MONTHLY PROGRESS REPORT #226 FOR JANUARY 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 January to 31 January 2016.

1. SUMMARY OF REMEDIATION ACTIONS

The following is a description of Remediation Actions (RA) underway at Camp Edwards as of January 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.

<u>Demolition Area 1 Comprehensive Groundwater RA</u>

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 2.310 billion gallons of water treated and re-injected as of 29 January 2016. The following shut down of the Frank Perkins Road facility occurred in January:

• Shut down on 13 January 2016 at 0138 due to a system alarm and was restarted on 13 January 2016 at 0824.

The Pew Road Mobile Treatment Unit (MTU) continues to operate at a flow rate of 105 gpm with over 451.2 million gallons of water treated and re-injected as of 29 January 2016. The following Pew Road MTU shut downs occurred in January:

- Shut down on 11 January 2016 at 1419 for media change-out and was restarted on 18 January 2016 at 1002; and
- Shut down on 24 January 2016 at 0241 due to a power interruption and was restarted on 25 January 2016 at 1736.

The Base Boundary RA was operating at a flow rate of 65 gpm with over 140.6 million gallons of water treated and re-injected as of 29 January 2016. The following Base Boundary MTU shut downs occurred in January:

- Shut down on 9 December 2015 at 1210 for repairs and was restarted on 7 January 2016 at 0850;
- Shut down on 7 January 2016 at 0950 for repairs and was restarted on 11 January 2016 at 0830;
- Shut down on 15 January 2016 at 0740 for repairs and was restarted on 16 January 2016 at 1040;
- Shut down on 16 January 2016 at 1321 due to a power interruption and was restarted on 19 January 2016 at 1115;

- Shut down on 19 January 2016 at 1337 due to a system alarm and was restarted on 20 January 2016 at 1057;
- Shut down on 21 January 2016 at 1541 due to a system alarm and was restarted on 21 January 2016 at 0949; and
- Shut down on 25 January 2016 at 1807 due to a system alarm and was restarted on 26 January 2016 at 1300.

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 29 January 2016, over 328 million gallons of water have been treated and re-injected. No J-1 Range Southern system shut downs occurred in January.

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 29 January 2016, over 269 million gallons of water have been treated and re-injected. No J-1 Range Northern MTU shut downs occurred in January.

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 January 2016, over 871.7 million gallons of water have been treated and re-injected. The following J-3 Range system shut downs occurred in January:

- Shut down on 5 January 2016 at 1400 for media change-out and was restarted on 7 January 2016 at 1017;
- Shut down on 12 January 2016 at 1600 due to energy curtailment on the FS-12 plant and was restarted on 13 January 2016 at 1116; and

• Shut down on 23 January 2016 at 2313 due to a power interruption and was restarted on 26 January 2016 at 0950.

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 29 January 2016, over 730.5 million gallons of water have been treated and re-injected. No Northern Treatment Building shut downs occurred in January.

The Northern MTUs E and F continue to operate at a flow rate of 250 gpm. As of 29 January 2016, over 1.177 billion gallons of water have been treated and re-injected. The following J-2 Range Northern MTU shut downs occurred in January:

- MTUs E and F shut down on 13 January 2016 at 0123 due to a system alarm and was restarted on 13 January 2016 at 0910;
- MTU F shut down on 14 January 2016 at 0649 due to a system alarm and was restarted on 14 January 2016 at 0749;
- MTU E shut down on 14 January 2016 at 0651 due to a system alarm and was restarted on 14 January 2016 at 0752; and
- MTU E shut down on 16 January 2016 at 1816 due to a system alarm and was restarted on 20 January 2016 at 0800.

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 29 January 2016, over 809.5 million gallons of water have been treated and re-injected. The following MTU H and I shut down occurred in January:

 MTUs H and I shut down on 23 January 2016 at 1942 due to a power interruption and was restarted on 25 January 2016 at 1102. MTU J continues to operate at a flow rate of 120 gpm. As of 29 January 2016, over 359 million gallons of water have been treated and re-injected. No shut downs of MTU J occurred in January.

MTU K continues to operate at a flow rate of 125 gpm. As of 29 January 2016, over 463million gallons of water have been treated and re-injected. No shut downs of MTU K occurred in January.

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 29 January 2016, over 527 million gallons of water have been treated and re-injected. No CIA treatment facility shutdowns occurred in January.

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 Eastern, J-3 Range, and Central Impact Area (CIA).

Environmental and system performance monitoring groundwater samples were collected at CIA, Demolition Area 1, J-2 Range Northern, J-3 Range, L Range, Northwest Corner, and Western Boundary.

Soil samples were collected at CIA and the Small Arms Ranges (C Range).

Groundwater Profile samples were collected at Demolition Area 2 (BH-655) and J-1 Range Northern (BH-656).

Began construction of infiltration gallery for the Leading Edge treatment system at Demolition Area 1.

Began construction of the reinjection gallery and influent pipeline at CIA treatment system.

Completed vegetation and surface clearance of Phase II Area 3 at the CIA. Completed anomaly investigation at EPA QA Grid, Phase II Area 1.

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

Transport and off-site disposal of excavated soil from the Small Arms Ranges (SAR). Performed post-excavation sampling at C Range.

Performed vegetation clearance at D, Former C, Former N and J-2 Ranges future soil removal areas.

JBCC IAGWSP Tech Update Meeting Minutes 14 January 2016

Project and Field Work Update

In the Central Impact Area, vegetation and surface clearance are ongoing in Phase II Area 3. They should be completed by the end of next week. Geophysics activities will resume toward the end of January in the 8 acre area of Phase II Area 3. After the UXO activities finish in this area, the team will demob until mid-March. Dawson is continuing complete clearance in the 100% QA grid and will finish this mobe.

IAGWSP stated that transportation and disposal of soil from six of the seven small arms ranges has been completed. The remaining excavation from will be completed by a different contractor. At the Former B Range, the horizontal extent of the contamination is still being delineated and results are pending.

Construction activities are underway at the CIA EW-3 groundwater treatment system. The reinjection gallery construction is ongoing. The J-3 Range pilot boring was completed and USACE is working on the design of the extraction well. The pilot boring at Demo 1 off-site was completed on Monday. At Demo 1 source area, development of the extraction well began yesterday. The sonic rig is currently at the first location in J-1 North and the Demo 2 wells have been installed.

Action Items

The action items were discussed and updated

J-2 Range Northern Annual Environmental Monitoring Report Presentation

A presentation was provided on the J-2 Range Northern Annual Environmental Monitoring Report. It was noted that during the reporting period (October 2014 to September 2015), no new field work was conducted.

The J-2 Range Northern groundwater treatment system performance statistics were reviewed and discussed. During the reporting period, at MTUs E and F (Wood Road) 122 million gallons of groundwater were treated, 4.58 pounds of perchlorate and 0.17 pounds of RDX were removed. At MTU G (Jefferson Road) 113 million gallons of water were treated, 0.77 pound of perchlorate and zero pounds of RDX were removed.

Sampling locations, groundwater monitoring results, and trends were reviewed and discussed. Perchlorate concentrations ranged from non-detect to 20.5 μ g/L (MW-585M1) and there were 15 wells with concentrations above 2 μ g/L and 2 wells with concentrations above 15 μ g/L. RDX concentrations ranged from non-detect to 2.7 μ g/L (MW-585M3) and there were 2 wells with concentrations above 0.6 μ g/L, 1 well with concentrations above 2 μ g/L, and no wells greater than 20 μ g/L. An overview of the hydraulic analysis completed in August 2015 was presented. It was noted that the numerical model indicates that the perchlorate plume is being captured and that stagnation points downgradient of each extraction well are creating a disjointed plume.

Decision Document cleanup timelines were discussed. Perchlorate and RDX measurements indicate that the plume is reasonably well predicted by the fate and transport model and cleanup times are consistent with the DD timelines.

IAGWSP recommends making no modifications to plant operations or extraction rates and no changes to the hydraulic or chemical monitoring programs.

J-2 Range Eastern Annual Environmental Monitoring Report Presentation

A presentation was provided on the J-2 Range Eastern Annual Environmental Monitoring Report. It was noted that during the reporting period (October 2014 to September 2015), no new field work was conducted.

The J-2 Range Northern groundwater treatment system performance statistics were reviewed and discussed. During the reporting period, at MTU J, 60.5 million gallons of groundwater was treated, 0.36 pounds of perchlorate, 0.08 pounds of RDX and 0.17 pounds of HMX were removed. At MTUs H and I, 124 million gallons of water were treated, 1.71 pounds of perchlorate, 0.39 pounds of RDX and 0.16 pounds of HMX were removed. At MTU K, 62.9 million gallons of water were treated, 0.15 pounds of perchlorate and 0.38 pounds of RDX were removed.

Sampling locations, groundwater monitoring results, and trends were reviewed and discussed. Perchlorate concentrations ranged from non-detect to 67.1 μ g/L (MW-368M2) and there were 8 wells with concentrations above 2 μ g/L and 2 wells with concentrations above 15 μ g/L. RDX concentrations ranged from non-detect to 10.7 μ g/L (MW-368M2) and there were 6 wells with concentrations above 0.6 μ g/L, 2 wells with concentrations above 2 μ g/L, and no wells greater than 20 μ g/L. An overview of the hydraulic analyses completed in April and September 2015 was presented. It was noted that the numerical model indicates that the perchlorate and RDX plumes are being captured and that stagnation points downgradient of each extraction well are creating a disjointed plume.

Decision Document cleanup timelines were discussed. Perchlorate and RDX measurements indicate that the plume is reasonably well predicted by the fate and transport model and cleanup times are consistent with the DD timelines.

IAGWSP recommends making no modifications to plant operations or extraction rates however they do recommend pulsing the operation of extraction well J2EW0004 to improve the capture at J2EW0005. IAGWSP is recommending that the frequency at 7 wells be reduced from semi-annual to annual.

JBCC IAGWSP Tech Update Meeting Minutes 28 January 2016

Project and Field Work Update

In the Central Impact Area (CIA), the Dawson UXO team completed the clearance in the 100% QA grid and collected the required soil samples from the 100% grid and from the BEM. Eight munitions items were blown-in-place (BIP) the past week. Soil samples will be collected at two of the BIP locations after the soil is removed. Geophysical surveys with the EM-61 are being completed in Phase II Area 3. When the survey is complete, Dawson will demobilize from the site for the winter. Metal Mapper and Dawson will return to the CIA to resume their work in March.

Lead contaminated soil excavated from Small Arms Ranges B, C, Former D, M2 and N has been transported off-site by the current contractor (H&S). This completes the work under their contract. Dawson has completed vegetation clearance at D, Former B, Former C and Former N ranges. In April, they will excavate these areas and additional lifts in some of the ranges dug by H&S.

The Baltimore Corps UXO team has work remaining to complete at the J3 Range (Hillside, Conex, Burn Kettle and Barrage Rocket areas). Work in these areas will commence in early March.

Construction activities are ongoing at the CIA EW-3 groundwater treatment system. The reinjection gallery construction is nearly complete and the contractor is working on the trench; starting at the extraction well. Work at the Demo 1 off-base site will resume on Monday with continued work on the

reinjection gallery. The Demo 1 off-base extraction well will be drilled in mid-February. The sonic rig completed the first location in J-1 North (MW-656) at a total depth of 324 feet. The rig will be working on the second J-1 North location next (MW-657). There will be a screen call for MW-656 next week.

Action Items

The action items were discussed and updated

JBCC Cleanup Team Meeting

The JBCC Cleanup Team (JBCCCT), formerly the MMR Cleanup Team (MMRCT) meet on January 13, 2016, and is next scheduled to meet next on May 11, 2016. The Cleanup Team meeting discusses late breaking news and responses to action items, as well as updates from the IAGWSP and the Installation Restoration Program (IRP). The JBCCCT meetings provide a forum for community input regarding issues related to both the IRP and the IAGWSP.

SUMMARY OF DATA RECEIVED

Table 2 summarizes the validated detections of explosives compounds and perchlorate for all groundwater results received from 1 January to 31 January 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. 225 for December 2015	01/10/2016
•	Final Demolition Area 2 2015 Annual Environmental Monitoring Report	01/07/2016
•	Future Use of the Buried Explosion Module – Project Note	01/11/2016
•	Change to the Northwest Corner Chemical Monitoring Well Network –	01/28/2016
	Project Note	

3. SCHEDULED ACTIONS

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

- J-2 Range Project Note for Additional Wells to Evaluate Source Response;
- Training Areas Draft Investigation Report;
- Training Areas Draft Remedy Selection Plan;
- Corrective Action Memo for BEM;
- Western Boundary 2015 Annual Environmental Monitoring Report;
- Western Boundary Residual Risk Assessment Report (also known as Demonstration of Compliance Report);
- CIA System Performance Monitoring Report;
- CIA Environmental Monitoring Work Plan;
- CIA Draft 2015 Source Removal Annual Report;
- Northwest Corner 2015 Annual Environmental Monitoring Report;
- J-3 Range 2015 Interim Environmental Monitoring Report; and
- J-2 Range Eastern and J-2 Range Northern 2015 Environmental Monitoring Report.

TABLE 1 Sampling Progress: 15 December 2015 to 31 January 2016

Location SSCIA4903	Field Sample ID	Type	Date Sampled	Matrix	(ft bgs)	
0001/14000	DA121615CIA01_30C	FR	01/28/2016	Soil	0	of Screen (ft bgs) 0.25
SSCIA4903	DA121615CIA01_30B	FR	01/28/2016	Soil	0	0.25
SSCIA4903	DA121615CIA01_30A	N	01/28/2016	Soil	0	0.25
						0.25
+	-					278.6
						220.5
			1			208
						227
			ļ			244.1
			ļ			265.1
						226.2
		<u> </u>				301
						234
						234
			ļ			250.8
						233
						291
						232
	=					256.1
	MW-613M1_S16		01/26/2016		267.1	277.1
BH-656		N	ļ		276	281
MW-612M2	MW-612M2_S16	N	01/26/2016		267	277
MW-612M1	MW-612M1_S16	N	01/26/2016		297	307
SSCIACSL03	CIA-BEM-PILE-B	N	01/21/2016	Soil	0	0.25
SSCIACSL03	CIA-BEM-B	N	01/21/2016	Soil	0	0.25
SSCIA4902	PII-A1-GRID47_39C	FR	01/21/2016	Soil	0	0.25
SSCIA4902	PII-A1-GRID47_39B	FR	01/21/2016	Soil	0	0.25
SSCIA4902	PII-A1-GRID47_39A	N	01/21/2016	Soil	0	0.25
BH-656	J1NP-1_266-271	N	01/21/2016	GW Profile	266	271
BH-656	J1NP-1_256-261	N	01/21/2016	GW Profile	256	261
MW-327M3	MW-327M3_S16	N	01/19/2016	Ground Water	220.2	230.2
MW-313M3	MW-313M3_S16	N	01/19/2016	Ground Water	195.1	205.6
MW-313M2	MW-313M2_S16	N	01/19/2016	Ground Water	215.5	225.5
MW-313M1	MW-313M1_S16	N	01/19/2016	Ground Water	255.4	265.4
MW-313M1	MW-313M1_S16D	FD	01/19/2016	Ground Water	255.4	265.4
BH-656	J1NP-1_246-251	N	01/18/2016	GW Profile	246	251
BH-656	J1NP-1_236-241	N	01/18/2016	GW Profile	236	241
BH-656	J1NP-1_226-231	N	01/15/2016	GW Profile	226	231
BH-656	J1NP-1_226-231D	FD	01/15/2016	GW Profile	226	231
BH-656	J1NP-1_216-221	N	01/15/2016	GW Profile	216	221
BH-656	J1NP-1_206-211	N	01/15/2016	GW Profile	206	211
BH-656	J1NP-1_196-201	N	01/15/2016	GW Profile	196	201
BH-656	J1NP-1_186-191	N	01/15/2016	GW Profile	186	191
BH-656	J1NP-1_176-181	N	01/15/2016	GW Profile	176	181
D1-EFF	D1-EFF-66A	N	01/12/2016	Process Water	0	0
	D1-MID-2-66A	N		Process Water	0	0
D1-MID-1	D1-MID-1-66A	N	01/12/2016	Process Water	0	0
	D1-INF-66A	N	1	Process Water	0	0
			1			107
		1	1			117
			ļ			102
			ļ			0
		1	+		1	0
		1	1			0
			1			0
MW-325M1	MW-325M1_S16	N	01/12/2016	Ground Water	172.4	182.4
IVIVY -JZJIVI I		N	01/11/2016	Soil	0	0.25
SSCBNGS			U1/11/2U10	OUII	IV	U.ZU
SSCRNGS	CRNG_SOUTHGRID_PEA		ļ	Ground Water		200
MW-288M1	MW-288M1_S16	N	01/11/2016	Ground Water	190	200
			ļ	Ground Water Soil Soil		200 0.25 0.25
	MW-612M1 SSCIACSL03 SSCIACSL03 SSCIACSL03 SSCIA4902 SSCIA4902 SH-656 BH-656 MW-327M3 MW-313M3 MW-313M1 MW-313M1 BH-656	MW-620M1 MW-620M1_S16 MW-231M1 MW-231M1_S16 MW-240M1 MW-240M1_S16 MW-630M1 MW-630M1_S16 MW-619M2 MW-619M2_S16 MW-619M1 MW-619M2_S16 MW-619M1 MW-619M1_S16 JZEW3-MW-2-B JZEW3-MW-2-B_S16 BH-656 JNP-1_296-301 JZEW0001 JZEW0001_S16 JZEW0001 JZEW0001_S16 JZEW0002 JZEW0002_S16 BH-656 JNP-1_286-291 JZEW0003 JZEW0003_S16 MW-613M2 MW-613M2_S16 MW-613M2 MW-613M2_S16 MW-613M1 MW-613M1_S16 BH-656 J1NP-1_276-281 MW-612M2 MW-612M2_S16 MW-612M1 MW-612M1_S16 SSCIACSL03 CIA-BEM-PILE-B SSCIACSL03 CIA-BEM-B SSCIACSL03 CIA-BEM-B SSCIACHO2 PII-A1-GRID47_39C SSCIACHO2 PII-A1-GRID47_39C SSCIACHO2 PII-A1-GRID47_39C SSCIACHO2 PII-A1-GRID47_39C <td>MW-620M1 MW-620M1_S16 N MW-231M1 MW-231M1_S16 N MW-240M1 MW-240M1_S16 N MW-630M1 MW-630M1_S16 N MW-619M2 MW-619M2_S16 N MW-619M1 MW-619M1_S16 N JZEW3-MW-2-B JZEW3-MW-2-B_S16 N JZEW0001 JZEW0001_S16 N JZEW0001 JZEW0001_S16 N JZEW0001 JZEW0001_S16 N JZEW0002 JZEW0001_S16 N JZEW0003 JZEW0002_S16 N BH-656 J1NP-1_286-291 N JZEW0003 JZEW0003_S16 N MW-613M2 MW-613M2_S16 N MW-613M2 MW-613M2_S16 N MW-613M1 MW-613M1_S16 N BH-656 J1NP-1_276-281 N MW-613M1 MW-612M1_S16 N SSCIACSL03 CIA-BEM-PILE-B N SSCIACSL03 CIA-BEM-PILE-B N SSCIACSL03 CIA-B</td> <td>MW-620M1 MW-620M1_S16 N 01/28/2016 MW-231M1 MW-231M1_S16 N 01/28/2016 MW-240M1 MW-240M1_S16 N 01/27/2016 MW-630M1 MW-630M1_S16 N 01/27/2016 MW-630M1 MW-630M1_S16 N 01/27/2016 MW-619M2 MW-619M2_S16 N 01/27/2016 MW-619M2 MW-619M1_S16 N 01/27/2016 MW-619M1 MW-619M1_S16 N 01/27/2016 J2EW3-MW-2-B J2EW3-MW-2-B_S16 N 01/27/2016 J2EW3-MW-2-B J2EW3-MW-2-B_S16 N 01/27/2016 J2EW0001 J2EW0001_S16 N 01/27/2016 J2EW0001 J2EW0001_S16 N 01/27/2016 J2EW0002 J2EW0002_S16 N 01/26/2016 J2EW0002 J2EW0002_S16 N 01/26/2016 J2EW0003 J2EW0003_S16 N 01/26/2016 MW-613M2 MW-613M2_S16 N 01/26/2016 MW-613M2 MW-613M2_S16 N 01/26/2016 MW-613M1 MW-613M1_S16 N 01/26/2016 MW-613M2 MW-613M2_S16 N 01/26/2016 MW-612M2 MW-612M2_S16 N 01/26/2016 MW-612M2 MW-612M2_S16 N 01/26/2016 MW-612M2 MW-612M1_S16 N 01/26/2016 MW-612M3 MW-612M2_S16 N 01/26/2016 MW-612M3 MW-612M2_S16 N 01/26/2016 MW-612M2 MW-612M2_S16 N 01/26/2016 MW-612M2 MW-612M2_S16 N 01/26/2016 MW-612M3 MW-612M3_S16 N 01/20106 SSCIA4902 PII-A1-GRID47_39B FR 01/21/2016 SSCIA4902 PII-A1-GRID47_39B FR 01/21/2016 MH-656 J1NP-1_266-271 N 01/21/2016 MH-656 J1NP-1_266-271 N 01/21/2016 MH-313M3 MW-313M3_S16 N 01/19/2016 MW-313M1 MW-313M3_S16 N 01/19/2016 MW-313M3 MW-313M3_S16 N 01/19/2016 MW-313M1 MW-313M1_S16 N 01/19/2016 MH-656 J1NP-1_266-251 N 01/15/2016 BH-656 J1NP-1_266-271 N</td> <td>MW-620M1 MW-620M1_S16 N 01/28/2016 Ground Water MW-221MM MW-23MM_S16 N 01/28/2016 Ground Water MW-240M1_S16 N 01/28/2016 Ground Water MW-630M1 MW-630M1_S16 N 01/27/2016 Ground Water MW-619M2 MW-619M2_S16 N 01/27/2016 Ground Water MW-619M1 MW-619M1_S16 N 01/27/2016 Ground Water JZEW03MW-2-B JZEW03MW-2-B_S16 N 01/27/2016 Ground Water JZEW0001 JZEW0001_S16 N 01/27/2016 Ground Water JZEW0001 JZEW0001_S16 N 01/27/2016 Ground Water JZEW0002 JZEW0002_S16 N 01/28/2016 Ground Water JZEW0003 JZEW0003_S16 N 01/28/2016 Ground Water JZEW0003 JZEW0003_S16 N 01/28/2016 Ground Water JZEW0003 JZEW0003_S16 N 01/28/2016 Ground Water JW-613M1_S16 N 01/28/2016</td> <td>MW-620M1 MW-620M1_S16 N 01/28/2016 Ground Water 268.6 MW-221MM MW-221MM_S16 N 01/28/2016 Ground Water 210.5 MW-320MM MW-23MM_S16 N 01/28/2016 Ground Water 210.5 MW-630M1 MW-650M1_S16 N 01/27/2016 Ground Water 234.1 MW-619M2 MW-619M2 MW-619M1 N 01/27/2016 Ground Water 234.1 MW-619M1 MW-619M1 S16 N 01/27/2016 Ground Water 234.1 MW-619M1 <th< td=""></th<></td>	MW-620M1 MW-620M1_S16 N MW-231M1 MW-231M1_S16 N MW-240M1 MW-240M1_S16 N MW-630M1 MW-630M1_S16 N MW-619M2 MW-619M2_S16 N MW-619M1 MW-619M1_S16 N JZEW3-MW-2-B JZEW3-MW-2-B_S16 N JZEW0001 JZEW0001_S16 N JZEW0001 JZEW0001_S16 N JZEW0001 JZEW0001_S16 N JZEW0002 JZEW0001_S16 N JZEW0003 JZEW0002_S16 N BH-656 J1NP-1_286-291 N JZEW0003 JZEW0003_S16 N MW-613M2 MW-613M2_S16 N MW-613M2 MW-613M2_S16 N MW-613M1 MW-613M1_S16 N BH-656 J1NP-1_276-281 N MW-613M1 MW-612M1_S16 N SSCIACSL03 CIA-BEM-PILE-B N SSCIACSL03 CIA-BEM-PILE-B N SSCIACSL03 CIA-B	MW-620M1 MW-620M1_S16 N 01/28/2016 MW-231M1 MW-231M1_S16 N 01/28/2016 MW-240M1 MW-240M1_S16 N 01/27/2016 MW-630M1 MW-630M1_S16 N 01/27/2016 MW-630M1 MW-630M1_S16 N 01/27/2016 MW-619M2 MW-619M2_S16 N 01/27/2016 MW-619M2 MW-619M1_S16 N 01/27/2016 MW-619M1 MW-619M1_S16 N 01/27/2016 J2EW3-MW-2-B J2EW3-MW-2-B_S16 N 01/27/2016 J2EW3-MW-2-B J2EW3-MW-2-B_S16 N 01/27/2016 J2EW0001 J2EW0001_S16 N 01/27/2016 J2EW0001 J2EW0001_S16 N 01/27/2016 J2EW0002 J2EW0002_S16 N 01/26/2016 J2EW0002 J2EW0002_S16 N 01/26/2016 J2EW0003 J2EW0003_S16 N 01/26/2016 MW-613M2 MW-613M2_S16 N 01/26/2016 MW-613M2 MW-613M2_S16 N 01/26/2016 MW-613M1 MW-613M1_S16 N 01/26/2016 MW-613M2 MW-613M2_S16 N 01/26/2016 MW-612M2 MW-612M2_S16 N 01/26/2016 MW-612M2 MW-612M2_S16 N 01/26/2016 MW-612M2 MW-612M1_S16 N 01/26/2016 MW-612M3 MW-612M2_S16 N 01/26/2016 MW-612M3 MW-612M2_S16 N 01/26/2016 MW-612M2 MW-612M2_S16 N 01/26/2016 MW-612M2 MW-612M2_S16 N 01/26/2016 MW-612M3 MW-612M3_S16 N 01/20106 SSCIA4902 PII-A1-GRID47_39B FR 01/21/2016 SSCIA4902 PII-A1-GRID47_39B FR 01/21/2016 MH-656 J1NP-1_266-271 N 01/21/2016 MH-656 J1NP-1_266-271 N 01/21/2016 MH-313M3 MW-313M3_S16 N 01/19/2016 MW-313M1 MW-313M3_S16 N 01/19/2016 MW-313M3 MW-313M3_S16 N 01/19/2016 MW-313M1 MW-313M1_S16 N 01/19/2016 MH-656 J1NP-1_266-251 N 01/15/2016 BH-656 J1NP-1_266-271 N	MW-620M1 MW-620M1_S16 N 01/28/2016 Ground Water MW-221MM MW-23MM_S16 N 01/28/2016 Ground Water MW-240M1_S16 N 01/28/2016 Ground Water MW-630M1 MW-630M1_S16 N 01/27/2016 Ground Water MW-619M2 MW-619M2_S16 N 01/27/2016 Ground Water MW-619M1 MW-619M1_S16 N 01/27/2016 Ground Water JZEW03MW-2-B JZEW03MW-2-B_S16 N 01/27/2016 Ground Water JZEW0001 JZEW0001_S16 N 01/27/2016 Ground Water JZEW0001 JZEW0001_S16 N 01/27/2016 Ground Water JZEW0002 JZEW0002_S16 N 01/28/2016 Ground Water JZEW0003 JZEW0003_S16 N 01/28/2016 Ground Water JZEW0003 JZEW0003_S16 N 01/28/2016 Ground Water JZEW0003 JZEW0003_S16 N 01/28/2016 Ground Water JW-613M1_S16 N 01/28/2016	MW-620M1 MW-620M1_S16 N 01/28/2016 Ground Water 268.6 MW-221MM MW-221MM_S16 N 01/28/2016 Ground Water 210.5 MW-320MM MW-23MM_S16 N 01/28/2016 Ground Water 210.5 MW-630M1 MW-650M1_S16 N 01/27/2016 Ground Water 234.1 MW-619M2 MW-619M2 MW-619M1 N 01/27/2016 Ground Water 234.1 MW-619M1 MW-619M1 S16 N 01/27/2016 Ground Water 234.1 MW-619M1 MW-619M1 <th< td=""></th<>

TABLE 1 Sampling Progress: 15 December 2015 to 31 January 2016

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
L Range	MW-242M1	MW-242M1_S16	N	01/11/2016	Ground Water	235	245
L Range	MW-242M1	MW-242M1_S16D	FD	01/11/2016	Ground Water	235	245
C Range	SSCRNG02	CR02A_PEA	N	01/11/2016	Soil	0	0.25
C Range	CR02DR	CR02DR_PEA	N	01/11/2016	Soil	0	0.25
C Range	CR04S	CR04S_PEC	FR	01/11/2016	Soil	0	0.25
L Range	MW-596M1	MW-596M1_S16	N	01/11/2016	Ground Water	231.1	241.1
C Range	CR04S	CR04S PEB	FR	01/11/2016	Soil	0	0.25
C Range	CR04S	CR04S_PEA	N	01/11/2016	Soil	0	0.25
C Range	CR04N	CR04N_PEC	FR	01/11/2016	Soil	0	0.25
L Range	MW-246M1	MW-246M1_S16	N	01/11/2016	Ground Water	178	188
_	CR04N	CR04N_PEB	FR	01/11/2016	Soil	0	0.25
C Range		CR04N_PEA	N		Soil	0	0.25
C Range	CR04N	-		01/11/2016		-	
C Range	SSCRNG01	CR01A_PEA	N	01/11/2016	Soil	0	0.25
C Range	SSCRNGBR5-6	BERM_AREAS5/6_PEA	N	01/11/2016	Soil	0	0.25
C Range	SSCRNGN	CRNG_NORTHGRID_PEA	N	01/11/2016	Soil	0	0.25
Demolition Area 1	FPR-2-EFF-A	FPR-2-EFF-A-118A	N	01/07/2016	Process Water	0	0
Demolition Area 1	FPR-2-GAC-MID3A	FPR-2-GAC-MID3A-118A	N	01/07/2016	Process Water	0	0
Demolition Area 1	FPR2-POST-IX-A	FPR2-POST-IX-A-118A	N	01/07/2016	Process Water	0	0
Demolition Area 1	FPR-2-INF	FPR-2-INF-118A	N	01/07/2016	Process Water	0	0
Demolition Area 1	PR-EFF	PR-EFF-118A	N	01/07/2016	Process Water	0	0
Demolition Area 1	PR-MID-2	PR-MID-2-118A	N	01/07/2016	Process Water	0	0
Demolition Area 1	PR-MID-1	PR-MID-1-118A	N	01/07/2016	Process Water	0	0
Demolition Area 1	PR-INF	PR-INF-118A	N	01/07/2016	Process Water	0	0
L Range	90MW0034	90MW0034_S16	N	01/06/2016	Ground Water	94	99
L Range	90MW0031	90MW0031_S16	N	01/06/2016	Ground Water	195.3	200.2
J1 Range Southern	J1S-EFF	J1S-EFF-98A	N	01/06/2016	Process Water	0	0
J1 Range Southern	J1S-MID-2	J1S-MID-2-98A	N	01/06/2016	Process Water	0	0
-		J1S-INF-2-98A	N	+	Process Water	0	0
J1 Range Southern	J1S-INF-2	MW-595M2 S16		01/06/2016	Ground Water		-
L Range	MW-595M2		N	01/06/2016		205.3	215.3
Central Impact Area	CIA2-EFF	CIA2-EFF-24A	N	01/06/2016	Process Water	0	0
Central Impact Area	CIA2-MID2	CIA2-MID2-24A	N	01/06/2016	Process Water	0	0
Central Impact Area	CIA2-MID1	CIA2-MID1-24A	N	01/06/2016	Process Water	0	0
Central Impact Area	CIA2-INF	CIA2-INF-24A	N	01/06/2016	Process Water	0	0
L Range	MW-595M1	MW-595M1_S16	N	01/06/2016	Ground Water	255.3	265.3
Central Impact Area	CIA1-EFF	CIA1-EFF-24A	N	01/06/2016	Process Water	0	0
Central Impact Area	CIA1-MID2	CIA1-MID2-24A	N	01/06/2016	Process Water	0	0
Central Impact Area	CIA1-MID1	CIA1-MID1-24A	N	01/06/2016	Process Water	0	0
Central Impact Area	CIA1-INF	CIA1-INF-24A	N	01/06/2016	Process Water	0	0
L Range	MW-153M2	MW-153M2_S16	N	01/05/2016	Ground Water	144	154
L Range	MW-153M1	MW-153M1_S16	N	01/05/2016	Ground Water	199	209
J2 Range Eastern	J2E-EFF-IH	J2E-EFF-IH-88A	N	01/05/2016	Process Water	0	0
J2 Range Eastern	J2E-MID-2H	J2E-MID-2H-88A	N	01/05/2016	Process Water	0	0
J2 Range Eastern	J2E-MID-1H	J2E-MID-1H-88A	N	01/05/2016	Process Water	0	0
J2 Range Eastern	J2E-MID-2I	J2E-MID-2I-88A	N	01/05/2016	Process Water	0	0
J2 Range Eastern	J2E-MID-1I	J2E-MID-1I-88A	N	01/05/2016	Process Water	0	0
J2 Range Eastern	J2E-INF-I	J2E-INF-I-88A	N	01/05/2016	Process Water	0	0
J3 Range	MW-637M3	MW-637M3 S16	N	01/05/2016	Ground Water	174.1	184.1
J2 Range Eastern	J2E-EFF-K	J2E-EFF-K-88A	N	01/05/2016	Process Water	0	0
-		_		1	Process Water		
J2 Range Eastern	J2E-MID-2K	J2E-MID-2K-88A	N	01/05/2016		0	0
J2 Range Eastern	J2E-MID-1K	J2E-MID-1K-88A	N	01/05/2016	Process Water	0	0
J2 Range Eastern	J2E-INF-K	J2E-INF-K-88A	N	01/05/2016	Process Water	0	0
J2 Range Eastern	J2E-EFF-J	J2E-EFF-J-88A	N	01/05/2016	Process Water	0	0
J3 Range	MW-637M2	MW-637M2_S16	N	01/05/2016	Ground Water	214.1	224.1
J2 Range Eastern	J2E-MID-2J	J2E-MID-2J-88A	N	01/05/2016	Process Water	0	0
J2 Range Eastern	J2E-MID-1J	J2E-MID-1J-88A	N	01/05/2016	Process Water	0	0
J2 Range Eastern	J2E-INF-J	J2E-INF-J-88A	N	01/05/2016	Process Water	0	0
J3 Range	MW-637M1	MW-637M1_S16	N	01/05/2016	Ground Water	236.1	246.1
J3 Range	90EW0001	90EW0001_S16	N	01/04/2016	Ground Water	83.1	143.8
J3 Range	J3EW0032	J3EW0032_S16	N	01/04/2016	Ground Water	102	152
J3 Range	J3EW0032	J3EW0032_S16D	FD	01/04/2016	Ground Water	102	152
				1	1	1	1

TABLE 1 Sampling Progress: 15 December 2015 to 31 January 2016

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Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
J3 Range	J3EWIP1	J3EWIP1_S16D	FD	01/04/2016	Ground Water	153	193
J2 Range Northern	J2N-EFF-G	J2N-EFF-G-112A	N	01/04/2016	Process Water	0	0
J2 Range Northern	J2N-MID-2G	J2N-MID-2G-112A	N	01/04/2016	Process Water	0	0
J3 Range	MW-636M2	MW-636M2_S16	N	01/04/2016	Ground Water	110.5	120.5
-		J2N-MID-1G-112A	N	01/04/2016	Process Water	0	0
J2 Range Northern	J2N-MID-1G	J2N-INF-G-112A			Process Water		-
J2 Range Northern	J2N-INF-G		N	01/04/2016		0	0
J2 Range Northern	J2N-EFF-EF	J2N-EFF-EF-112A	N	01/04/2016	Process Water	0	0
J2 Range Northern	J2N-MID-2F	J2N-MID-2F-112A	N	01/04/2016	Process Water	0	0
J2 Range Northern	J2N-MID-1F	J2N-MID-1F-112A	N	01/04/2016	Process Water	0	0
J2 Range Northern	J2N-INF-EF	J2N-INF-EF-112A	N	01/04/2016	Process Water	0	0
J3 Range	MW-636M1	MW-636M1_S16	N	01/04/2016	Ground Water	141.6	151.6
J2 Range Northern	J2N-MID-2E	J2N-MID-2E-112A	N	01/04/2016	Process Water	0	0
J2 Range Northern	J2N-MID-1E	J2N-MID-1E-112A	N	01/04/2016	Process Water	0	0
J1 Range Northern	J1N-EFF	J1N-EFF-27A	N	01/04/2016	Process Water	0	0
J1 Range Northern	J1N-MID2	J1N-MID2-27A	N	01/04/2016	Process Water	0	0
Central Impact Area	MW-626M2	MW-626M2_R3	N	01/04/2016	Ground Water	237.2	247.2
J1 Range Northern	J1N-MID1	J1N-MID1-27A	N	01/04/2016	Process Water	0	0
J1 Range Northern	J1N-INF2	J1N-INF2-27A	N	01/04/2016	Process Water	0	0
Central Impact Area	MW-626M1	MW-626M1_R3	N	01/04/2016	Ground Water	282.2	292.2
J3 Range	90PLT01006	90PLT01006_F15	N	12/30/2015	Process Water	0	0
Northwest Corner	MW-441M2	MW-441M2_F15	N	12/29/2015	Ground Water	109.5	119.5
Western Boundary	4036000-04G	4036000-04G_15Q4	N	12/22/2015	Ground Water	55	65
Western Boundary	4036000-03G	4036000-03G_15Q4	N	12/22/2015	Ground Water	50	60
Western Boundary	4036000-06G	4036000-06G 15Q4	N	12/22/2015	Ground Water	108	128
Western Boundary	4036000-01G	4036000-01G_15Q4	N	12/22/2015	Ground Water	38	70
Demolition Area 1	MW-432	MW-432_F15	N	12/21/2015	Ground Water	88	188
Demolition Area 1	MW-431	MW-431_F15	N	12/21/2015	Ground Water	88	188
Demolition Area 1	MW-31S	MW-31S_F15	N	12/21/2015	Ground Water	98	103
Demolition Area 1	MW-31S	MW-31S_F15D	FD	12/21/2015	Ground Water	98	103
Demolition Area 1	MW-31M	MW-31M_F15	N	12/21/2015	Ground Water	113	123
Demolition Area 1	MW-598M2	MW-598M2_F15	N		Ground Water	88	98
				12/21/2015	Ground Water		
Demolition Area 1	MW-598M1	MW-598M1_F15	N	12/21/2015	GW Profile	122	132
Demolition Area 2	BH-655	D2P-B_231-236	N	12/18/2015		231	236
Demolition Area 2	BH-655	D2P-B_221-226	N	12/18/2015	GW Profile	221	226
Demolition Area 2	BH-655	D2P-B_211-216	N	12/18/2015	GW Profile	211	216
Demolition Area 2	BH-655	D2P-B_201-206	N	12/17/2015	GW Profile	201	206
Demolition Area 2	BH-655	D2P-B_191-196	N	12/17/2015	GW Profile	191	196
Demolition Area 2	BH-655	D2P-B_181-186	N	12/17/2015	GW Profile	181	186
Demolition Area 2	BH-655	D2P-B_171-176	N	12/17/2015	GW Profile	171	176
Demolition Area 2	BH-655	D2P-B_161-166	N	12/16/2015	GW Profile	161	166
Demolition Area 2	BH-655	D2P-B_151-156	N	12/16/2015	GW Profile	151	156
Demolition Area 1	MW-76M2	MW-76M2_F15	N	12/16/2015	Ground Water	105	115
Demolition Area 2	BH-655	D2P-B_141-146	N	12/16/2015	GW Profile	141	146
Demolition Area 2	BH-655	D2P-B_141-146D	FD	12/16/2015	GW Profile	141	146
Demolition Area 1	MW-77M2	MW-77M2_F15	N	12/16/2015	Ground Water	120	130
Demolition Area 2	BH-655	D2P-B_131-136	N	12/16/2015	GW Profile	131	136
Demolition Area 1	MW-544M3	MW-544M3_F15	N	12/16/2015	Ground Water	77.5	87.5
Demolition Area 2	BH-655	D2P-B_121-126	N	12/16/2015	GW Profile	121	126
Demolition Area 1	MW-544M2	MW-544M2_F15	N	12/16/2015	Ground Water	112	122
Demolition Area 1	MW-544M1	MW-544M1_F15	N	12/16/2015	Ground Water	162	172
Demolition Area 1	XX9514	XX9514_F15	N	12/16/2015	Ground Water	102	112
Demolition Area 1	MW-554M2	MW-554M2_F15	N	12/15/2015	Ground Water	89.1	99.1
Demolition Area 1	MW-554M1	MW-554M1_F15	N	12/15/2015	Ground Water	120	130
Demolition Area 1	MW-642M2	MW-642M2_F15	N	12/15/2015	Ground Water	77.3	87.3
Demolition Area 1	MW-642M1	MW-642M1_F15	N	12/15/2015	Ground Water	104.3	114.3
Demolition Area 1	MW-641M2	MW-641M2_F15	N	12/15/2015	Ground Water	86.2	96.2
	MW-641M1	MW-641M1_F15	N	12/15/2015	Ground Water	113.2	123.2
Demolition Area 1	IVIVY TO TIVII	WWW-0411WII_I 10	I'N	12/13/2013	Ciodila Water	113.4	140.4

TABLE 2 VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS Data Received January 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-559M2	MW-559M2_F15	87	97	12/03/2015	SW6850	Perchlorate	0.14	J	UG/L	2.0		0.015	0.20
Demolition Area 1	MW-559M1	MW-559M1_F15	135.6	145.6	12/03/2015	SW6850	Perchlorate	1.9		UG/L	2.0		0.015	0.20
Demolition Area 1	MW-558M2	MW-558M2_F15	98	108	12/03/2015	SW6850	Perchlorate	0.40		UG/L	2.0		0.015	0.20
Demolition Area 1	MW-558M1	MW-558M1_F15	134	144	12/03/2015	SW6850	Perchlorate	1.4		UG/L	2.0		0.015	0.20
Demolition Area 1	MW-556M2	MW-556M2_F15	111	121	12/03/2015	SW6850	Perchlorate	0.93		UG/L	2.0		0.015	0.20
Demolition Area 1	MW-556M1	MW-556M1_F15	153	163	12/03/2015	SW6850	Perchlorate	2.0		UG/L	2.0	Х	0.015	0.20
Demolition Area 1	MW-73S	MW-73S_F15	52.2	61.7	12/02/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.37		UG/L	0.60		0.025	0.20
Demolition Area 1	MW-19S	MW-19S_F15	52.7	62.7	12/02/2015	SW8330	2-Amino-4,6-dinitrotoluene	0.20		UG/L	7.3		0.023	0.20
Demolition Area 1	MW-19S	MW-19S_F15	52.7	62.7	12/02/2015	SW8330	4-Amino-2,6-dinitrotoluene	0.35		UG/L	7.3		0.023	0.20
Demolition Area 1	MW-19S	MW-19S_F15	52.7	62.7	12/02/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	1.8		UG/L	400		0.019	0.20
Demolition Area 1	MW-19S	MW-19S_F15	52.7	62.7	12/02/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	5.0		UG/L	0.60	Х	0.025	0.20
Demolition Area 1	MW-19S	MW-19S_F15D	52.7	62.7	12/02/2015	SW8330	2-Amino-4,6-dinitrotoluene	0.21		UG/L	7.3		0.023	0.20
Demolition Area 1	MW-19S	MW-19S_F15D	52.7	62.7	12/02/2015	SW8330	4-Amino-2,6-dinitrotoluene	0.36		UG/L	7.3		0.023	0.20
Demolition Area 1	MW-19S	MW-19S_F15D	52.7	62.7	12/02/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	1.9		UG/L	400		0.019	0.20
Demolition Area 1	MW-19S	MW-19S_F15D	52.7	62.7	12/02/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	5.2		UG/L	0.60	Х	0.025	0.20
Demolition Area 1	MW-211M1	MW-211M1_F15	200	210	12/02/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.21		UG/L	0.60		0.025	0.20
Demolition Area 1	MW-211M1	MW-211M1_F15	200	210	12/02/2015	SW6850	Perchlorate	0.57		UG/L	2.0		0.015	0.20
Demolition Area 1	MW-211M1	MW-211M1_F15D	200	210	12/02/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.20		UG/L	0.60		0.025	0.20
Demolition Area 1	MW-211M1	MW-211M1_F15D	200	210	12/02/2015	SW6850	Perchlorate	0.62		UG/L	2.0		0.015	0.20
Demolition Area 1	MW-341M2	MW-341M2_F15	264.5	269.5	12/02/2015	SW6850	Perchlorate	4.8		UG/L	2.0	Х	0.015	0.20
Demolition Area 1	MW-258M1	MW-258M1_F15	109	119	12/01/2015	SW6850	Perchlorate	11.8		UG/L	2.0	Х	0.015	0.20
Demolition Area 1	MW-258M1	MW-258M1_F15D	109	119	12/01/2015	SW6850	Perchlorate	11.0		UG/L	2.0	Х	0.015	0.20
Demolition Area 1	MW-532M2	MW-532M2_F15	138	148	12/01/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.51		UG/L	0.60		0.025	0.20
Demolition Area 1	MW-532M2	MW-532M2_F15	138	148	12/01/2015	SW6850	Perchlorate	4.0		UG/L	2.0	Х	0.015	0.20
Demolition Area 1	MW-532M2	MW-532M2_F15D	138	148	12/01/2015	SW6850	Perchlorate	4.3		UG/L	2.0	Х	0.015	0.20
Demolition Area 1	MW-532M1	MW-532M1_F15	168	178	12/01/2015	SW6850	Perchlorate	0.37		UG/L	2.0		0.015	0.20
Demolition Area 2	MW-161S	MW-161S_F15	145.5	155.5	12/01/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.9		UG/L	0.60	Х	0.025	0.20
Demolition Area 2	MW-160S	MW-160S_F15	137.5	147.5	12/01/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.62		UG/L	0.60	Х	0.025	0.20
Demolition Area 2	MW-573M2	MW-573M2_F15	155.4	165.4	11/30/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.26		UG/L	400		0.019	0.20
Demolition Area 2	MW-573M2	MW-573M2_F15	155.4	165.4	11/30/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.53		UG/L	0.60		0.025	0.20
Demolition Area 2	MW-573M2	MW-573M2_F15D	155.4	165.4	11/30/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.25		UG/L	400		0.019	0.20
Demolition Area 2	MW-573M2	MW-573M2_F15D	155.4	165.4	11/30/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.57		UG/L	0.60		0.025	0.20
Demolition Area 2	MW-435M2	MW-435M2_F15	149.6	159.9	11/24/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.36		UG/L	0.60		0.025	0.20
J1 Range Northern	MW-164M1	MW-164M1_F15	227	237	11/19/2015	SW6850	Perchlorate	0.049	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-168M3	MW-168M3_F15	103	113	11/17/2015	SW6850	Perchlorate	0.068	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-168M2	MW-168M2_F15	198	208	11/17/2015	SW6850	Perchlorate	0.034	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-166M3	MW-166M3_F15	125	135	11/17/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.30		UG/L	400		0.019	0.20
J1 Range Northern	MW-166M3	MW-166M3_F15	125	135	11/17/2015	SW8330	4-Amino-2,6-dinitrotoluene	0.50		UG/L	7.3		0.023	0.20

TABLE 2 VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS Data Received January 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
J1 Range Northern	MW-166M3	MW-166M3_F15	125	135	11/17/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.56		UG/L	0.60		0.025	0.20
J1 Range Northern	MW-306M2	MW-306M2_F15	164.7	174.7	11/16/2015	SW6850	Perchlorate	0.75		UG/L	2.0		0.015	0.20
J1 Range Northern	MW-306M1	MW-306M1_F15	184.9	194.9	11/16/2015	SW6850	Perchlorate	0.067	J	UG/L	2.0		0.015	0.20
Central Impact Area	MW-349M2	MW-349M2_F15	195	205	11/12/2015	SW6850	Perchlorate	0.024	J	UG/L	2.0		0.015	0.20
Central Impact Area	MW-349M1	MW-349M1_F15	229	239	11/12/2015	SW6850	Perchlorate	0.44		UG/L	2.0		0.015	0.20
J1 Range Northern	MW-303M3	MW-303M3_F15	139.7	149.7	11/12/2015	SW6850	Perchlorate	0.045	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-303M3	MW-303M3_F15	139.7	149.7	11/12/2015	SW8330	4-Amino-2,6-dinitrotoluene	0.41		UG/L	7.3		0.023	0.20
J1 Range Northern	MW-303M3	MW-303M3_F15D	139.7	149.7	11/12/2015	SW8330	4-Amino-2,6-dinitrotoluene	0.38		UG/L	7.3		0.023	0.20
J1 Range Northern	MW-303M2	MW-303M2_F15	235.1	245.1	11/12/2015	SW6850	Perchlorate	0.59		UG/L	2.0		0.015	0.20
J1 Range Northern	MW-303M2	MW-303M2_F15	235.1	245.1	11/12/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	10.8		UG/L	0.60	Х	0.025	0.20
J1 Range Northern	MW-303M2	MW-303M2_F15	235.1	245.1	11/12/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	4.7		UG/L	400		0.019	0.20
J1 Range Northern	MW-303M2	MW-303M2_F15D	235.1	245.1	11/12/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	10.5		UG/L	0.60	X	0.025	0.20
J1 Range Northern	MW-303M2	MW-303M2_F15D	235.1	245.1	11/12/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	4.5		UG/L	400		0.019	0.20
J1 Range Northern	MW-191M2	MW-191M2_F15	120	130	11/10/2015	SW6850	Perchlorate	0.033	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-191M2	MW-191M2_F15	120	130	11/10/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	5.1		UG/L	400		0.019	0.20
J1 Range Northern	MW-346M3	MW-346M3_F15	175	185	11/10/2015	SW6850	Perchlorate	0.13	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-346M2	MW-346M2_F15	205.3	215.3	11/10/2015	SW6850	Perchlorate	2.4		UG/L	2.0	X	0.015	0.20
J1 Range Northern	MW-346M2	MW-346M2_F15	205.3	215.3	11/10/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	5.1		UG/L	0.60	X	0.025	0.20
J1 Range Northern	MW-346M2	MW-346M2_F15D	205.3	215.3	11/10/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	5.2		UG/L	0.60	X	0.025	0.20
J1 Range Northern	MW-346M1	MW-346M1_F15	245	255	11/10/2015	SW6850	Perchlorate	16.9		UG/L	2.0	Х	0.030	0.40
J1 Range Northern	MW-346M1	MW-346M1_F15	245	255	11/10/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	6.9		UG/L	0.60	Х	0.025	0.20
J1 Range Northern	MW-346M1	MW-346M1_F15D	245	255	11/10/2015	SW6850	Perchlorate	16.9		UG/L	2.0	Х	0.030	0.40
J1 Range Northern	MW-346M1	MW-346M1_F15D	245	255	11/10/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	7.1		UG/L	0.60	X	0.025	0.20
J1 Range Northern	MW-136S	MW-136S_F15	107	117	11/09/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	1.2		UG/L	400		0.019	0.20
J1 Range Northern	MW-326M2	MW-326M2_F15	196.3	206.3	11/09/2015	SW6850	Perchlorate	1.0		UG/L	2.0		0.015	0.20
J1 Range Northern	MW-326M2	MW-326M2_F15	196.3	206.3	11/09/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	10.5		UG/L	400		0.019	0.20
J1 Range Northern	MW-326M2	MW-326M2_F15	196.3	206.3	11/09/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	23.6		UG/L	0.60	Х	0.050	0.40
J1 Range Northern	MW-326M2	MW-326M2_F15D	196.3	206.3	11/09/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	11.1		UG/L	400		0.019	0.20
J1 Range Northern	MW-326M2	MW-326M2_F15D	196.3	206.3	11/09/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	26.1		UG/L	0.60	Х	0.050	0.40
J1 Range Northern	MW-326M1	MW-326M1_F15	250	260	11/09/2015	SW6850	Perchlorate	0.20		UG/L	2.0		0.015	0.20
J1 Range Northern	MW-245M2	MW-245M2_F15	204	214	11/09/2015	SW6850	Perchlorate	50.7		UG/L	2.0	Х	0.15	2.0
J1 Range Northern	MW-245M2	MW-245M2_F15	204	214	11/09/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	69.2		UG/L	0.60	Х	0.13	1.0
J1 Range Northern	MW-245M2	MW-245M2_F15	204	214	11/09/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	8.0		UG/L	400		0.019	0.20
J1 Range Northern	MW-245M2	MW-245M2_F15D	204	214	11/09/2015	SW6850	Perchlorate	54.3		UG/L	2.0	Х	0.15	2.0
J1 Range Northern	MW-245M2	MW-245M2_F15D	204	214	11/09/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	7.4		UG/L	400		0.019	0.20
J1 Range Northern	MW-245M2	MW-245M2_F15D	204	214	11/09/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	71.7		UG/L	0.60	Х	0.13	1.0
J1 Range Northern	MW-245M1	MW-245M1_F15	244	254	11/09/2015	SW6850	Perchlorate	0.24		UG/L	2.0		0.015	0.20
J1 Range Northern	MW-265M3	MW-265M3_F15	200	210	11/05/2015	SW6850	Perchlorate	0.090	J	UG/L	2.0		0.015	0.20

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TABLE 2 VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS Data Received January 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
J1 Range Northern	MW-265M3	MW-265M3_F15	200	210	11/05/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.21		UG/L	0.60		0.025	0.20
J1 Range Northern	MW-265M2	MW-265M2_F15	225	235	11/05/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	4.6		UG/L	0.60	Х	0.025	0.20
J1 Range Northern	MW-265M2	MW-265M2_F15	225	235	11/05/2015	SW6850	Perchlorate	63.5		UG/L	2.0	Х	0.075	1.0
J1 Range Northern	MW-265M2	MW-265M2_F15D	225	235	11/05/2015	SW6850	Perchlorate	64.2		UG/L	2.0	Х	0.075	1.0
J1 Range Northern	MW-265M1	MW-265M1_F15	265	275	11/05/2015	SW6850	Perchlorate	0.17	J	UG/L	2.0		0.015	0.20
J1 Range Northern	MW-369M1	MW-369M1_F15	254.1	264.1	11/04/2015	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.28		UG/L	400		0.019	0.20
J1 Range Northern	MW-369M1	MW-369M1_F15	254.1	264.1	11/04/2015	SW6850	Perchlorate	0.88		UG/L	2.0		0.015	0.20
J1 Range Northern	MW-369M1	MW-369M1_F15	254.1	264.1	11/04/2015	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.8		UG/L	0.60	Х	0.025	0.20
J1 Range Northern	MW-286M2	MW-286M2_F15	205	215	11/04/2015	SW6850	Perchlorate	0.49		UG/L	2.0		0.015	0.20