1-C	J3-MW-1-C_F15	N	07/07/2015	Ground Water	203.6	213.6
J2 Range Northern	J2N-EFF-G	J2N-EFF-G-106A	N	07/06/2015	Process Water	0	0
J2 Range Northern	J2N-MID-2G	J2N-MID-2G-106A	N	07/06/2015	Process Water	0	0
J2 Range Northern	J2N-MID-1G	J2N-MID-1G-106A	N	07/06/2015	Process Water	0	0
J2 Range Northern	J2N-INF-G	J2N-INF-G-106A	N	07/06/2015	Process Water	0	0
J2 Range Northern	J2N-EFF-EF	J2N-EFF-EF-106A	N	07/06/2015	Process Water	0	0
J2 Range Northern	J2N-MID-2F	J2N-MID-2F-106A	N	07/06/2015	Process Water	0	0
J2 Range Northern	J2N-MID-1F	J2N-MID-1F-106A	N	07/06/2015	Process Water	0	0
J2 Range Northern	J2N-INF-EF	J2N-INF-EF-106A	N	07/06/2015	Process Water	0	0
J2 Range Northern	J2N-MID-2E	J2N-MID-2E-106A	N	07/06/2015	Process Water	0	0
J2 Range Northern	J2N-MID-1E	J2N-MID-1E-106A	N	07/06/2015	Process Water	0	0
J1 Range Northern	J1N-EFF	J1N-EFF-21A	N	07/06/2015	Process Water	0	0
J1 Range Northern	J1N-MID2	J1N-MID2-21A	N	07/06/2015	Process Water	0	0
J1 Range Northern	J1N-MID1	J1N-MID1-21A	N	07/06/2015	Process Water	0	0
J1 Range Northern	J1N-INF2	J1N-INF2-21A	N	07/06/2015	Process Water	0	0
Former B Range	FBR09	MISFBR09-A	N	07/01/2015	Soil	0	0.25
Former B Range	FBR07	MISFBR07-A	N	07/01/2015	Soil	0	0.25
Former B Range	FBR08	MISFBR08-A_R2	FR	07/01/2015	Soil	0	0.25
Former B Range	FBR08	MISFBR08-A_R1	FR	07/01/2015	Soil	0	0.25

N = Normal Sample
 FD = Field Duplicate

TABLE 1
Sampling Progress: 1 July to 31 July 2015

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
Former B Range	FBR08	MISFBR08-A	N	07/01/2015	Soil	0	0.25
Former C Range	FCR03	MISFCR03-B	N	06/30/2015	Soil	0.5	1
Former C Range	FCR07	MISFCR07-B	N	06/30/2015	Soil	0.5	1
J1 Range Southern	BH-645	J1SP-1_296-301	N	06/30/2015	GW Profile	296	301
J1 Range Southern	BH-645	J1SP-1_286-291	N	06/30/2015	GW Profile	286	291
Former C Range	FCR02	MISFCR02-B	N	06/30/2015	Soil	0.5	1
J1 Range Southern	BH-645	J1SP-1_276-281	N	06/30/2015	GW Profile	276	281

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received July 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
Northwest Corner	RSNW01	RSNW01_S15	0	0	06/24/2015	SW6850	Perchlorate	0.36		UG/L	2.0		0.015	0.20
Northwest Corner	RSNW06	RSNW06_S15	0	0	06/24/2015	SW6850	Perchlorate	0.22		UG/L	2.0		0.015	0.20
Northwest Corner	MW-284M2	MW-284M2_S15	45	55	06/24/2015	SW6850	Perchlorate	0.87		UG/L	2.0		0.015	0.20
Northwest Corner	MW-284M2	MW-284M2_S15D	45	55	06/24/2015	SW6850	Perchlorate	0.81		UG/L	2.0		0.015	0.20
Northwest Corner	MW-284M1	MW-284M1_S15	115	125	06/24/2015	SW6850	Perchlorate	0.14	J	UG/L	2.0		0.015	0.20
Northwest Corner	MW-270S	MW-270S_S15	22	32	06/24/2015	SW6850	Perchlorate	0.16	J	UG/L	2.0		0.015	0.20
Northwest Corner	MW-270D	MW-270D_S15	132	137	06/24/2015	SW6850	Perchlorate	0.074	J	UG/L	2.0		0.015	0.20
Northwest Corner	MW-270D	MW-270D_S15	132	137	06/24/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.25		UG/L	0.60		0.025	0.20
Northwest Corner	MW-270M1	MW-270M1_S15	74	79	06/24/2015	SW6850	Perchlorate	0.26		UG/L	2.0		0.015	0.20
Northwest Corner	MW-283M1	MW-283M1_S15	38	48	06/24/2015	SW6850	Perchlorate	0.12	J	UG/L	2.0		0.015	0.20
Northwest Corner	MW-323M1	MW-323M1_S15	195	205	06/23/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.99		UG/L	0.60	X	0.025	0.20
Northwest Corner	MW-323M1	MW-323M1_S15D	195	205	06/23/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.92		UG/L	0.60	X	0.025	0.20
Northwest Corner	MW-279S	MW-279S_S15	66	76	06/23/2015	SW6850	Perchlorate	0.23		UG/L	2.0		0.015	0.20
Northwest Corner	MW-279M2	MW-279M2_S15	83	88	06/23/2015	SW6850	Perchlorate	1.2		UG/L	2.0		0.015	0.20
Northwest Corner	MW-279M1	MW-279M1_S15	96	106	06/23/2015	SW6850	Perchlorate	0.23		UG/L	2.0		0.015	0.20
Northwest Corner	MW-314S	MW-314S_S15	24	34	06/22/2015	SW6850	Perchlorate	0.36		UG/L	2.0		0.015	0.20
Northwest Corner	MW-297M1	MW-297M1_S15	92	102	06/22/2015	SW6850	Perchlorate	0.34		UG/L	2.0		0.015	0.20
Western Boundary	4036000-04G	4036000-04G_15Q2	55	65	06/22/2015	SW6850	Perchlorate	0.21		UG/L	2.0		0.015	0.20
Western Boundary	4036000-04G	4036000-04G_15Q2D	55	65	06/22/2015	SW6850	Perchlorate	0.21		UG/L	2.0		0.015	0.20
Western Boundary	4036000-03G	4036000-03G_15Q2	50	60	06/22/2015	SW6850	Perchlorate	0.14	J	UG/L	2.0		0.015	0.20
Western Boundary	4036000-06G	4036000-06G_15Q2	108	128	06/22/2015	SW6850	Perchlorate	0.097	J	UG/L	2.0		0.015	0.20
Western Boundary	4036000-01G	4036000-01G_15Q2	38	70	06/22/2015	SW6850	Perchlorate	0.12	J	UG/L	2.0		0.015	0.20
Central Impact Area	MW-207M1	MW-207M1_S15	254	264	06/16/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.20		UG/L	0.60		0.025	0.20
Central Impact Area	MW-607M3	MW-607M3_S15	157.4	167.4	06/16/2015	SW6850	Perchlorate	0.13	J	UG/L	2.0		0.015	0.20
Central Impact Area	MW-607M3	MW-607M3_S15	157.4	167.4	06/16/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.4		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-607M2	MW-607M2_S15	177.4	187.4	06/16/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	5.8		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-607M2	MW-607M2_S15D	177.4	187.4	06/16/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	5.9		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-607M1	MW-607M1_S15	207.4	217.4	06/16/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.0		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-176M1	MW-176M1_S15	270	280	06/15/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.38		UG/L	400		0.019	0.20
Central Impact Area	MW-176M1	MW-176M1_S15	270	280	06/15/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	4.1		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-609M2	MW-609M2_S15	182.4	192.4	06/15/2015	SW6850	Perchlorate	0.22		UG/L	2.0		0.015	0.20
Central Impact Area	MW-609M1	MW-609M1_S15	210.4	220.4	06/15/2015	SW6850	Perchlorate	0.24		UG/L	2.0		0.015	0.20
Central Impact Area	MW-609M1	MW-609M1_S15	210.4	220.4	06/15/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.2		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-223M2	MW-223M2_S15	185	195	06/15/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.63		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-629M2	MW-629M2_R3	186.9	196.9	06/11/2015	SW6850	Perchlorate	0.66		UG/L	2.0		0.015	0.20
Central Impact Area	MW-629M2	MW-629M2_R3	186.9	196.9	06/11/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.2		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-629M2	MW-629M2_R3D	186.9	196.9	06/11/2015	SW6850	Perchlorate	0.70		UG/L	2.0		0.015	0.20
Central Impact Area	MW-629M1	MW-629M1_R3	216.9	226.9	06/11/2015	SW6850	Perchlorate	0.043	J	UG/L	2.0		0.015	0.20
Central Impact Area	MW-629M1	MW-629M1_R3	216.9	226.9	06/11/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	17.9		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-629M1	MW-629M1_R3D	216.9	226.9	06/11/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	17.8		UG/L	0.60	X	0.025	0.20

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

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received July 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
Central Impact Area	MW-638M2	MW-638M2_R3	204.2	214.2	06/11/2015	SW6850	Perchlorate	0.37		UG/L	2.0		0.015	0.20
Central Impact Area	MW-638M2	MW-638M2_R3	204.2	214.2	06/11/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.67		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-638M2	MW-638M2_R3D	204.2	214.2	06/11/2015	SW6850	Perchlorate	0.37		UG/L	2.0		0.015	0.20
Central Impact Area	MW-633M2	MW-633M2_R3	197	207	06/10/2015	SW6850	Perchlorate	0.022	J	UG/L	2.0		0.015	0.20
Central Impact Area	MW-633M2	MW-633M2_R3	197	207	06/10/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.56		UG/L	0.60		0.025	0.20
Central Impact Area	MW-618M2	MW-618M2_R3	190.5	200.5	06/10/2015	SW6850	Perchlorate	0.084	J	UG/L	2.0		0.015	0.20
Central Impact Area	MW-618M1	MW-618M1_R3	238.5	248.5	06/10/2015	SW6850	Perchlorate	0.095	J	UG/L	2.0		0.015	0.20
Central Impact Area	MW-608M2	MW-608M2_S15	253.4	263.4	06/09/2015	SW6850	Perchlorate	0.037	J	UG/L	2.0		0.015	0.20
Central Impact Area	MW-608M2	MW-608M2_S15	253.4	263.4	06/09/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.20		UG/L	400		0.019	0.20
Central Impact Area	MW-608M2	MW-608M2_S15	253.4	263.4	06/09/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	4.9		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-608M2	MW-608M2_S15D	253.4	263.4	06/09/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.21		UG/L	400		0.019	0.20
Central Impact Area	MW-608M2	MW-608M2_S15D	253.4	263.4	06/09/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	4.8		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-608M1	MW-608M1_S15	267.4	277.4	06/09/2015	SW6850	Perchlorate	0.020	J	UG/L	2.0		0.015	0.20
Central Impact Area	MW-608M1	MW-608M1_S15	267.4	277.4	06/09/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.7		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-249M2	MW-249M2_S15	174	184	06/09/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.78		UG/L	0.60	X	0.025	0.20
Northwest Corner	MW-277S	MW-277S_S15	102	112	06/03/2015	SW6850	Perchlorate	0.19	J	UG/L	2.0		0.015	0.20
Northwest Corner	MW-278S	MW-278S_S15	80	90	06/03/2015	SW6850	Perchlorate	0.22		UG/L	2.0		0.015	0.20
Northwest Corner	MW-278M2	MW-278M2_S15	97	102	06/03/2015	SW6850	Perchlorate	0.58		UG/L	2.0		0.015	0.20
Northwest Corner	MW-278M1	MW-278M1_S15	113	123	06/03/2015	SW6850	Perchlorate	0.51		UG/L	2.0		0.015	0.20
Western Boundary	MW-02-09M1	MW-02-09M1_S15	74	84	06/02/2015	SW6850	Perchlorate	0.18	J	UG/L	2.0		0.015	0.20
Western Boundary	MW-213M3	MW-213M3_S15	77	82	05/27/2015	SW6850	Perchlorate	0.15	J	UG/L	2.0		0.015	0.20
Western Boundary	MW-213M2	MW-213M2_S15	89	99	05/27/2015	SW6850	Perchlorate	0.27		UG/L	2.0		0.015	0.20
Western Boundary	MW-213M2	MW-213M2_S15D	89	99	05/27/2015	SW6850	Perchlorate	0.28		UG/L	2.0		0.015	0.20
Western Boundary	MW-80M2	MW-80M2_S15	99	109	05/27/2015	SW6850	Perchlorate	0.051	J	UG/L	2.0		0.015	0.20
Western Boundary	MW-80M1	MW-80M1_S15	130	140	05/27/2015	SW6850	Perchlorate	0.13	J	UG/L	2.0		0.015	0.20
Western Boundary	MW-233M3	MW-233M3_S15	231	241	05/27/2015	SW6850	Perchlorate	0.13	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-303M3	MW-303M3_S15	139.7	149.7	05/26/2015	SW6850	Perchlorate	0.027	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-303M3	MW-303M3_S15	139.7	149.7	05/26/2015	SW8330	4-Amino-2,6-dinitrotoluene	0.38		UG/L	7.3		0.023	0.20
J1 Range Northern	MW-303M2	MW-303M2_S15	235.1	245.1	05/26/2015	SW6850	Perchlorate	1.7		UG/L	2.0		0.015	0.20
J1 Range Northern	MW-303M2	MW-303M2_S15	235.1	245.1	05/26/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	12.8		UG/L	0.60	X	0.025	0.20
J1 Range Northern	MW-303M2	MW-303M2_S15	235.1	245.1	05/26/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	4.0		UG/L	400		0.019	0.20
J1 Range Northern	MW-590M2	MW-590M2_S15	238	248	05/26/2015	SW6850	Perchlorate	0.77		UG/L	2.0		0.015	0.20
J1 Range Northern	MW-590M1	MW-590M1_S15	258	268	05/26/2015	SW6850	Perchlorate	0.026	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-584M2	MW-584M2_S15	228	238	05/26/2015	SW6850	Perchlorate	0.12	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-584M1	MW-584M1_S15	248	258	05/26/2015	SW6850	Perchlorate	10.2		UG/L	2.0	X	0.030	0.40
J1 Range Northern	MW-401M3	MW-401M3_S15	228.5	238.5	05/21/2015	SW6850	Perchlorate	0.41		UG/L	2.0		0.015	0.20
J1 Range Northern	MW-245M2	MW-245M2_S15	204	214	05/21/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	6.8		UG/L	400		0.019	0.20
J1 Range Northern	MW-245M2	MW-245M2_S15	204	214	05/21/2015	SW6850	Perchlorate	72.2		UG/L	2.0	X	0.15	2.0
J1 Range Northern	MW-245M2	MW-245M2_S15	204	214	05/21/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	87.2		UG/L	0.60	X	0.20	1.6
J1 Range Northern	MW-245M2	MW-245M2_S15D	204	214	05/21/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	6.9		UG/L	400		0.019	0.20

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

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received July 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
J1 Range Northern	MW-245M2	MW-245M2_S15D	204	214	05/21/2015	SW6850	Perchlorate	71.9		UG/L	2.0	X	0.15	2.0
J1 Range Northern	MW-245M2	MW-245M2_S15D	204	214	05/21/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	88.1		UG/L	0.60	X	0.20	1.6
J1 Range Northern	MW-606M2	MW-606M2_S15	193.2	203.2	05/21/2015	SW6850	Perchlorate	0.019	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-606M1	MW-606M1_S15	233.3	243.3	05/21/2015	SW6850	Perchlorate	0.019	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-430M2	MW-430M2_S15	188.4	198.4	05/20/2015	SW6850	Perchlorate	0.020	J	UG/L	2.0		0.015	0.20
Central Impact Area	MW-626M2	MW-626M2_R2	237.2	247.2	05/20/2015	SW6850	Perchlorate	0.085	J	UG/L	2.0		0.015	0.20
Central Impact Area	MW-626M2	MW-626M2_R2	237.2	247.2	05/20/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.4		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-626M2	MW-626M2_R2D	237.2	247.2	05/20/2015	SW6850	Perchlorate	0.088	J	UG/L	2.0		0.015	0.20
Central Impact Area	MW-626M2	MW-626M2_R2D	237.2	247.2	05/20/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.4		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-626M1	MW-626M1_R2	282.2	292.2	05/20/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	3.4		UG/L	0.60	X	0.025	0.20
J1 Range Northern	MW-566M1	MW-566M1_S15	232	242	05/14/2015	SW6850	Perchlorate	7.1		UG/L	2.0	X	0.015	0.20
J1 Range Northern	MW-564M1	MW-564M1_S15	227	237	05/14/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.20		UG/L	400		0.019	0.20
J1 Range Northern	MW-564M1	MW-564M1_S15	227	237	05/14/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.5		UG/L	0.60	X	0.025	0.20
J1 Range Northern	MW-564M1	MW-564M1_S15	227	237	05/14/2015	SW6850	Perchlorate	53.8		UG/L	2.0	X	0.15	2.0
J1 Range Northern	MW-564M1	MW-564M1_S15D	227	237	05/14/2015	SW6850	Perchlorate	53.8		UG/L	2.0	X	0.15	2.0
J1 Range Northern	MW-549M2	MW-549M2_S15	187.3	197.3	05/14/2015	SW6850	Perchlorate	0.040	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-549M1	MW-549M1_S15	227.4	237.4	05/14/2015	SW6850	Perchlorate	2.4		UG/L	2.0	X	0.015	0.20
J1 Range Northern	MW-567M1	MW-567M1_S15	215.5	225.5	05/14/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	16.2		UG/L	0.60	X	0.025	0.20
J1 Range Northern	MW-567M1	MW-567M1_S15	215.5	225.5	05/14/2015	SW6850	Perchlorate	46.6		UG/L	2.0	X	0.15	2.0
J1 Range Northern	MW-567M1	MW-567M1_S15D	215.5	225.5	05/14/2015	SW6850	Perchlorate	46.5		UG/L	2.0	X	0.15	2.0
J1 Range Northern	MW-605M2	MW-605M2_S15	182.2	192.2	05/13/2015	SW6850	Perchlorate	0.042	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-605M1	MW-605M1_S15	220.2	230.2	05/13/2015	SW6850	Perchlorate	0.028	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-370M2	MW-370M2_S15	215.5	225.5	05/13/2015	SW6850	Perchlorate	0.23		UG/L	2.0		0.015	0.20
Central Impact Area	MW-370M1	MW-370M1_S15	245	255	05/13/2015	SW6850	Perchlorate	2.9		UG/L	2.0	X	0.015	0.20

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