

**MONTHLY PROGRESS REPORT #253
FOR APRIL 2018**

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 April to 27 April 2018.

1. SUMMARY OF REMEDIATION ACTIONS

The following is a description of Remediation Actions (RA) underway at Camp Edwards as of April 2018.

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, Base Boundary, and the Leading Edge 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 175 gpm, with over 2.551 billion gallons of water treated and re-injected as of 27 April 2018. The following Frank Perkins Road facility shut downs occurred in April:

- Tripped at 0340 on 19 April 2018 due to a power interruption. The facility was restarted at 0710 on 19 April 2018.

The Pew Road Mobile Treatment Unit (MTU) continues to operate at a flow rate of 103 gpm with over 567.3 million gallons of water treated and re-injected as of 27 April 2018. The following Pew Road MTU shut down occurred in April:

- 0113 on 05 April 2018 due to a power interruption caused by high winds, alarm was a VFD Fault. The MTU was restarted at 0717 on 05 April 2018. Bag filters changed on 5 April 2018.
- Tripped at 0340 on 19 April 2018 due to a power interruption. The MTU was restarted at 0734 on 19 April 2018.
- 0020 on 23 April 2018; alarm was "VFD Fault" due to a power interruption. The MTU was restarted at 0728 on 23 April 2018.
- 1756 on 25 April 2018; alarm was "VFD Fault." The MTU was restarted at 0734 on 26 April 2018 after replacing bag filters.

The Base Boundary MTU is operating at a flow rate of 65 gpm with over 196.2 million gallons of water treated and re-injected as of 27 April 2018. The following Base Boundary MTU shut down occurred in April:

- 1150 on 21 April 2018 due to a power outage. The MTU was restarted at 1022 on 23 April 2018.

The Leading Edge system continues to operate at a flow rate of 100 gpm with over 100.3 million gallons of water treated and re-injected as of 27 April 2018. The following Leading Edge system shut down occurred in April:

- 1150 on 21 April 2018 due to a power outage. The System was restarted at 0944 on 23 April 2018.

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 April 2018, over 993.2 million gallons of water have been treated and re-injected. The following Northern Treatment Building shutdown occurred in April:

- 1149 on 21 April 2018 due to a power outage. The Treatment Building was restarted at 0735 on 23 April 2018.

The Northern MTUs E and F continue to operate at a flow rate of 250 gpm. As of 27 April 2018, over 1.448 billion gallons of water have been treated and re-injected. The following J-2 Range Northern MTU E or F shut downs occurred in April:

- 1150 on 21 April 2018 due to a power outage. The MTU was restarted at 0745 on 23 April 2018.
- 1150 on 21 April 2018 due to a power outage. The MTU was restarted at 0745 on 23 April 2018.

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 April 2018, over 1.068 billion gallons of water have been treated and re-injected. The following MTU H and I shut down occurred in April:

- MTUs H and I were turned off at 1300 on 17 April 2018 to drain GAC vessels #5 and #6 at MTU I for carbon change out on 18 April 2018. CFS was onsite on 18 April 2018 to perform the carbon change. The new carbon was wetted from the bottom up to allow for overnight soaking. MTUs H and I were restarted at 0912 on 19 April 2018.

MTU J continues to operate at a flow rate of 120 gpm. As of 27 April 2018, over 493.3 million gallons of water have been treated and re-injected. No MTU J shutdown occurred in April.

MTU K continues to operate at a flow rate of 125 gpm. As of 27 April 2018, over 607.9 million gallons of water have been treated and re-injected. No MTU K shutdowns occurred in April.

J-3 Range Groundwater RA

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

The J-3 system is currently operating at a flow rate of 235 gpm (while J3EW0032 is running at 45 gpm instead of 65 gpm). As of 27 April 2018, over 1.0102 billion gallons of water have been treated and re-injected. The following J-3 Range system shut downs occurred in April:

- 90EW0001 shut down at 0114 on 05 April 2018 due to a power interruption caused by high winds; there were no alarms. 90EW0001 was restarted at 0950 on 05 April 2018.
- 90EW0001 shut down at 2255 on 12 April 2018; there were no alarms. 90EW0001 was restarted at 0743 on 13 April 2018.
- 0540 h on 22 April 2018 due to a power outage. When power was restored, 90EW0001 would not restart. A VFD fault would not clear. J3EW0032, J3EWIP1, and J3EWIP2 were restarted at 0833 on 23 April 2018 resulting in 23.88 hours of downtime. BETCO was onsite on 25 April 2018 to inspect the VFD issue for 90EW0001 and communication was restored and the fault cleared. 90EW0001 was restarted at 0942 on 25 April 2018.

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 April 2018, over 475.4 million gallons of water have been treated and re-injected. The following J-1 Range Southern system shut downs occurred in April:

- J1SEW0002 was turned off at 1200 on 26 April 2018 to run J1SEW0001 for SPM sampling. J1SEW0001 was started at 1200 h and run at 75 gpm. J1SEW0001 was turned off at 1232 on 26 April 2018 after the sample was collected and J1SEW0002 was restarted at that time. Bag filters were changed out on 26 April.

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 continues to operate at a total system flow rate of 250 gpm. As of 27 April 2018, over 565.3 million gallons of water have been treated and re-injected. No J-1 Range Northern MTU shut downs occurred in April.

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: three 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 three infiltration galleries to return treated water to the aquifer. The CIA systems 1, 2, and 3 continue to run at a combined total flow rate of 750 gpm. As of 27 April 2018, over 1.329 billion gallons of water have been treated and re-injected. The following CIA treatment facility shut downs occurred in April:

- Tripped at 0340 on 19 April 2018 due to a power interruption. System 2 was restarted at 0817 on 19 April 2018.
- System 3 shutdown at 1150 on 21 April 2018 due to a power outage. The System was restarted at 0722 on 24 April 2018.

SUMMARY OF ACTIONS TAKEN

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

Performed routine inspections of BEM cover at the CIA to ensure cover is secure and intact.

Completed CIA Phase 3 Area 1 surface sweep and vegetation clearing.

Began CIA QC seeding and dynamic mode Metal Mapper survey.

Conducted groundwater sampling in the Central Impact Area (SPM).

Process water samples were collected from the Central Impact Area (CIA), Demolition Area 1, J-1 Range Northern, J-1 Range Southern, J-2 Range Eastern, J-2 Range Northern, and J-3 Range.

Environmental and system performance monitoring groundwater samples were collected from B Range, C Range, CIA, CS-10, G Range, GB Range, J-2 Range Eastern, J-2 Range Northern, and Northwest Corner.

JBCC IAGWSP Tech Update Meeting Minutes 26 April 2018

Project and Fieldwork Update

The abandonment of Western Boundary monitoring wells in Bourne began this week. There are two groups of wells; one on Town of Bourne land the other in Schooner Lane. Dawson will be mobbing to the site in mid-May to clear the first three well pads for upcoming monitoring well drilling. The Drill rig will mobilize to the site June 4. UXO clearance will begin in June for the wells in the Impact Area.

In the Small Arms Ranges, there is a contract modification being worked on to perform additional lifts at B Range, C Range and Former B Range. Each Range requires one grid. Work will begin in approximately a month to give the area time to dry out.

In the CIA, Parsons has the Metal Mapper set up and operational this week. Initial set up is going well. They performed testing this morning and the data has gone into their office for processing and it looks like everything is operational. They have a new sled system that gets the coils as close as they can to the ground surface. There is a seed team dedicated to planting the seed items and they performed scouting last week to find enough "clean" areas where they can place the items. They don't think they'll have a problem finding enough spots for the number of seed items needed. They've already placed in in three of the five areas. They have enough in and complete now so the crew can begin the dynamic data collection. The area has also been professional surveyed and Parsons did a second safety surface cleaning this week to get the site prepped for the system.

J-1 Range Northern Annual Environmental Monitoring Report Presentation

A presentation was provided on the J-1 Range Northern Annual Environmental Monitoring Report. It was noted that during the reporting period (January 2017 to December 2017), two new wells were installed downgradient of the leading edge of the plume in Zone 2 at Wood Road and the plume shells were updated. The J-1 Range Northern groundwater treatment system performance statistics were reviewed and discussed. During the reporting period, at the J-1 North MTU, 128 million gallons of groundwater were treated, 0.75 pounds of perchlorate and 0.09 pounds of RDX were removed.

Sampling locations, groundwater monitoring results, and trends were reviewed and discussed. For Perchlorate concentrations in Zone 1, there is a decreasing trend in the trailing edge well at MW-346M1 (11.7 µg/L, Nov 2017), and a declining trend in the mid-plume at MW-265M2 (18.6 µg/L, Nov 2017). The maximum perchlorate concentration was detected at MW-245M2 (49.8 µg/L, April 2017). For RDX, there is a steady trend in the trailing edge well at MW-303M2 (8.3 µg/L, Dec 2017) and there continues to be a slight increasing trend in the mid-plume (MW-346M1). The maximum RDX concentration was detected at MW-245M2 (69.2 µg/L, April 2017).

For Perchlorate concentrations in Zone 2, there continues to be a <0.35 µg/L concentration trend in the trailing edge (MW-370M2). Concentrations in the mid-plume wells were slightly lower or steady during this reporting period. The maximum perchlorate detected was 31.5 µg/L (MW-564M1, Nov 2017). For RDX, there is a continued non-detect in the trailing edge (MW-370M2, since 2014) and in the deep trailing edge (MW-370M1). There is a constant trend of concentrations between 2.5 µg/L – 3.0 µg/L in the mid-plume (MW564M1). The maximum RDX concentration was detected at MW-564M1 (2.7 µg/L, April 2017). The hydraulic monitoring and capture zone analysis was reviewed and discussed. There was one synoptic water level round in November 2017 and hydraulic measurements were consistent with past results. The capture zones were developed manually and by model. The model predicted and observed capture zones include the entire plumes. The observed capture zone is slightly larger than the model predicted one.

Decision Document cleanup timelines were discussed. Perchlorate and RDX observed measurements does not indicate any obvious delays in cleanup timeline. Perchlorate concentrations in MW-370M1 above 2.0 µg/L, if sustained, could impact cleanup timelines. IAGWSP recommends making no modifications to treatment system operations and noted that new wells MW-688 M1/M2 and MW689 M1/M1 were added to the hydraulic and chemical monitoring networks with the fall 2017 annual monitoring event.

J-1 Range Southern Annual Environmental Monitoring Report Presentation

A presentation was provided on the J-1 Range Southern Annual Environmental Monitoring Report. It was noted that during the reporting period (January 2017 to December 2017), a source area drive point program was conducted in Zone 1 and four monitoring wells were completed off-base on Grand Oak Road and Little Acorn Lane. The J-1 Range Southern groundwater treatment system performance statistics were reviewed and discussed. During the reporting period, 61 million gallons of groundwater was treated and 0.23 pounds of RDX were removed.

Sampling locations, groundwater monitoring results, and trends were reviewed and discussed. The maximum RDX concentration in Zone 1 (source area to J1SEW0001) is 0.52 µg/L (MW-360M2) a decline from 6.44 µg/L in 2016. The plume above risk-based concentrations is currently interpreted to be east of MW-528M1 and between MW-131S/MW-360 and the base boundary. In Zone 2 (J1SEW0001 to J1SEW0002), the maximum concentration is 7.0 µg/L (MW-647M1). It was noted that MW-524M1 has been less than 2 µg/L since 2016.

The hydraulic monitoring and capture zone analysis was reviewed and discussed. There was one synoptic water level round in July 2017 and hydraulic measurements were generally consistent with past results. Water levels were similar to November 2016; the top of the mound is approximately 0.5 feet lower. The capture zones were developed manually and by model. The United States Geological Survey top of mound well is trending in the lower part of a 14-year range (< 69 ft msl). The capture zone is confirmed on eastern boundary (Song Bird Circle) and the capture zone extent horizontally and vertically downgradient of J1SEW0002 is similar to Nov 2016. Most of the leading edge of the plume is under the same flat hydraulic gradient as Nov 2016 (stagnation point extends further downgradient).

Decision Document cleanup timelines were discussed. The DD timeline was based on the 2009 Plume Shell. The May 2011 DD cleanup timeline (< 0.6 µg/L) was 2024 but the September 2011 project note that located the leading edge extraction well predicted 2032. Predictions based on the 2017 plume shell estimates that upgradient of J1SEW0001 will be < 0.6 µg/L in 2031, upgradient of J1SEW0002 will be < 0.6 µg/L in 2035. Downgradient of J1SEW0002 will be < 0.6 µg/L in 2047.

IAGWSP recommendations for Zone 1 include delineating the RDX Plume by finishing the drivepoints in the source area. There are nine new drive points between MW-360 and MW-528 on east side, two upgradient of MW-360 & MW-131, three to complete the transect downgradient of MW-360 and MW-131, one upgradient of Greenway Road on the east side of plume, one between the elevated RDX in profiles DP-676 and DP-693 and two at the base boundary near previous boring DP-547 and well point DP-379. It is also recommended to determine the need for further treatment optimization. All pumping (125 gpm) was shifted to J1SEW0002 in January 2017. Evaluations are underway to determine if the existing system is adequate or if upgrades are needed and the potential for alternative treatment technologies. Finally a RDX attenuation rate study is underway. In Zone 2, it is recommended to determine if there is a need for a new boring downgradient on Checkerberry Lane.

Action Items

Action items were discussed and updated.

JBCC Cleanup Team Meeting

The next JBCC Cleanup Team (JBCCCT) meeting has yet to be scheduled. 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 April to 30 April 2018. 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.

Twelve operable units (OU) are 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:

- Final 2017 Land Use Controls Monitoring Report, 04/03/2018
- Training Areas Remedy Selection Plan 04/05/2018
- Draft J-1 Range Northern and J-1 Range Southern 2018 Annual Environmental Monitoring Report 04/09/2018
- Monthly Progress Report No. 252 for March 2018 04/10/2018
- Final J-2 Range Eastern 2017 Environmental Monitoring Report and J-2 Range Northern 2017 Environmental Monitoring Report 04/19/2018

3. SCHEDULED ACTIONS

The following documents are being prepared or revised during May 2018:

Training Areas

- Four project notes for post Decision Document work

Annual Reports/ Environmental Monitoring Reports/Work Plans

- L-Range Annual Monitoring Report
- Northwest Corner Annual Monitoring Report

Central Impact Area

- 2017 Source Removal Annual Report
- 2018 Source Area Workplan

Miscellaneous

- J-2 Phase 2 Geophysical and Soil Technical Memorandum
- J-3 Geophysical and Soil Technical Memorandum
- Technology evaluation and attenuation study reports

TABLE 1
Sampling Progress: 1 April to 30 April 2018

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
J1 Range Southern	MW-669M2	MW-669M2_S18	N	04/26/2018	Ground Water	201.7	211.7
J1 Range Southern	MW-669M1	MW-669M1_S18	N	04/26/2018	Ground Water	223.7	233.7
J1 Range Southern	J1S-EW2-INF	J1S-EW2-INF_S18	N	04/26/2018	Process Water	0	0
J1 Range Southern	J1S-EW1-INF	J1S-EW1-INF_S18	N	04/26/2018	Process Water	0	0
Central Impact Area	MW-223M2	MW-223M2_S18	N	04/26/2018	Ground Water	185	195
Central Impact Area	MW-223M1	MW-223M1_S18	N	04/26/2018	Ground Water	211	221
Central Impact Area	MW-223D	MW-223D_S18	N	04/26/2018	Ground Water	260	270
J1 Range Southern	MW-670M2	MW-670M2_S18	N	04/25/2018	Ground Water	198.5	208.5
J1 Range Southern	MW-670M1	MW-670M1_S18	N	04/25/2018	Ground Water	220.5	230.5
J1 Range Southern	MW-402M2	MW-402M2_S18	N	04/25/2018	Ground Water	155.24	165.27
J1 Range Southern	MW-402M1	MW-402M1_S18	N	04/25/2018	Ground Water	190.14	200.13
J1 Range Southern	MW-647M2	MW-647M2_S18	N	04/25/2018	Ground Water	189.3	199.3
J1 Range Southern	MW-647M1	MW-647M1_S18	N	04/25/2018	Ground Water	211.3	221.3
J1 Range Southern	MW-647M1	MW-647M1_S18D	FD	04/25/2018	Ground Water	211.3	221.3
J1 Range Southern	MW-524M1	MW-524M1_S18	N	04/24/2018	Ground Water	148	158
J1 Range Southern	MW-524M1	MW-524M1_S18D	FD	04/24/2018	Ground Water	148	158
Central Impact Area	MW-617M2	MW-617M2_S18	N	04/24/2018	Ground Water	118.3	128.3
Central Impact Area	MW-617M1	MW-617M1_S18	N	04/24/2018	Ground Water	175.8	185.8
Central Impact Area	MW-607M3	MW-607M3_S18	N	04/24/2018	Ground Water	157.4	167.4
Central Impact Area	MW-607M2	MW-607M2_S18	N	04/24/2018	Ground Water	177.4	187.4
Central Impact Area	MW-607M2	MW-607M2_S18D	FD	04/24/2018	Ground Water	177.4	187.4
Central Impact Area	MW-607M1	MW-607M1_S18	N	04/24/2018	Ground Water	207.4	217.4
J1 Range Southern	MW-591M2	MW-591M2_S18	N	04/23/2018	Ground Water	165	175
J1 Range Southern	MW-591M1	MW-591M1_S18	N	04/23/2018	Ground Water	200	210
J1 Range Southern	MW-646M2	MW-646M2_S18	N	04/23/2018	Ground Water	168	178
J1 Range Southern	MW-646M1	MW-646M1_S18	N	04/23/2018	Ground Water	198	208
J1 Range Southern	MW-592M2	MW-592M2_S18	N	04/23/2018	Ground Water	158	168
J1 Range Southern	MW-592M1	MW-592M1_S18	N	04/23/2018	Ground Water	201	211
Central Impact Area	MW-108M4	MW-108M4_S18	N	04/19/2018	Ground Water	240	250
Central Impact Area	MW-108M1	MW-108M1_S18	N	04/19/2018	Ground Water	297	307
Central Impact Area	MW-102M2	MW-102M2_S18	N	04/19/2018	Ground Water	237	247
Central Impact Area	MW-102M1	MW-102M1_S18	N	04/19/2018	Ground Water	267	277
Central Impact Area	MW-42M3	MW-42M3_S18	N	04/19/2018	Ground Water	165.8	176
Central Impact Area	MW-42M2	MW-42M2_S18	N	04/19/2018	Ground Water	185.8	196
Central Impact Area	MW-42M1	MW-42M1_S18	N	04/19/2018	Ground Water	205.8	216
Former A Range	MW-42M1	MW-42M1_S18	N	04/19/2018	Ground Water	205.8	216
Central Impact Area	MW-51M2	MW-51M2_S18	N	04/18/2018	Ground Water	203	213
Central Impact Area	MW-51M1	MW-51M1_S18	N	04/18/2018	Ground Water	234	244
Central Impact Area	MW-51D	MW-51D_S18	N	04/18/2018	Ground Water	264	274
Central Impact Area	MW-644M2	MW-644M2_S18	N	04/18/2018	Ground Water	230.9	240.9
Central Impact Area	MW-644M1	MW-644M1_S18	N	04/18/2018	Ground Water	275.9	285.9
Central Impact Area	MW-626M2	MW-626M2_S18	N	04/18/2018	Ground Water	237.2	247.2
Central Impact Area	MW-626M1	MW-626M1_S18	N	04/18/2018	Ground Water	282.2	292.2
Central Impact Area	MW-626M1	MW-626M1_S18D	FD	04/18/2018	Ground Water	282.2	292.2
Central Impact Area	MW-50M1	MW-50M1_S18	N	04/17/2018	Ground Water	207	217
Central Impact Area	MW-616M2	MW-616M2_S18	N	04/17/2018	Ground Water	107.1	117.1
Central Impact Area	MW-616M1	MW-616M1_S18	N	04/17/2018	Ground Water	217.1	227.1
Central Impact Area	MW-618M2	MW-618M2_S18	N	04/17/2018	Ground Water	190.5	200.5
Central Impact Area	MW-618M1	MW-618M1_S18	N	04/17/2018	Ground Water	238.5	248.5
Northwest Corner	MW-323M2	MW-323M2_S18	N	04/16/2018	Ground Water	120	130
Northwest Corner	MW-323M1	MW-323M1_S18	N	04/16/2018	Ground Water	195	205
Northwest Corner	MW-338S	MW-338S_S18	N	04/16/2018	Ground Water	72	82
Northwest Corner	MW-338M2	MW-338M2_S18	N	04/16/2018	Ground Water	119	129
Northwest Corner	MW-338M1	MW-338M1_S18	N	04/16/2018	Ground Water	189	199
Northwest Corner	MW-350M2	MW-350M2_S18	N	04/13/2018	Ground Water	126	136
Central Impact Area	MW-628M2	MW-628M2_S18	N	04/13/2018	Ground Water	120.8	130.8
Central Impact Area	MW-628M1	MW-628M1_S18	N	04/13/2018	Ground Water	230.8	240.8
Northwest Corner	MW-441M2	MW-441M2_S18	N	04/13/2018	Ground Water	109.5	119.5
Northwest Corner	MW-441M1	MW-441M1_S18	N	04/13/2018	Ground Water	204.6	214.6

N = Normal Sample
FD = Field Duplicate

TABLE 1
Sampling Progress: 1 April to 30 April 2018

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
Central Impact Area	MW-625M2	MW-625M2_S18	N	04/13/2018	Ground Water	230	240
Central Impact Area	MW-625M1	MW-625M1_S18	N	04/13/2018	Ground Water	260	270
Central Impact Area	MW-209M2	MW-209M2_S18	N	04/12/2018	Ground Water	220	230
Central Impact Area	MW-209M1	MW-209M1_S18	N	04/12/2018	Ground Water	240	250
Central Impact Area	MW-209M1	MW-209M1_S18D	FD	04/12/2018	Ground Water	240	250
Central Impact Area	MW-212M1	MW-212M1_S18	N	04/12/2018	Ground Water	333	343
Central Impact Area	MW-149M1	MW-149M1_S18	N	04/12/2018	Ground Water	237.5	247.5
Central Impact Area	MW-207M1	MW-207M1_S18	N	04/12/2018	Ground Water	254	264
Central Impact Area	MW-176M2	MW-176M2_S18	N	04/12/2018	Ground Water	229	239
Central Impact Area	MW-176M1	MW-176M1_S18	N	04/12/2018	Ground Water	270	280
Central Impact Area	MW-202M1	MW-202M1_S18	N	04/11/2018	Ground Water	264	274
Central Impact Area	MW-624M2	MW-624M2_S18	N	04/11/2018	Ground Water	254	264
Central Impact Area	MW-624M1	MW-624M1_S18	N	04/11/2018	Ground Water	284	294
Central Impact Area	MW-623M3	MW-623M3_S18	N	04/11/2018	Ground Water	275	285
Central Impact Area	MW-623M2	MW-623M2_S18	N	04/11/2018	Ground Water	291.8	301.8
Central Impact Area	MW-623M1	MW-623M1_S18	N	04/11/2018	Ground Water	340	350
Central Impact Area	MW-249M2	MW-249M2_S18	N	04/10/2018	Ground Water	174	184
Central Impact Area	MW-633M2	MW-633M2_S18	N	04/10/2018	Ground Water	197	207
Central Impact Area	MW-633M1	MW-633M1_S18	N	04/10/2018	Ground Water	282	292
Central Impact Area	MW-203M2	MW-203M2_S18	N	04/10/2018	Ground Water	176	186
Central Impact Area	MW-686M2	MW-686M2_S18	N	04/10/2018	Ground Water	194.3	204.3
Central Impact Area	MW-686M1	MW-686M1_S18	N	04/10/2018	Ground Water	243.2	253.2
Central Impact Area	MW-96M2	MW-96M2_S18	N	04/09/2018	Ground Water	160	170
Central Impact Area	MW-96M1	MW-96M1_S18	N	04/09/2018	Ground Water	206	216
Central Impact Area	MW-687M2	MW-687M2_S18	N	04/09/2018	Ground Water	188	198
Central Impact Area	MW-687M1	MW-687M1_S18	N	04/09/2018	Ground Water	232.6	242.6
Central Impact Area	MW-185M1	MW-185M1_S18	N	04/09/2018	Ground Water	247	257
Central Impact Area	MW-442M2	MW-442M2_S18	N	04/09/2018	Ground Water	215.3	225.3
Central Impact Area	MW-442M1	MW-442M1_S18	N	04/09/2018	Ground Water	247.6	257.6
Central Impact Area	MW-208M1	MW-208M1_S18	N	04/05/2018	Ground Water	195	205
Central Impact Area	MW-180M3	MW-180M3_S18	N	04/05/2018	Ground Water	171	181
Demolition Area 1	PR-EFF	PR-EFF-145A	N	04/05/2018	Process Water	0	0
Demolition Area 1	PR-MID-2	PR-MID-2-145A	N	04/05/2018	Process Water	0	0
Demolition Area 1	PR-MID-1	PR-MID-1-145A	N	04/05/2018	Process Water	0	0
Demolition Area 1	PR-INF	PR-INF-145A	N	04/05/2018	Process Water	0	0
Central Impact Area	MW-03M2	MW-03M2_S18	N	04/05/2018	Ground Water	180	185
Demolition Area 1	D1LE-EFF	D1LE-EFF-21A	N	04/05/2018	Process Water	0	0
Demolition Area 1	D1LE-MID2	D1LE-MID2-21A	N	04/05/2018	Process Water	0	0
Demolition Area 1	D1LE-MID1	D1LE-MID1-21A	N	04/05/2018	Process Water	0	0
Demolition Area 1	D1LE-INF	D1LE-INF-21A	N	04/05/2018	Process Water	0	0
Central Impact Area	MW-204M2	MW-204M2_S18	N	04/05/2018	Ground Water	76	86
Central Impact Area	MW-204M1	MW-204M1_S18	N	04/05/2018	Ground Water	141	151
Demolition Area 1	D1-EFF	D1-EFF-93A	N	04/05/2018	Process Water	0	0
Demolition Area 1	D1-MID-2	D1-MID-2-93A	N	04/05/2018	Process Water	0	0
Demolition Area 1	D1-MID-1	D1-MID-1-93A	N	04/05/2018	Process Water	0	0
Demolition Area 1	D1-INF	D1-INF-93A	N	04/05/2018	Process Water	0	0
Central Impact Area	MW-43M2	MW-43M2_S18	N	04/05/2018	Ground Water	200	210
Central Impact Area	MW-43M1	MW-43M1_S18	N	04/05/2018	Ground Water	223	233
Demolition Area 1	FPR-2-EFF-A	FPR-2-EFF-A-145A	N	04/05/2018	Process Water	0	0
Demolition Area 1	FPR-2-GAC-MID1A	FPR-2-GAC-MID1A-145A	N	04/05/2018	Process Water	0	0
Demolition Area 1	FPR2-POST-IX-A	FPR2-POST-IX-A-145A	N	04/05/2018	Process Water	0	0
Demolition Area 1	FPR-2-INF	FPR-2-INF-145A	N	04/05/2018	Process Water	0	0
Central Impact Area	MW-111M1	MW-111M1_S18	N	04/04/2018	Ground Water	224	234
J1 Range Southern	J1S-EFF	J1S-EFF-125A	N	04/04/2018	Process Water	0	0
J1 Range Southern	J1S-MID-2	J1S-MID-2-125A	N	04/04/2018	Process Water	0	0
J1 Range Southern	J1S-INF-2	J1S-INF-2-125A	N	04/04/2018	Process Water	0	0
Central Impact Area	MW-86S	MW-86S_S18	N	04/04/2018	Ground Water	143	153
Central Impact Area	MW-86M2	MW-86M2_S18	N	04/04/2018	Ground Water	158	168
Central Impact Area	MW-86M1	MW-86M1_S18	N	04/04/2018	Ground Water	208	218

N = Normal Sample
FD = Field Duplicate

TABLE 1
Sampling Progress: 1 April to 30 April 2018

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
J3 Range	J3-EFF	J3-EFF-139A	N	04/04/2018	Process Water	0	0
J3 Range	J3-MID-2	J3-MID-2-139A	N	04/04/2018	Process Water	0	0
J3 Range	J3-MID-1	J3-MID-1-139A	N	04/04/2018	Process Water	0	0
J3 Range	J3-INF	J3-INF-139A	N	04/04/2018	Process Water	0	0
Central Impact Area	MW-89M3	MW-89M3_S18	N	04/04/2018	Ground Water	174	184
J2 Range Northern	J2N-EFF-G	J2N-EFF-G-139A	N	04/04/2018	Process Water	0	0
J2 Range Northern	J2N-MID-2G	J2N-MID-2G-139A	N	04/04/2018	Process Water	0	0
J2 Range Northern	J2N-MID-1G	J2N-MID-1G-139A	N	04/04/2018	Process Water	0	0
J2 Range Northern	J2N-INF-G	J2N-INF-G-139A	N	04/04/2018	Process Water	0	0
Central Impact Area	MW-89M2	MW-89M2_S18	N	04/04/2018	Ground Water	214	224
Central Impact Area	MW-89M2	MW-89M2_S18D	FD	04/04/2018	Ground Water	214	224
J2 Range Northern	J2N-EFF-EF	J2N-EFF-EF-139A	N	04/04/2018	Process Water	0	0
J2 Range Northern	J2N-MID-2F	J2N-MID-2F-139A	N	04/04/2018	Process Water	0	0
J2 Range Northern	J2N-MID-1F	J2N-MID-1F-139A	N	04/04/2018	Process Water	0	0
J2 Range Northern	J2N-INF-EF	J2N-INF-EF-139A	N	04/04/2018	Process Water	0	0
J2 Range Northern	J2N-MID-2E	J2N-MID-2E-139A	N	04/04/2018	Process Water	0	0
J2 Range Northern	J2N-MID-1E	J2N-MID-1E-139A	N	04/04/2018	Process Water	0	0
Central Impact Area	MW-89M1	MW-89M1_S18	N	04/04/2018	Ground Water	234	244
J1 Range Northern	J1N-EFF	J1N-EFF-54A	N	04/04/2018	Process Water	0	0
J1 Range Northern	J1N-MID2	J1N-MID2-54A	N	04/04/2018	Process Water	0	0
J1 Range Northern	J1N-MID1	J1N-MID1-54A	N	04/04/2018	Process Water	0	0
J1 Range Northern	J1N-INF2	J1N-INF2-54A	N	04/04/2018	Process Water	0	0
Central Impact Area	MW-39M1	MW-39M1_S18	N	04/03/2018	Ground Water	220	230
Central Impact Area	MW-87M2	MW-87M2_S18	N	04/03/2018	Ground Water	169	179
Central Impact Area	MW-87M1	MW-87M1_S18	N	04/03/2018	Ground Water	194	204
Central Impact Area	MW-87M1	MW-87M1_S18D	FD	04/03/2018	Ground Water	194	204
Central Impact Area	MW-95M2	MW-95M2_S18	N	04/03/2018	Ground Water	167	177
Central Impact Area	CIA2-EFF	CIA2-EFF-51A	N	04/03/2018	Process Water	0	0
Central Impact Area	CIA2-MID2	CIA2-MID2-51A	N	04/03/2018	Process Water	0	0
Central Impact Area	CIA2-MID1	CIA2-MID1-51A	N	04/03/2018	Process Water	0	0
Central Impact Area	CIA2-INF	CIA2-INF-51A	N	04/03/2018	Process Water	0	0
Central Impact Area	MW-95M1	MW-95M1_S18	N	04/03/2018	Ground Water	202	212
Central Impact Area	MW-88M2	MW-88M2_S18	N	04/03/2018	Ground Water	213	223
Central Impact Area	MW-88M2	MW-88M2_S18D	FD	04/03/2018	Ground Water	213	223
Central Impact Area	CIA1-EFF	CIA1-EFF-51A	N	04/03/2018	Process Water	0	0
Central Impact Area	CIA1-MID2	CIA1-MID2-51A	N	04/03/2018	Process Water	0	0
Central Impact Area	CIA1-MID1	CIA1-MID1-51A	N	04/03/2018	Process Water	0	0
Central Impact Area	CIA1-INF	CIA1-INF-51A	N	04/03/2018	Process Water	0	0
Central Impact Area	MW-88M1	MW-88M1_S18	N	04/03/2018	Ground Water	233	243
Central Impact Area	CIA3-EFF	CIA3-EFF-22A	N	04/03/2018	Process Water	0	0
Central Impact Area	CIA3-MID2	CIA3-MID2-22A	N	04/03/2018	Process Water	0	0
Central Impact Area	CIA3-MID1	CIA3-MID1-22A	N	04/03/2018	Process Water	0	0
Central Impact Area	CIA3-INF	CIA3-INF-22A	N	04/03/2018	Process Water	0	0
Central Impact Area	MW-25	MW-25_S18	N	04/02/2018	Ground Water	108	118
Central Impact Area	MW-104S	MW-104S_S18	N	04/02/2018	Ground Water	118	128
J2 Range Eastern	J2E-EFF-K	J2E-EFF-K-115A	N	04/02/2018	Process Water	0	0
J2 Range Eastern	J2E-MID-2K	J2E-MID-2K-115A	N	04/02/2018	Process Water	0	0
J2 Range Eastern	J2E-MID-1K	J2E-MID-1K-115A	N	04/02/2018	Process Water	0	0
J2 Range Eastern	J2E-INF-K	J2E-INF-K-115A	N	04/02/2018	Process Water	0	0
Central Impact Area	MW-104M2	MW-104M2_S18	N	04/02/2018	Ground Water	135	145
J2 Range Eastern	J2E-EFF-J	J2E-EFF-J-115A	N	04/02/2018	Process Water	0	0
J2 Range Eastern	J2E-MID-2J	J2E-MID-2J-115A	N	04/02/2018	Process Water	0	0
J2 Range Eastern	J2E-MID-1J	J2E-MID-1J-115A	N	04/02/2018	Process Water	0	0
J2 Range Eastern	J2E-INF-J	J2E-INF-J-115A	N	04/02/2018	Process Water	0	0
Central Impact Area	MW-104M1	MW-104M1_S18	N	04/02/2018	Ground Water	155	165
J2 Range Eastern	J2E-EFF-IH	J2E-EFF-IH-115A	N	04/02/2018	Process Water	0	0
J2 Range Eastern	J2E-MID-2H	J2E-MID-2H-115A	N	04/02/2018	Process Water	0	0
J2 Range Eastern	J2E-MID-1H	J2E-MID-1H-115A	N	04/02/2018	Process Water	0	0
J2 Range Eastern	J2E-MID-2I	J2E-MID-2I-115A	N	04/02/2018	Process Water	0	0

N = Normal Sample
FD = Field Duplicate

TABLE 1
Sampling Progress: 1 April to 30 April 2018

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
J2 Range Eastern	J2E-MID-11	J2E-MID-11-115A	N	04/02/2018	Process Water	0	0
J2 Range Eastern	J2E-INF-I	J2E-INF-I-115A	N	04/02/2018	Process Water	0	0

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
 Data Received April 2018

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
B Range	MW-455S	MW-455S_S18	117.6	127.6	02/13/2018	SW6010C	Copper	4.0	J	ug/L		X	1.7	25.0
B Range	MW-539M1	MW-539M1_S18	113	123	02/12/2018	SW6010C	Copper	2.0	J	ug/L		X	1.7	25.0
B Range	MW-490S	MW-490S_S18	108.1	118.1	02/08/2018	SW6020A	Tungsten	0.17	J	ug/L		X	0.14	2.0
C Range	MW-456S	MW-456S_S18	150.3	160.3	02/12/2018	SW6010C	Copper	28.8		ug/L		X	1.7	25.0
C Range	MW-491S	MW-491S_S18	146.9	156.9	02/12/2018	SW6010C	Copper	22.2	J	ug/L		X	1.7	25.0
Central Impact Area	MW-614M2	MW-614M2_S18	215	225	03/15/2018	SW6850	Perchlorate	0.022	J	ug/L	2.0		0.012	0.20
Central Impact Area	MW-615M2	MW-615M2_S18	200	210	03/15/2018	SW6850	Perchlorate	0.039	J	ug/L	2.0		0.012	0.20
Central Impact Area	MW-615M1	MW-615M1_S18	260	270	03/15/2018	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.24		ug/L	400		0.025	0.20
Central Impact Area	MW-615M1	MW-615M1_S18	260	270	03/15/2018	SW6850	Perchlorate	1.4		ug/L	2.0		0.012	0.20
Central Impact Area	MW-615M1	MW-615M1_S18	260	270	03/15/2018	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	3.8		ug/L	0.60	X	0.036	0.20
Central Impact Area	MW-615M1	MW-615M1_S18D	260	270	03/15/2018	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.24		ug/L	400		0.025	0.20
Central Impact Area	MW-615M1	MW-615M1_S18D	260	270	03/15/2018	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	3.4		ug/L	0.60	X	0.036	0.20
Central Impact Area	MW-123S	MW-123S_S18	139	149	02/13/2018	SW6010C	Copper	26.0		ug/L		X	1.7	25.0
CS-10 (ARNG)	03MW0709	03MW0709_S18	82.1	87.1	02/15/2018	SW6010C	Copper	3.9	J	ug/L		X	1.7	25.0
Demolition Area 1	MW-696M1	MW-696M1_R1	175.2	185.2	03/28/2018	SW6850	Perchlorate	0.36		ug/L	2.0		0.012	0.20
Demolition Area 1	MW-697M1	MW-697M1_R1	243	253	03/28/2018	SW6850	Perchlorate	0.094	J	ug/L	2.0		0.012	0.20
Demolition Area 1	MW-698M1	MW-698M1_R1	212.4	222.4	03/28/2018	SW6850	Perchlorate	0.031	J	ug/L	2.0		0.012	0.20
Demolition Area 1	MW-35S	MW-35S_S18	84	94	02/20/2018	SW6020A	Tungsten	0.51	J	ug/L		X	0.14	2.0
Demolition Area 1	MW-36S	MW-36S_S18	73	83	02/13/2018	SW6010C	Copper	18.9	J	ug/L		X	1.7	25.0
Demolition Area 1	MW-431	MW-431_F17	88	188	12/13/2017	SW6850	Perchlorate	0.11	J	ug/L	2.0		0.012	0.20
Demolition Area 1	MW-431	MW-431_F17	88	188	12/13/2017	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.21		ug/L	400		0.025	0.20
Demolition Area 1	MW-431	MW-431_F17	88	188	12/13/2017	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.30		ug/L	0.60		0.036	0.20
Demolition Area 1	EW-658	EW-658_F17	96	136	12/13/2017	SW6850	Perchlorate	0.077	J	ug/L	2.0		0.012	0.20
Demolition Area 1	EW-658	EW-658_F17	96	136	12/13/2017	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.27		ug/L	0.60		0.036	0.20
Demolition Area 1	MW-19S	MW-19S_F17	52.7	62.7	12/13/2017	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.93		ug/L	400		0.025	0.20
Demolition Area 1	MW-19S	MW-19S_F17	52.7	62.7	12/13/2017	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	3.2		ug/L	0.60	X	0.036	0.20
Demolition Area 1	MW-19S	MW-19S_F17D	52.7	62.7	12/13/2017	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.88		ug/L	400		0.025	0.20
Demolition Area 1	MW-19S	MW-19S_F17D	52.7	62.7	12/13/2017	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	3.1		ug/L	0.60	X	0.036	0.20
G Range	MW-470S	MW-470S_S18	76.3	86.3	02/13/2018	SW6020A	Antimony	0.47	J	ug/L	0.60		0.18	2.0
G Range	MW-470S	MW-470S_S18	76.3	86.3	02/13/2018	SW6010C	Copper	15.7	J	ug/L		X	1.7	25.0
G Range	MW-470S	MW-470S_S18D	76.3	86.3	02/13/2018	SW6020A	Antimony	0.45	J	ug/L	0.60		0.18	2.0
G Range	MW-470S	MW-470S_S18D	76.3	86.3	02/13/2018	SW6010C	Copper	9.7	J	ug/L		X	1.7	25.0
GB Range	03MW0122A	03MW0122A_S18	83.4	93.4	02/15/2018	SW6010C	Copper	9.4	J	ug/L		X	1.7	25.0
GB Range	03MW0122A	03MW0122A_S18D	83.4	93.4	02/15/2018	SW6010C	Copper	7.4	J	ug/L		X	1.7	25.0
J2 Range Eastern	MW-368M2	MW-368M2_S18	202.7	212.7	02/22/2018	SW6850	Perchlorate	16.4		ug/L	2.0	X	0.012	0.20
J2 Range Eastern	MW-368M2	MW-368M2_S18	202.7	212.7	02/22/2018	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	5.5		ug/L	400		0.025	0.20
J2 Range Eastern	MW-368M2	MW-368M2_S18	202.7	212.7	02/22/2018	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	7.1		ug/L	0.60	X	0.036	0.20
J2 Range Eastern	MW-368M2	MW-368M2_S18D	202.7	212.7	02/22/2018	SW6850	Perchlorate	17.9		ug/L	2.0	X	0.012	0.20
J2 Range Eastern	MW-368M2	MW-368M2_S18D	202.7	212.7	02/22/2018	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	5.5		ug/L	400		0.025	0.20
J2 Range Eastern	MW-368M2	MW-368M2_S18D	202.7	212.7	02/22/2018	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	7.0		ug/L	0.60	X	0.036	0.20
J2 Range Eastern	MW-339M1	MW-339M1_S18	233	243	02/22/2018	SW6850	Perchlorate	0.52		ug/L	2.0		0.012	0.20
J2 Range Eastern	MW-324M2	MW-324M2_S18	203.7	214.7	02/21/2018	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.79		ug/L	400		0.025	0.20
J2 Range Eastern	MW-324M2	MW-324M2_S18	203.7	214.7	02/21/2018	SW6850	Perchlorate	2.3		ug/L	2.0	X	0.012	0.20
J2 Range Eastern	MW-324M1	MW-324M1_S18	234.9	244.9	02/21/2018	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.20		ug/L	0.60		0.036	0.20
J2 Range Eastern	MW-324M1	MW-324M1_S18	234.9	244.9	02/21/2018	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.96		ug/L	400		0.025	0.20

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

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
 Data Received April 2018

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
J2 Range Eastern	MW-324M1	MW-324M1_S18	234.9	244.9	02/21/2018	SW6850	Perchlorate	2.0		ug/L	2.0		0.012	0.20
J2 Range Eastern	J2MW-04M2	J2MW-04M2_S18	210	220	02/21/2018	SW6850	Perchlorate	0.035	J	ug/L	2.0		0.012	0.20
J2 Range Eastern	J2MW-04M1	J2MW-04M1_S18	257	267	02/21/2018	SW6850	Perchlorate	0.099	J	ug/L	2.0		0.012	0.20
J2 Range Eastern	J2MW-04M1	J2MW-04M1_S18	257	267	02/21/2018	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.20		ug/L	0.60		0.036	0.20
J2 Range Eastern	J2MW-04M1	J2MW-04M1_S18	257	267	02/21/2018	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.35		ug/L	400		0.025	0.20
J2 Range Northern	J2EW0001	J2EW0001_S18	179	234	02/07/2018	SW6850	Perchlorate	1.5		ug/L	2.0		0.012	0.20
J2 Range Northern	J2EW0002	J2EW0002_S18	198	233	02/07/2018	SW6850	Perchlorate	4.2		ug/L	2.0	X	0.012	0.20
J2 Range Northern	J2EW0002	J2EW0002_S18D	198	233	02/07/2018	SW6850	Perchlorate	4.2		ug/L	2.0	X	0.012	0.20
J2 Range Northern	J2EW0003	J2EW0003_S18	202	232	02/07/2018	SW6850	Perchlorate	0.45		ug/L	2.0		0.012	0.20
Northwest Corner	MW-270M1	MW-270M1_S18	74	79	02/28/2018	SW6850	Perchlorate	0.17	J	ug/L	2.0		0.012	0.20
Northwest Corner	MW-284M2	MW-284M2_S18	45	55	02/22/2018	SW6850	Perchlorate	0.38		ug/L	2.0		0.012	0.20
Northwest Corner	MW-284M1	MW-284M1_S18	115	125	02/22/2018	SW6850	Perchlorate	0.068	J	ug/L	2.0		0.012	0.20

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