

**MONTHLY PROGRESS REPORT #230
FOR MAY 2016**

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 May to 31 May 2016.

1. SUMMARY OF REMEDIATION ACTIONS

The following is a description of Remediation Actions (RA) underway at Camp Edwards as of May 2016. 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 continues to operate at a flow rate of 250 gpm, with over 2.361 billion gallons of water treated and re-injected as of 27 May 2016. The following Frank Perkins Road facility shut down occurred in May:

- Shut down on 26 May 2016 at 1147 for SCADA upgrade and was restarted on 26 May 2016 at 1311.

The Pew Road Mobile Treatment Unit (MTU) continues to operate at a flow rate of 105 gpm with over 468.2 million gallons of water treated and re-injected as of 27 May 2016. No Pew Road MTU shut downs occurred in May.

The Base Boundary RA was shut down on 3 April 2016 and is offline awaiting extraction well motor replacement, with over 147.6 million gallons of water treated and re-injected as of 27 May 2016.

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 27 May 2016, over 345 million gallons of water have been treated and re-injected. No J-1 Range Southern system shut downs occurred in May.

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 27 May 2016, over 302 million gallons of water have been treated and re-injected. The following J-1 Range Northern MTU shut down occurred in May:

- Extraction well EW-0001 shut down on 29 May 2016 at 0301 due to a system alarm and was restarted on 31 May 2016 at 1026.

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 27 May 2016, over 905.7 million gallons of water have been treated and re-injected. The following J-3 Range system shut downs occurred in May:

- EW-IP1 shut down on 7 May 2016 at 1623 due to a power interruption and was restarted on 9 May 2016 at 0905; and
- Shut down on 30 May 2016 at 0922 due to a power interruption and was restarted on 31 May 2016 at 0854.

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 Re-infiltration 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 27 May 2016, over 761.5 million gallons of water have been treated and re-injected. The following Northern Treatment Building shut down occurred in May:

- Shut down on 13 May 2016 at 2057 due to a system alarm and was restarted on 16 May 2016 at 0928; and
- Shut down on 20 May 2016 at 2058 due to a power interruption and was restarted on 23 May 2016 at 0740.

The Northern MTUs E and F continue to operate at a flow rate of 250 gpm. As of 27 May 2016, over 1.227 billion gallons of water have been treated and re-injected. The following J-2 Range Northern MTU shut downs occurred in May:

- MTU E was shut down on 11 May 2016 at 1318 due to a system alarm and was restarted on 11 May at 1421;
- MTUs E and F were shut down on 2 May 2016 at 1012 to troubleshoot communication issues for Extraction Well EW-0002 and were restarted on 12 May 2016 at 1115;
- MTU E shut down on 20 May 2016 at 0658 due to a system alarm and was restarted on 20 May 2016 at 0754;
- MTU F shut down on 20 May 2016 at 0612 due to a system alarm and was restarted on 20 May 2016 at 0751; and
- MTUs E and F were shut down on 23 May 2016 at 0755 for system maintenance and were restarted on 23 May 2016 at 0857.

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 27 May 2016, over 840.5 million gallons of water have been treated and re-injected. No MTU H and I shut downs occurred in May.

MTU J continues to operate at a flow rate of 120 gpm. As of 27 May 2016, over 375 million gallons of water have been treated and re-injected. The following shut down of MTU J occurred in May:

- MTU J shut down on 30 May 2016 at 0914 due to a system alarm and was restarted on 31 May 2016 at 0907.

MTU K continues to operate at a flow rate of 125 gpm. As of 27 May 2016, over 480 million gallons of water have been treated and re-injected. No MTU K shut downs occurred in May.

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 27 May 2016, over 609 million gallons of water have been treated and re-injected. No CIA treatment facility shut downs occurred in May.

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, 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 at Demolition Area 1, Demolition Area 2, J-1 Range Northern, and J-1 Range Southern.

Collected surface water samples at J-3 Range (Snake Pond).

Completed soil excavations at B Range (2nd lift), C Range (2nd lift) and Former C Range (1st lift).

Collected post-excavation soil samples in B Range, C Range and Former C Range.

Collected surface soil samples and completed excavation in soil removal grids at J-2 Range.

Surveyed and developed new monitoring wells.

Completed installation of well vault and installation of tie-in at the J-3 Range treatment plant, and continued trenching and installation of electrical and extraction well pump for new in-plume extraction well at J-3 Range.

Continued construction of the document storage room at Demolition Area 1.

Completed installation of electric poles for new in-plume extraction well and restoration of area along effluent pipeline/reinjection gallery, continued installation of electric service for new in-plume extraction well and pipeline, and continued installation of electric service and construction of access road for the leading edge system at Demolition Area 1.

Continued utility hookup, installed fiber optic cable, and completed system start up pump test at the CIA.

Performed daily inspection of BEM cover at the CIA to ensure cover is secure and intact.

Continued metalmapper collection of cued data in Phase II area 2, and continued intrusive investigation of anomalies in Phase II area 1 at the CIA.

JBCC IAGWSP Tech Update Meeting Minutes 12 May 2016

Project and Field Work Update

At the Central Impact Area, Metal Mapper continues to work in Phase II Area 2. One unit is on site the other is being repaired. Dawson continues to dig in Phase II Area 1. The projects are on schedule and going well.

The only item left for the CIA EW-3 groundwater treatment system is for Eversource to install the meter. Earlier in the week Eversource indicated to USACE that they would be making the connection today or tomorrow (May 12-13) but as of this morning they were not on-site. EPA asked MassDEP if they could reach out again to Eversource to try and find out when they will finish the work. MassDEP said that they would. EPA requested that at an upcoming technical meeting, IAGWSP provide the results of the recently completed CIA startup test.

At the Demolition Area 1 off-site system, everything is completed with the exception of the power. Most recently the fencing has been installed and the access road has been paved. After Eversource completes the connection at CIA, they will move over to Demolition Area 1. It is estimated that Eversource has a few days' worth of work to install power and then there will be approximately a week more for our contractor to finish up which includes having the town of Bourne complete an inspection.

There is no change in status to the Demolition Area 1 base boundary system. The extraction well is still down and the pump needs to be replaced. Eversource has stated that it will cost \$250K to de-energize the power line that is over the treatment system. USACE has proposed a work-around that they feel will work from a safety and operational perspective but Eversource has not responded other than to say that no work should be done in the easement area until further notice.

At the Small Arms Ranges, they are completing soil excavations at the Former C Range. They will move to Former B and D Ranges on Friday. A site visit to Former C Range is scheduled for May 13.

The drill rig will mobilize to the site on or around June 20th. There are three Demolition Area 1 wells and five J-2 East wells in this mob. Approval has been received from Natural Heritage, SHPO and U.S. Fish and Wildlife for the wells. A representative from the Wampanoag tribe had a few questions and has requested a site visit to Demolition Area 1 which is being scheduled sometime the week of May 16th. A UXO survey still needs to be completed for the J-2 East wells.

IAGWSP proposes putting any additional drilling (e.g. J-2 Range source wells) off until the fall so exceptions aren't needed from the Department of Fish and Wildlife to work during bat season.

The J-3 Range MEC investigations will resume sometime in June after the UXO crew completes the survey work for the new J-2 Range monitoring wells.

The Demolition Area 1 source area extraction well and the new J-3 Range extraction well are in but will not come online until sometime in June because the VFDs for both are on backorder. All other work has been completed.

EPA requested that IAGWSP provide a summary of what is left to complete as part of the post- Decision Document project notes for the J-2 Range.

Action Items

The action items were discussed and updated.

JBCC Cleanup Team Meeting

The JBCC Cleanup Team (JBCCCT), formerly the MMR Cleanup Team (MMRCT) was previously scheduled to meet next on May 11, 2016; this meeting has been canceled, and the next meeting date has not yet been determined. 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 May to 31 May 2016. 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 and Jonathan Bourne Library).

2. DELIVERABLES SUBMITTED

Deliverables submitted during the reporting period include the following:

- Monthly Progress Report No. 229 for April 2016 05/10/2016
- Draft L Range 2016 Annual Environmental Monitoring Report 05/20/2016

3. SCHEDULED ACTIONS

The following documents are being prepared or revised during June 2016:

- J-2 Range Project Note for Additional Wells to Evaluate Source Response;
- Training Areas Draft Investigation Report;
- Training Areas Draft Remedy Selection Plan;
- CIA Environmental Monitoring Work Plan;
- CIA Draft 2015 Source Removal Annual Report;
- Draft BIP Report;
- L Range 2016 Environmental Monitoring Report;
- J-1 Range Northern and J-1 Range Southern 2016 Environmental Monitoring Report; and
- Small Arms Ranges 2016 Annual Interim Environmental Monitoring Report.

TABLE 1
Sampling Progress: 1 May to 31 May 2016

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
Demolition Area 2	MW-311M2	MW-311M2_S16	N	05/31/2016	Ground Water	200	210
Demolition Area 2	MW-311M1	MW-311M1_S16	N	05/31/2016	Ground Water	222	232
Demolition Area 2	MW-380M2	MW-380M2_S16	N	05/31/2016	Ground Water	205.7	215.7
Demolition Area 2	MW-380M1	MW-380M1_S16	N	05/31/2016	Ground Water	226.6	236.6
Demolition Area 2	MW-160S	MW-160S_S16	N	05/26/2016	Ground Water	137.5	147.5
J3 Range	LKSNK0006	LKSNK0006_S16	N	05/26/2016	Surface Water	0	1
J3 Range	LKSNK0007	LKSNK0007_S16	N	05/26/2016	Surface Water	0	4
J3 Range	LKSNK0005	LKSNK0005_S16	N	05/26/2016	Surface Water	0	4
J3 Range	90PLT01006	90PLT01006_S16	N	05/26/2016	Process Water	0	0
Demolition Area 2	MW-161S	MW-161S_S16	N	05/25/2016	Ground Water	145.5	155.5
Demolition Area 2	MW-161S	MW-161S_S16D	FD	05/25/2016	Ground Water	145.5	155.5
Demolition Area 2	MW-16S	MW-16S_S16	N	05/25/2016	Ground Water	125	135
Demolition Area 2	MW-406M2	MW-406M2_S16	N	05/25/2016	Ground Water	202.5	212.5
Demolition Area 2	MW-406M1	MW-406M1_S16	N	05/25/2016	Ground Water	224.7	229.7
Demolition Area 2	MW-259M1	MW-259M1_S16	N	05/24/2016	Ground Water	189	199
Demolition Area 2	MW-262M1	MW-262M1_S16	N	05/24/2016	Ground Water	226	236
Demolition Area 2	MW-404M2	MW-404M2_S16	N	05/24/2016	Ground Water	200	210
Demolition Area 2	MW-404M1	MW-404M1_S16	N	05/24/2016	Ground Water	219.5	229.5
Demolition Area 2	MW-572M1	MW-572M1_S16	N	05/23/2016	Ground Water	164.9	174.9
Demolition Area 2	MW-573M2	MW-573M2_S16	N	05/23/2016	Ground Water	155.4	165.4
Demolition Area 2	MW-573M2	MW-573M2_S16D	FD	05/23/2016	Ground Water	155.4	165.4
Demolition Area 2	MW-573M1	MW-573M1_S16	N	05/23/2016	Ground Water	176.4	186.4
Demolition Area 2	MW-435M2	MW-435M2_S16	N	05/23/2016	Ground Water	149.6	159.9
Demolition Area 2	MW-435M1	MW-435M1_S16	N	05/23/2016	Ground Water	169.9	180
J1 Range Northern	MW-590M2	MW-590M2_S16	N	05/19/2016	Ground Water	238	248
J1 Range Northern	MW-590M1	MW-590M1_S16	N	05/19/2016	Ground Water	258	268
J1 Range Northern	MW-584M2	MW-584M2_S16	N	05/19/2016	Ground Water	228	238
J1 Range Northern	MW-584M1	MW-584M1_S16	N	05/19/2016	Ground Water	248	258
J1 Range Northern	J1N-INF1B	J1N-INF1B_S16	N	05/19/2016	Process Water	0	0
J1 Range Northern	J1N-INF1A	J1N-INF1A_S16	N	05/19/2016	Process Water	0	0
J1 Range Northern	MW-303M3	MW-303M3_S16	N	05/18/2016	Ground Water	139.7	149.7
Former C Range	SSFCR136-A	FCR136-A_C	FR	05/18/2016	Soil	0	0.25
J1 Range Northern	MW-303M2	MW-303M2_S16	N	05/18/2016	Ground Water	235.1	245.1
Former C Range	SSFCR136-A	FCR136-A_B	FR	05/18/2016	Soil	0	0.25
Former C Range	SSFCR136-A	FCR136-A_A	N	05/18/2016	Soil	0	0.25
J1 Range Northern	MW-245M2	MW-245M2_S16	N	05/18/2016	Ground Water	204	214
J1 Range Northern	MW-245M2	MW-245M2_S16D	FD	05/18/2016	Ground Water	204	214
B Range	SSBRNGSE01	BRNGSE01_A	N	05/18/2016	Soil	0	0.25
B Range	SSBRNGSW01	BRNGSW01_A	N	05/18/2016	Soil	0	0.25
B Range	SSBR02DRA	BR02DRA_C	FR	05/18/2016	Soil	0	0.25
B Range	SSBR02DRA	BR02DRA_B	FR	05/18/2016	Soil	0	0.25
J1 Range Southern	MW-524M1	MW-524M1_S16	N	05/18/2016	Ground Water	148	158
J1 Range Southern	MW-524M1	MW-524M1_S16D	FD	05/18/2016	Ground Water	148	158
B Range	SSBR02DRA	BR02DRA_A	N	05/18/2016	Soil	0	0.25
C Range	SSCRNGBR5-6	CRNGBRM5-6_C	FR	05/18/2016	Soil	0	0.25
C Range	SSCRNGBR5-6	CRNGBRM5-6_B	FR	05/18/2016	Soil	0	0.25
C Range	SSCRNGBR5-6	CRNGBRM5-6_A	N	05/18/2016	Soil	0	0.25
C Range	SSCRNGN01	CRNGN01_A	N	05/18/2016	Soil	0	0.25
C Range	SSCRNGMID01	CRNGMID01_A	N	05/18/2016	Soil	0	0.25
C Range	SSCRNGS01	CRNGS01_A	N	05/18/2016	Soil	0	0.25
J1 Range Northern	MW-401M3	MW-401M3_S16	N	05/17/2016	Ground Water	228.5	238.5
J1 Range Northern	MW-401M1	MW-401M1_S16	N	05/17/2016	Ground Water	256.1	266.1
J1 Range Northern	MW-606M2	MW-606M2_S16	N	05/17/2016	Ground Water	193.2	203.2
J1 Range Northern	MW-606M1	MW-606M1_S16	N	05/17/2016	Ground Water	233.3	243.3
J1 Range Northern	MW-540M1	MW-540M1_S16	N	05/17/2016	Ground Water	258	268
J1 Range Northern	MW-541M1	MW-541M1_S16	N	05/16/2016	Ground Water	210	220
J1 Range Northern	MW-430M2	MW-430M2_S16	N	05/16/2016	Ground Water	188.4	198.4
J1 Range Northern	MW-430M1	MW-430M1_S16	N	05/16/2016	Ground Water	245.2	255.2
J1 Range Northern	MW-567M1	MW-567M1_S16	N	05/16/2016	Ground Water	215.5	225.5
J1 Range Northern	MW-567M1	MW-567M1_S16D	FD	05/16/2016	Ground Water	215.5	225.5
J1 Range Northern	MW-605M2	MW-605M2_S16	N	05/16/2016	Ground Water	182.2	192.2

N = Normal Sample
FD = Field Duplicate

TABLE 1
Sampling Progress: 1 May to 31 May 2016

J1 Range Northern	MW-605M1	MW-605M1_S16	N	05/16/2016	Ground Water	220.2	230.2
J1 Range Northern	MW-370M2	MW-370M2_S16	N	05/12/2016	Ground Water	215.5	225.5
J1 Range Northern	MW-370M1	MW-370M1_S16	N	05/12/2016	Ground Water	245	255
J1 Range Northern	MW-564M1	MW-564M1_S16	N	05/12/2016	Ground Water	227	237
J1 Range Northern	MW-564M1	MW-564M1_S16D	FD	05/12/2016	Ground Water	227	237
J1 Range Northern	MW-549M2	MW-549M2_S16	N	05/12/2016	Ground Water	187.3	197.3
J1 Range Northern	MW-549M1	MW-549M1_S16	N	05/12/2016	Ground Water	227.4	237.4
J1 Range Northern	MW-566M1	MW-566M1_S16	N	05/12/2016	Ground Water	232	242
J1 Range Southern	MW-591M2	MW-591M2_S16	N	05/11/2016	Ground Water	165	175
J1 Range Southern	MW-591M1	MW-591M1_S16	N	05/11/2016	Ground Water	200	210
J1 Range Southern	MW-647M2	MW-647M2_S16	N	05/11/2016	Ground Water	189.3	199.3
J1 Range Southern	MW-647M1	MW-647M1_S16	N	05/11/2016	Ground Water	211.3	221.3
J1 Range Southern	MW-647M1	MW-647M1_S16D	FD	05/11/2016	Ground Water	211.3	221.3
J1 Range Southern	MW-592M2	MW-592M2_S16	N	05/11/2016	Ground Water	158	168
J1 Range Southern	MW-592M1	MW-592M1_S16	N	05/11/2016	Ground Water	201	211
J1 Range Southern	MW-402M2	MW-402M2_S16	N	05/10/2016	Ground Water	155.2	165.3
J1 Range Southern	MW-402M1	MW-402M1_S16	N	05/10/2016	Ground Water	190.1	200.1
J1 Range Southern	MW-403M2	MW-403M2_S16	N	05/10/2016	Ground Water	127.3	137.4
J1 Range Southern	MW-403M1	MW-403M1_S16	N	05/10/2016	Ground Water	159.9	169.9
J1 Range Southern	MW-400M2	MW-400M2_S16	N	05/10/2016	Ground Water	138.9	148.9
J1 Range Southern	MW-400M1	MW-400M1_S16	N	05/10/2016	Ground Water	192.8	202.8
J1 Range Southern	J1S-EW2-INF	J1S-EW2-INF_S16	N	05/09/2016	Process Water	0	0
J1 Range Southern	J1S-EW1-INF	J1S-EW1-INF_S16	N	05/09/2016	Process Water	0	0
Demolition Area 1	MW-432	MW-432_S16	N	05/09/2016	Ground Water	88	188
Demolition Area 1	MW-431	MW-431_S16	N	05/09/2016	Ground Water	88	188
Demolition Area 1	MW-73S	MW-73S_S16	N	05/09/2016	Ground Water	52.2	61.7
Demolition Area 1	MW-31S	MW-31S_S16	N	05/09/2016	Ground Water	98	103
Demolition Area 1	MW-31S	MW-31S_S16D	FD	05/09/2016	Ground Water	98	103
Demolition Area 1	MW-31M	MW-31M_S16	N	05/09/2016	Ground Water	113	123
Demolition Area 1	MW-31M	MW-31M_S16D	FD	05/09/2016	Ground Water	113	123
Demolition Area 1	MW-31D	MW-31D_S16	N	05/09/2016	Ground Water	133	138
Central Impact Area	CIA2-EFF	CIA2-EFF-28A	N	05/05/2016	Process Water	0	0
Central Impact Area	CIA2-MID2	CIA2-MID2-28A	N	05/05/2016	Process Water	0	0
Central Impact Area	CIA2-MID1	CIA2-MID1-28A	N	05/05/2016	Process Water	0	0
Central Impact Area	CIA2-INF	CIA2-INF-28A	N	05/05/2016	Process Water	0	0
Central Impact Area	CIA1-EFF	CIA1-EFF-28A	N	05/05/2016	Process Water	0	0
Central Impact Area	CIA1-MID2	CIA1-MID2-28A	N	05/05/2016	Process Water	0	0
Central Impact Area	CIA1-MID1	CIA1-MID1-28A	N	05/05/2016	Process Water	0	0
Central Impact Area	CIA1-INF	CIA1-INF-28A	N	05/05/2016	Process Water	0	0
Demolition Area 1	MW-19S	MW-19S_S16	N	05/04/2016	Ground Water	52.7	62.7
Demolition Area 1	MW-19S	MW-19S_S16D	FD	05/04/2016	Ground Water	52.7	62.7
J1 Range Southern	J1S-EFF	J1S-EFF-102A	N	05/04/2016	Process Water	0	0
J1 Range Southern	J1S-MID	J1S-MID-102A	N	05/04/2016	Process Water	0	0
J1 Range Southern	J1S-INF-2	J1S-INF-2-102A	N	05/04/2016	Process Water	0	0
J3 Range	J3-EFF	J3-EFF-116A	N	05/04/2016	Process Water	0	0
J3 Range	J3-MID-2	J3-MID-2-116A	N	05/04/2016	Process Water	0	0
J3 Range	J3-MID-1	J3-MID-1-116A	N	05/04/2016	Process Water	0	0
J3 Range	J3-INF	J3-INF-116A	N	05/04/2016	Process Water	0	0
Demolition Area 1	MW-274	MW-274_S16	N	05/04/2016	Ground Water	109	199
Demolition Area 1	PR-EFF	PR-EFF-122A	N	05/04/2016	Process Water	0	0
Demolition Area 1	PR-MID-2	PR-MID-2-122A	N	05/04/2016	Process Water	0	0
Demolition Area 1	PR-MID-1	PR-MID-1-122A	N	05/04/2016	Process Water	0	0
Demolition Area 1	PR-INF	PR-INF-122A	N	05/04/2016	Process Water	0	0
Demolition Area 1	FPR-2-EFF-A	FPR-2-EFF-A-122A	N	05/04/2016	Process Water	0	0
Demolition Area 1	XX9514	XX9514_S16	N	05/04/2016	Ground Water	102	112
Demolition Area 1	XX9514	XX9514_S16D	FD	05/04/2016	Ground Water	102	112
Demolition Area 1	FPR-2-GAC-MID1A	FPR-2-GAC-MID1A-122A	N	05/04/2016	Process Water	0	0
Demolition Area 1	FPR2-POST-IX-A	FPR2-POST-IX-A-122A	N	05/04/2016	Process Water	0	0
Demolition Area 1	FPR-2-INF	FPR-2-INF-122A	N	05/04/2016	Process Water	0	0
Demolition Area 1	MW-139M2	MW-139M2_S16	N	05/03/2016	Ground Water	154	164
J2 Range Eastern	J2E-EFF-IH	J2E-EFF-IH-92A	N	05/03/2016	Process Water	0	0
J2 Range Eastern	J2E-MID-2H	J2E-MID-2H-92A	N	05/03/2016	Process Water	0	0
J2 Range Eastern	J2E-MID-1H	J2E-MID-1H-92A	N	05/03/2016	Process Water	0	0

N = Normal Sample
FD = Field Duplicate

TABLE 1
Sampling Progress: 1 May to 31 May 2016

Demolition Area 1	MW-165M2	MW-165M2_S16	N	05/03/2016	Ground Water	124.5	134.5
J2 Range Eastern	J2E-MID-2I	J2E-MID-2I-92A	N	05/03/2016	Process Water	0	0
J2 Range Eastern	J2E-MID-1I	J2E-MID-1I-92A	N	05/03/2016	Process Water	0	0
J2 Range Eastern	J2E-INF-I	J2E-INF-I-92A	N	05/03/2016	Process Water	0	0
Demolition Area 1	MW-165M1	MW-165M1_S16	N	05/03/2016	Ground Water	184.5	194.5
Demolition Area 1	MW-129M3	MW-129M3_S16	N	05/03/2016	Ground Water	96	106
J2 Range Eastern	J2E-EFF-K	J2E-EFF-K-92A	N	05/03/2016	Process Water	0	0
J2 Range Eastern	J2E-MID-2K	J2E-MID-2K-92A	N	05/03/2016	Process Water	0	0
J2 Range Eastern	J2E-MID-1K	J2E-MID-1K-92A	N	05/03/2016	Process Water	0	0
J2 Range Eastern	J2E-INF-K	J2E-INF-K-92A	N	05/03/2016	Process Water	0	0
Demolition Area 1	MW-129M2	MW-129M2_S16	N	05/03/2016	Ground Water	116	126
J2 Range Eastern	J2E-EFF-J	J2E-EFF-J-92A	N	05/03/2016	Process Water	0	0
J2 Range Eastern	J2E-MID-2J	J2E-MID-2J-92A	N	05/03/2016	Process Water	0	0
J2 Range Eastern	J2E-MID-1J	J2E-MID-1J-92A	N	05/03/2016	Process Water	0	0
J2 Range Eastern	J2E-INF-J	J2E-INF-J-92A	N	05/03/2016	Process Water	0	0
Demolition Area 1	MW-129M1	MW-129M1_S16	N	05/03/2016	Ground Water	136	146
Demolition Area 1	MW-114M2	MW-114M2_S16	N	05/02/2016	Ground Water	120	130
Demolition Area 1	MW-114M1	MW-114M1_S16	N	05/02/2016	Ground Water	177	187
J2 Range Northern	J2N-EFF-G	J2N-EFF-G-116A	N	05/02/2016	Process Water	0	0
J2 Range Northern	J2N-MID-2G	J2N-MID-2G-116A	N	05/02/2016	Process Water	0	0
J2 Range Northern	J2N-MID-1G	J2N-MID-1G-116A	N	05/02/2016	Process Water	0	0
J2 Range Northern	J2N-INF-G	J2N-INF-G-116A	N	05/02/2016	Process Water	0	0
Demolition Area 1	MW-34M2	MW-34M2_S16	N	05/02/2016	Ground Water	131	141
J2 Range Northern	J2N-EFF-EF	J2N-EFF-EF-116A	N	05/02/2016	Process Water	0	0
J2 Range Northern	J2N-MID-2F	J2N-MID-2F-116A	N	05/02/2016	Process Water	0	0
J2 Range Northern	J2N-MID-1F	J2N-MID-1F-116A	N	05/02/2016	Process Water	0	0
J2 Range Northern	J2N-INF-EF	J2N-INF-EF-116A	N	05/02/2016	Process Water	0	0
Demolition Area 1	MW-34M1	MW-34M1_S16	N	05/02/2016	Ground Water	151	161
J2 Range Northern	J2N-MID-2E	J2N-MID-2E-116A	N	05/02/2016	Process Water	0	0
J2 Range Northern	J2N-MID-1E	J2N-MID-1E-116A	N	05/02/2016	Process Water	0	0
Demolition Area 1	MW-211M2	MW-211M2_S16	N	05/02/2016	Ground Water	175	185
J1 Range Northern	J1N-EFF	J1N-EFF-31A	N	05/02/2016	Process Water	0	0
J1 Range Northern	J1N-MID2	J1N-MID2-31A	N	05/02/2016	Process Water	0	0
J1 Range Northern	J1N-MID1	J1N-MID1-31A	N	05/02/2016	Process Water	0	0
Demolition Area 1	MW-211M1	MW-211M1_S16	N	05/02/2016	Ground Water	200	210
J1 Range Northern	J1N-INF2	J1N-INF2-31A	N	05/02/2016	Process Water	0	0

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
 Data Received May 2016

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-36M2	MW-36M2_S16	131	141	04/28/2016	SW6850	Perchlorate	0.19	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-36M1	MW-36M1_S16	152	162	04/28/2016	SW6850	Perchlorate	0.15	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-77M2	MW-77M2_S16	120	130	04/27/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.76		UG/L	400		0.019	0.20
Demolition Area 1	MW-77M2	MW-77M2_S16	120	130	04/27/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.98		UG/L	0.60	X	0.025	0.20
Demolition Area 1	MW-77M2	MW-77M2_S16D	120	130	04/27/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.75		UG/L	400		0.019	0.20
Demolition Area 1	MW-77M2	MW-77M2_S16D	120	130	04/27/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.97		UG/L	0.60	X	0.025	0.20
Demolition Area 1	MW-210M2	MW-210M2_S16	156	166	04/27/2016	SW6850	Perchlorate	0.86		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-210M1	MW-210M1_S16	201	211	04/27/2016	SW6850	Perchlorate	0.056	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-433	MW-433_S16	180.2	190.2	04/27/2016	SW6850	Perchlorate	0.040	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-76S	MW-76S_S16	85	95	04/26/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.23		UG/L	400		0.019	0.20
Demolition Area 1	MW-76S	MW-76S_S16	85	95	04/26/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.63		UG/L	0.60	X	0.025	0.20
Demolition Area 1	MW-76S	MW-76S_S16D	85	95	04/26/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.23		UG/L	400		0.019	0.20
Demolition Area 1	MW-76S	MW-76S_S16D	85	95	04/26/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.64		UG/L	0.60	X	0.025	0.20
Demolition Area 1	MW-76M2	MW-76M2_S16	105	115	04/26/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.72		UG/L	0.60	X	0.025	0.20
Demolition Area 1	MW-76M2	MW-76M2_S16	105	115	04/26/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.96		UG/L	400		0.019	0.20
Demolition Area 1	MW-76M2	MW-76M2_S16D	105	115	04/26/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.68		UG/L	0.60	X	0.025	0.20
Demolition Area 1	MW-76M2	MW-76M2_S16D	105	115	04/26/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.93		UG/L	400		0.019	0.20
Demolition Area 1	MW-76M1	MW-76M1_S16	125	135	04/26/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.36		UG/L	400		0.019	0.20
Demolition Area 1	MW-225M3	MW-225M3_S16	125	135	04/26/2016	SW6850	Perchlorate	0.050	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-532M2	MW-532M2_S16	138	148	04/26/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.33		UG/L	0.60		0.025	0.20
Demolition Area 1	MW-532M2	MW-532M2_S16	138	148	04/26/2016	SW6850	Perchlorate	2.6		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-532M2	MW-532M2_S16D	138	148	04/26/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.33		UG/L	0.60		0.025	0.20
Demolition Area 1	MW-532M2	MW-532M2_S16D	138	148	04/26/2016	SW6850	Perchlorate	2.5		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-240M2	MW-240M2_S16	125	135	04/25/2016	SW6850	Perchlorate	0.24		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-532M1	MW-532M1_S16	168	178	04/25/2016	SW6850	Perchlorate	0.31		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-531M1	MW-531M1_S16	138	148	04/25/2016	SW6850	Perchlorate	0.90		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-258M1	MW-258M1_S16	109	119	04/25/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.7		UG/L	0.60	X	0.025	0.20
Demolition Area 1	MW-258M1	MW-258M1_S16	109	119	04/25/2016	SW6850	Perchlorate	13.2		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-258M1	MW-258M1_S16D	109	119	04/25/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.7		UG/L	0.60	X	0.025	0.20
Demolition Area 1	MW-258M1	MW-258M1_S16D	109	119	04/25/2016	SW6850	Perchlorate	13.6		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-542M1	MW-542M1_S16	144	154	04/21/2016	SW6850	Perchlorate	0.14	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-352M1	MW-352M1_S16	115	125	04/21/2016	SW6850	Perchlorate	0.10	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-353M1	MW-353M1_S16	107	117	04/21/2016	SW6850	Perchlorate	0.17	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-597M2	MW-597M2_S16	118	128	04/21/2016	SW6850	Perchlorate	0.078	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-597M1	MW-597M1_S16	148	158	04/21/2016	SW6850	Perchlorate	0.15	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-546M2	MW-546M2_S16	100	110	04/20/2016	SW6850	Perchlorate	0.11	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-546M1	MW-546M1_S16	140	150	04/20/2016	SW6850	Perchlorate	0.11	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-543M2	MW-543M2_S16	91.8	101.8	04/20/2016	SW6850	Perchlorate	0.10	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-543M1	MW-543M1_S16	127	137	04/20/2016	SW6850	Perchlorate	0.087	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-544M3	MW-544M3_S16	77.5	87.5	04/14/2016	SW6850	Perchlorate	0.076	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-544M2	MW-544M2_S16	112	122	04/14/2016	SW6850	Perchlorate	0.53		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-544M1	MW-544M1_S16	162	172	04/14/2016	SW6850	Perchlorate	2.2		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-611M2	MW-611M2_S16	91	101	04/14/2016	SW6850	Perchlorate	1.2		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 May 2016

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-611M1	MW-611M1_S16	141	151	04/14/2016	SW6850	Perchlorate	1.5		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-598M2	MW-598M2_S16	88	98	04/14/2016	SW6850	Perchlorate	2.1		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-598M1	MW-598M1_S16	122	132	04/14/2016	SW6850	Perchlorate	1.9		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-610M2	MW-610M2_S16	85	95	04/13/2016	SW6850	Perchlorate	0.84		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-610M1	MW-610M1_S16	110	120	04/13/2016	SW6850	Perchlorate	1.5		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-641M2	MW-641M2_S16	86.2	96.2	04/13/2016	SW6850	Perchlorate	0.52		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-641M1	MW-641M1_S16	113.2	123.2	04/13/2016	SW6850	Perchlorate	1.8		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-559M2	MW-559M2_S16	87	97	04/13/2016	SW6850	Perchlorate	0.14	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-559M1	MW-559M1_S16	135.6	145.6	04/13/2016	SW6850	Perchlorate	1.6		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-642M2	MW-642M2_S16	77.3	87.3	04/12/2016	SW6850	Perchlorate	0.16	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-642M1	MW-642M1_S16	104.3	114.3	04/12/2016	SW6850	Perchlorate	0.24		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-554M2	MW-554M2_S16	89.1	99.1	04/12/2016	SW6850	Perchlorate	0.18	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-554M1	MW-554M1_S16	120	130	04/12/2016	SW6850	Perchlorate	0.26		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-582M2	MW-582M2_S16	84	94	04/12/2016	SW6850	Perchlorate	2.1		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-582M2	MW-582M2_S16D	84	94	04/12/2016	SW6850	Perchlorate	2.2		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-582M1	MW-582M1_S16	134	144	04/12/2016	SW6850	Perchlorate	3.5		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-558M2	MW-558M2_S16	98	108	04/11/2016	SW6850	Perchlorate	0.30		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-558M1	MW-558M1_S16	134	144	04/11/2016	SW6850	Perchlorate	1.0		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-556M2	MW-556M2_S16	111	121	04/11/2016	SW6850	Perchlorate	0.64		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-556M1	MW-556M1_S16	153	163	04/11/2016	SW6850	Perchlorate	2.0		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-569M2	MW-569M2_S16	84	94	04/08/2016	SW6850	Perchlorate	0.82		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-569M1	MW-569M1_S16	114	124	04/08/2016	SW6850	Perchlorate	4.3		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-569M1	MW-569M1_S16D	114	124	04/08/2016	SW6850	Perchlorate	4.5		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-571M2	MW-571M2_S16	74	84	04/08/2016	SW6850	Perchlorate	1.5		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-571M1	MW-571M1_S16	114	124	04/08/2016	SW6850	Perchlorate	2.5		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-571M1	MW-571M1_S16D	114	124	04/08/2016	SW6850	Perchlorate	2.4		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-545M4	MW-545M4_S16	72	82	04/08/2016	SW6850	Perchlorate	0.50		UG/L	2.0		0.019	0.20
Demolition Area 1	MW-231M1	MW-231M1_S16R	210.5	220.5	04/06/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.5		UG/L	0.60	X	0.025	0.20
Demolition Area 1	MW-231M1	MW-231M1_S16R	210.5	220.5	04/06/2016	SW6850	Perchlorate	15.3		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-231M1	MW-231M1_S16RD	210.5	220.5	04/06/2016	SW6850	Perchlorate	14.9		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-341M3	MW-341M3_S16	209.5	219.5	04/06/2016	SW6850	Perchlorate	0.027	J	UG/L	2.0		0.019	0.20
Demolition Area 1	MW-341M2	MW-341M2_S16	264.5	269.5	04/06/2016	SW6850	Perchlorate	5.6		UG/L	2.0	X	0.019	0.20
Demolition Area 1	MW-341M2	MW-341M2_S16D	264.5	269.5	04/06/2016	SW6850	Perchlorate	5.5		UG/L	2.0	X	0.019	0.20
Central Impact Area	MW-204M2	MW-204M2_S16	76	86	04/05/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.6		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-204M1	MW-204M1_S16	141	151	04/05/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.42		UG/L	0.60		0.025	0.20
Central Impact Area	MW-184M1	MW-184M1_S16	186	196	04/05/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	1.1		UG/L	400		0.019	0.20
Central Impact Area	MW-184M1	MW-184M1_S16	186	196	04/05/2016	SW6850	Perchlorate	1.9	J	UG/L	2.0		0.019	0.20
Central Impact Area	MW-184M1	MW-184M1_S16	186	196	04/05/2016	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-184M1	MW-184M1_S16D	186	196	04/05/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	1.1		UG/L	400		0.019	0.20
Central Impact Area	MW-184M1	MW-184M1_S16D	186	196	04/05/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	6.1		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-38M4	MW-38M4_S16	132	142	04/04/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.50		UG/L	0.60		0.025	0.20
Central Impact Area	MW-38M3	MW-38M3_S16	170	180	04/04/2016	SW6850	Perchlorate	0.33		UG/L	2.0		0.019	0.20
Central Impact Area	MW-38M3	MW-38M3_S16	170	180	04/04/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.41		UG/L	0.60		0.025	0.20

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

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
 Data Received May 2016

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-628M1	MW-628M1_S16	230.8	240.8	04/04/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.28	J	UG/L	0.60		0.025	0.20
Central Impact Area	MW-209M2	MW-209M2_S16	220	230	03/31/2016	SW6850	Perchlorate	0.52		UG/L	2.0		0.019	0.20
Central Impact Area	MW-209M1	MW-209M1_S16	240	250	03/31/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.64		UG/L	400		0.019	0.20
Central Impact Area	MW-209M1	MW-209M1_S16	240	250	03/31/2016	SW6850	Perchlorate	1.3		UG/L	2.0		0.019	0.20
Central Impact Area	MW-209M1	MW-209M1_S16	240	250	03/31/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	3.3		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-39M1	MW-39M1_S16	220	230	03/31/2016	SW6850	Perchlorate	0.88		UG/L	2.0		0.019	0.20
Central Impact Area	MW-39M1	MW-39M1_S16	220	230	03/31/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.1		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-87M1	MW-87M1_S16	194	204	03/31/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.44		UG/L	0.60		0.025	0.20
Central Impact Area	MW-87M1	MW-87M1_S16	194	204	03/31/2016	SW6850	Perchlorate	2.4		UG/L	2.0	X	0.019	0.20
Central Impact Area	MW-87M1	MW-87M1_S16D	194	204	03/31/2016	SW6850	Perchlorate	2.4		UG/L	2.0	X	0.019	0.20
Central Impact Area	MW-88M2	MW-88M2_S16	213	223	03/31/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.31		UG/L	400		0.019	0.20
Central Impact Area	MW-88M2	MW-88M2_S16	213	223	03/31/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.1		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-88M2	MW-88M2_S16	213	223	03/31/2016	SW6850	Perchlorate	3.8		UG/L	2.0	X	0.019	0.20
Central Impact Area	MW-88M2	MW-88M2_S16D	213	223	03/31/2016	SW6850	Perchlorate	3.9		UG/L	2.0	X	0.019	0.20
Central Impact Area	MW-102M2	MW-102M2_S16	237	247	03/30/2016	SW6850	Perchlorate	0.41		UG/L	2.0		0.019	0.20
Central Impact Area	MW-625M1	MW-625M1_S16	260	270	03/30/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.41		UG/L	0.60		0.025	0.20
Central Impact Area	MW-633M2	MW-633M2_S16	197	207	03/30/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.38	J	UG/L	0.60		0.025	0.20
Central Impact Area	MW-616M1	MW-616M1_S16	217.1	227.1	03/29/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.5		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-108M1	MW-108M1_S16	297	307	03/28/2016	SW6850	Perchlorate	0.33		UG/L	2.0		0.019	0.20
Central Impact Area	MW-123M1	MW-123M1_S16	291	301	03/28/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.27		UG/L	0.60		0.025	0.20
Central Impact Area	MW-615M1	MW-615M1_S16	260	270	03/28/2016	SW6850	Perchlorate	1.3		UG/L	2.0		0.019	0.20
Central Impact Area	MW-615M1	MW-615M1_S16	260	270	03/28/2016	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-615M1	MW-615M1_S16D	260	270	03/28/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	6.1	J	UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-95M1	MW-95M1_S16	202	212	03/18/2016	SW6850	Perchlorate	0.66		UG/L	2.0		0.015	0.20
Central Impact Area	MW-95M1	MW-95M1_S16	202	212	03/18/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.3		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-89M2	MW-89M2_S16	214	224	03/18/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	1.2		UG/L	400		0.019	0.20
Central Impact Area	MW-89M2	MW-89M2_S16	214	224	03/18/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	13.6		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-89M2	MW-89M2_S16	214	224	03/18/2016	SW6850	Perchlorate	5.9		UG/L	2.0	X	0.015	0.20
Central Impact Area	MW-89M2	MW-89M2_S16D	214	224	03/18/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	1.2		UG/L	400		0.019	0.20
Central Impact Area	MW-89M2	MW-89M2_S16D	214	224	03/18/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	13.7		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-89M2	MW-89M2_S16D	214	224	03/18/2016	SW6850	Perchlorate	6.7		UG/L	2.0	X	0.015	0.20
Central Impact Area	MW-89M1	MW-89M1_S16	234	244	03/18/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.55		UG/L	0.60		0.025	0.20
Central Impact Area	MW-623M3	MW-623M3_S16	275	285	03/17/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.32		UG/L	400		0.019	0.20
Central Impact Area	MW-623M3	MW-623M3_S16	275	285	03/17/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	5.0	J	UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-623M3	MW-623M3_S16D	275	285	03/17/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.32		UG/L	400		0.019	0.20
Central Impact Area	MW-623M3	MW-623M3_S16D	275	285	03/17/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	4.4	J	UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-623M2	MW-623M2_S16	291.8	301.8	03/17/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.27		UG/L	0.60		0.025	0.20
Central Impact Area	MW-614M1	MW-614M1_S16	275	285	03/16/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.30		UG/L	400		0.019	0.20
Central Impact Area	MW-614M1	MW-614M1_S16	275	285	03/16/2016	SW6850	Perchlorate	0.40		UG/L	2.0		0.015	0.20
Central Impact Area	MW-614M1	MW-614M1_S16	275	285	03/16/2016	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-609M1	MW-609M1_S16	210.4	220.4	03/15/2016	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-124M1	MW-124M1_S16	234	244	03/14/2016	SW6850	Perchlorate	0.032	J	UG/L	2.0		0.015	0.20
Central Impact Area	MW-608M2	MW-608M2_S16	253.4	263.4	03/14/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.35		UG/L	400		0.019	0.20

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TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
 Data Received May 2016

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-608M2	MW-608M2_S16	253.4	263.4	03/14/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	5.4		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-608M1	MW-608M1_S16	267.4	277.4	03/14/2016	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-607M3	MW-607M3_S16	157.4	167.4	03/14/2016	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-607M2	MW-607M2_S16	177.4	187.4	03/14/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	5.6		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-477M2	MW-477M2_S16	145.6	155.6	03/10/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.51		UG/L	400		0.019	0.20
Central Impact Area	MW-477M2	MW-477M2_S16	145.6	155.6	03/10/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	7.7		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-477M2	MW-477M2_S16D	145.6	155.6	03/10/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.51		UG/L	400		0.019	0.20
Central Impact Area	MW-477M2	MW-477M2_S16D	145.6	155.6	03/10/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	7.4		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-90S	MW-90S_S16	118	128	03/08/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.28	J	UG/L	400		0.019	0.20
Central Impact Area	MW-90S	MW-90S_S16	118	128	03/08/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	17.2		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-487M2	MW-487M2_S16	195	205	03/08/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.58		UG/L	0.60		0.025	0.20
Central Impact Area	OW-2	OW-2_S16	175	185	03/08/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.48		UG/L	0.60		0.025	0.20
Central Impact Area	MW-91S	MW-91S_S16	124	134	03/07/2016	SW8330	4-Amino-2,6-dinitrotoluene	0.27		UG/L	7.3		0.023	0.20
Central Impact Area	MW-91S	MW-91S_S16	124	134	03/07/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.32	J	UG/L	400		0.019	0.20
Central Impact Area	MW-91S	MW-91S_S16	124	134	03/07/2016	SW8330	2-Amino-4,6-dinitrotoluene	0.35		UG/L	7.3		0.023	0.20
Central Impact Area	MW-91S	MW-91S_S16	124	134	03/07/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.1	J	UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-91S	MW-91S_S16	124	134	03/07/2016	SW8330	2,4,6-Trinitrotoluene	5.1		UG/L	2.0	X	0.028	0.20
Central Impact Area	MW-91S	MW-91S_S16D	124	134	03/07/2016	SW8330	4-Amino-2,6-dinitrotoluene	0.27		UG/L	7.3		0.023	0.20
Central Impact Area	MW-91S	MW-91S_S16D	124	134	03/07/2016	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.30	J	UG/L	400		0.019	0.20
Central Impact Area	MW-91S	MW-91S_S16D	124	134	03/07/2016	SW8330	2-Amino-4,6-dinitrotoluene	0.35		UG/L	7.3		0.023	0.20
Central Impact Area	MW-91S	MW-91S_S16D	124	134	03/07/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2.2	J	UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-91S	MW-91S_S16D	124	134	03/07/2016	SW8330	2,4,6-Trinitrotoluene	5.3		UG/L	2.0	X	0.028	0.20
Central Impact Area	MW-91M1	MW-91M1_S16	170	180	03/07/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.3		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-93M1	MW-93M1_S16	185	195	03/07/2016	SW6850	Perchlorate	0.15	J	UG/L	2.0		0.015	0.20
Central Impact Area	MW-93M1	MW-93M1_S16	185	195	03/07/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.0		UG/L	0.60	X	0.025	0.20
Central Impact Area	MW-105M1	MW-105M1_S16	205	215	03/07/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.39		UG/L	0.60		0.025	0.20
Central Impact Area	MW-101M1	MW-101M1_S16	158	168	03/07/2016	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.4		UG/L	0.60	X	0.025	0.20

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