# MONTHLY PROGRESS REPORT #213 FOR DECEMBER 2014

# 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 December to 31 December 2014.

## 1. SUMMARY OF REMEDIATION ACTIONS

The following is a description of Remediation Actions (RA) underway at Camp Edwards as of December 2014. 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 was operating at a flow rate of 250 gpm with over 2.158 billion gallons of water treated and re-injected as of 26 December 2014. The following shut downs of the Frank Perkins Road facility occurred in December:

• Shut down on 23 December 2014 at 0845 to change bag filters and was restarted on 23 December 2014 at 0925.

The Pew Road Mobile Treatment Unit (MTU) continues to operate at a flow rate of 105 gpm with over 393 million gallons of water treated and re-injected as of 26 December 2014. The following Pew Road MTU shut down occurred in December:

- Shut down on 28 December 2014 at 1146 due to a system alarm and was restarted on 29 December 2014 at 0714; and
- Shut down on 30 December 2014 at 2355 due to a system alarm and was restarted on 31 December 2014 at 0852.

The Base Boundary RA continues to operate at a flow rate of 65 gpm with over 98.5 million gallons of water treated and re-injected as of 26 December 2014. No Base Boundary MTU shut downs occurred in December.

# 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 26 December 2014, over 243 million gallons of water have been treated and re-injected. No J-1 Range Southern system shut downs occurred in December.

#### 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 26 December 2014, over 121 million gallons of water have been treated and re-injected. No J-1 Range Northern MTU shut downs occurred in December.

# J-3 Range Groundwater RRA

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

The J-3 system is currently operating at a flow rate of 195 gpm. As of 26 December 2014, over 772 million gallons of water have been treated and re-injected. The following J-3 system shut downs occurred in December:

- EW-0001 and EW-0032 were shut down on 5 December 2014 at 1236 due to a system alarm and were restarted on 8 December 2014 at 1016:
- EW-0032 was shut down on 8 December 2014 at 1210 due to a system alarm and was restarted on 9 December 2014 at 0900:
- EW-0032 was shut down on 9 December 2014 at 1116 due to a system alarm and was restarted on 9 December 2014 at 1136;
- EW-0032 was shut down on 9 December 2014 at 1142 due to a system alarm (damaged variable frequency device (VFD)) and was restarted on 19 December 2014 at 1142;
- EW-IP1 was shut down on 22 November 2014 at 1512 due to pump/motor failure; following repair, EW-IP1 was restarted on 29 December 2014 at 1512; and
- EW- 0001 was shut down on 31 December 2014 at 1527 due to power interruption and was restarted on 2 January 2015 at 1252.

# J-2 Range Groundwater RA

#### Northern Plant

The J-2 Range Northern Treatment facility consists of removal and treatment of contaminated groundwater to control further migration of explosives compounds and perchlorate. The Extraction, Treatment, and Infiltration (ETI) system includes three extraction wells, ex-situ treatment process to remove explosives compounds and perchlorate from the groundwater, and an infiltration basin to return treated water to the aquifer.

The Northern Treatment Building continues to operate at a flow rate of 225 gpm. As of 26 December 2014, over 562 million gallons of water have been treated and re-injected. No Northern Treatment Building shut downs occurred in December.

The Northern MTUs E and F continue to operate at a flow rate of 250 gpm. As of 26 December 2014, over 954 million gallons of water have been treated and re-injected. The following J-2 Range Northern MTU shut down occurred in December:

• MTU E was shut down on 1 December 2014 at 1024 due to a system alarm and was restarted on 1 December 2014 at 1050.

#### 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 26 December 2014, over 641 million gallons of water have been treated and re-injected. No shut downs of MTUs H and I occurred in December.

MTU J continues to operate at a flow rate of 120 gpm. As of 26 December 2014, over 302 million gallons of water have been treated and re-injected. No shut downs of MTU J occurred in December.

MTU K continues to operate at a flow rate of 125 gpm. As of 26 December 2014, over 365 million gallons of water have been treated and re-injected. No shut downs of MTU K occurred in December.

## 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 26 December 2014, over 242 million gallons of water have been treated and re-injected. No CIA treatment facility shutdowns occurred in December.

#### 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 from the J-2 Range Northern, Small Arms Ranges, Northwest Corner, Demolition Area 1, Demolition Area 2, and Western Boundary.

Soil samples were collected from the CIA.

Completed intrusive investigation of Metal Mapper anomalies in 16-acre area at the CIA for the 2014 field season.

Completed soil excavation and post-excavation sampling at the CIA in 90x90 ft area at consolidated shot location.

Completed Buried Explosion Module (BEM) operations at the CIA and demobilized for the field season.

Began Munitions and Explosives of Concern (MEC) investigation at the meandering paths and designated grids, and began soil sampling in designated investigation grids at J-2 Range (in accordance with Project Notes dated 28 August 2013 and 29 August 2013, respectively).

#### **JBCC IAGWSP Tech Update Meeting Minutes 17 December 2014**

#### **CIA Source Work Update**

USACE provided a presentation on the CIA Source Work. They reviewed the results of the work that was done in the grid that EPA had selected for 100% dig for validation purposes. USACE explained the classification work to determine "digs." EPA asked how the greater than 70% classification goal for clutter was determined. IAGWSP clarified that this was a result of the ESTCP testing that had been done. The goal was to remove 95% of UXO and leave more than 70% of the clutter to reduce digging unnecessarily.

The findings were discussed from the 100% grid were discussed. All but one target of interest was found.

A figure was then shown that highlighted the status of each of the remaining work areas. Metal Mapper data collection is complete.

#### Demo 1

USACE reported that the Mendes Property Trustees signed the easement agreement. USACE stated the next step is to do the environmental paperwork and allow 30 days for a cultural resources review by the

SHPO. USACE will then work on the requisition strategy and they hope to have that completed for counter-signature by the end of February. The design phase can then begin and it is expected to take four months. USACE explained that they are planning for a three-month construction timeframe. USACE projects that award could potentially be made in late summer. IAGWSP will continue to provide updates at tech meetings.

# **Small Arms Ranges**

IAGWSP submitted the RLSO of the PN addendum. The agencies agreed to sign after the tech meeting.

# J-2 Investigation Update

The J-2 sampling and intrusive investigation work began in early December and 10/62 grids have been completed thus far. There was a discussion of the work on the meandering paths grids (a list of findings was provided previously to the agencies). The list of items destroyed in the BEM was reviewed. EPA commented that they thought only CIA items were supposed to be destroyed in the BEM. USACE stated that was not their understanding and there had been previous discussions with EPA about eliminating the CDC entirely and only using the BEM.

EPA asked for clarification on the items that were determined to be "unsafe for storage." USACE explained that while the items were deemed "safe to move" by a UXO technician, they were not compatible with storage and therefore, needed to be destroyed.

EPA asked about soil sampling at the BEM. USACE replied that no intermediate sampling was required as part of the signed project note. IAGWSP said that a threshold will need to be determined for the sand recycling.

Training Areas work will begin once J-2 work is completed.

## **CIA Design Update**

IAGWSP reported that the Project Note for locating the downgradient well will be submitted by the end of the week.

#### **Demo 2 Plume Shell Presentation**

A presentation was provided on the Demo 2 revised plume shell. USACE reviewed the comments on the Annual Report and noted the status of the responses.

USACE then explained the process for developing the new plume shell. USACE forward migrated all of the groundwater data using samples from 1997-2014, contoured all the data and confirmed the model inputs for hydro parameters (conductivity, storage coefficients, yield and porosity). They then interpreted iso-concentration contours.

A figure showing the modeling layers for hydraulic conductivity (150ft per day) was shown. A summary of the migrated RDX concentrations was also shown. IAGWSP noted how the migrated data compares with the figure in the 2014 Annual Report. USACE explained that attenuation was not factored into the model even though it is likely occurring.

EPA asked how often the wells were being sampled. USACE stated it was semi-annually.

In summary, USACE stated that the new plume shell shows non-contiguous plumelets and particle track migration indicates possible off-base RDX at concentrations above  $0.6~\mu g/L$ . USACE added that this was a very conservative estimate and noted that the RDX attenuation rate is 55% with reduction in five years. Monitoring data does not support plume migration that far downgradient. USACE explained that this model assumes no attenuation after 5 years. USACE recommends adding wells to better define the potential for contamination at the base boundary.

DEP asked if there were time markers on the particle tracks. USACE stated there were not. DEP asked for the depth at MW-573 and USACE agreed to provide this after the meeting.

EPA expressed concern that the inputs in the models won't be easily understood several years from now with new people working on the project. IAGWSP explained that USACE will remain on the project for continuity.

EPA asked for more time to digest the information and determine next steps for the well locations. USACE noted that property ownership and accessibility would be researched for potential locations.

IAGWSP will submit a second RCL in January.

MassDEP asked about the likelihood that RDX has/will cross the base boundary and if there are potential additional sources. USACE noted that the maximum highest concentration was 7ppb and it was brief. USACE clarified that the model depicts a gap in time with no reduction in concentrations and noted that was done to be conservative for modeling purposes but it is unrealistic. IAGWSP reiterated that the concentrations were migrated, without consideration for attenuation, so the off-base plume migration not likely.

#### **Action Items**

The action items were discussed and updated.

#### **JBCC Cleanup Team Meeting**

The JBCC Cleanup Team (JBCCCT), formerly the MMR Cleanup Team (MMRCT), is next scheduled to meet on February 11, 2015. The Cleanup Team meeting discusses late breaking news and responses to action items, as well as updates from the IAGWSP and the Installation Restoration Program (IRP). The JBCCCT meetings provide a forum for community input regarding issues related to both the IRP and the IAGWSP.

### SUMMARY OF DATA RECEIVED

Table 2 summarizes the validated detections of explosives compounds and perchlorate for all groundwater results received from 1 December through 31 December 2014. These results are compared to the Maximum Contaminant Levels/Health Advisory (MCL/HA) values for respective analytes. Explosives and perchlorate are the primary contaminants of concern (COC) at Camp Edwards.

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

Boundary. Environmental monitoring reports for each OU are generated each year to evaluate the current year groundwater results. These reports are available on the site Environmental Data Management System (EDMS) and at the project document repositories (IAGWSP office, Jonathan Bourne Library, Falmouth Public Library, and Sandwich Public Library).

## 2. DELIVERABLES SUBMITTED

Deliverables submitted during the reporting period include the following:

•	Monthly Progress Report No. 212 for November 2014	12/10/2014
•	Final Former A Range 2014 Environmental Monitoring Report	12/04/2014
•	Draft 2014 Central Impact Area Source Removal Annual Report	12/16/2014
•	Sampling, Soil Removal, and Monitoring at the Small Arms Ranges	12/18/2014
	Project Note (Addendum)	
•	Draft Central Impact Area Leading Edge Extraction Well Project Note	12/19/2014
•	Draft 2014 Central Impact Area Source Removal Annual Report	12/16/2014
•	Draft J-2 Range Eastern and J-2 Range Northern 2014 Environmental	12/30/2014
	Monitoring Report	

#### 3. SCHEDULED ACTIONS

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

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

TABLE 1
Sampling Progress: 1 December - 31 December 2014

December 2014 Monthly Prog	•	Sampling Progres	s: 1 Dec	ember - 31 De	ecember 2014		
Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
Demolition Area 1	MW-76M2	MW-76M2_F14	N	12/29/2014	Ground Water	105	115
Demolition Area 1	MW-77M2	MW-77M2_F14	N	12/29/2014	Ground Water	120	130
Demolition Area 1	MW-31S	MW-31S_F14	N	12/29/2014	Ground Water	98	103
Demolition Area 1	MW-31S	MW-31S_F14D	FD	12/29/2014	Ground Water	98	103
Demolition Area 1	MW-31M	MW-31M_F14	N	12/29/2014	Ground Water	113	123
J2 Range Northern	MW-621M2	MW-621M2_R3	N	12/22/2014	Ground Water	219.4	229.4
J2 Range Northern	MW-621M2	MW-621M2_R3D	FD	12/22/2014	Ground Water	219.4	229.4
J2 Range Northern	MW-621M1	MW-621M1_R3	N	12/22/2014	Ground Water	249.4	259.4
J2 Range Northern	MW-640M2	MW-640M2_R2	N	12/22/2014	Ground Water	216	226
J2 Range Northern	MW-640M1	MW-640M1_R2	N	12/22/2014	Ground Water	246	256
I Range	MW-639S	MW-639S_R2	N	12/18/2014	Ground Water	87.5	97.5
Demolition Area 1	MW-545M4	MW-545M4_F14	N	12/17/2014	Ground Water	72	82
Demolition Area 1	MW-545M3	MW-545M3_F14	N	12/17/2014	Ground Water	101.5	111.5
Demolition Area 1	MW-545M2	MW-545M2_F14	N	12/17/2014	Ground Water	142	152
Demolition Area 1	MW-545M1	MW-545M1_F14	N	12/17/2014	Ground Water	162	172
Demolition Area 1	MW-73S	MW-73S_F14	N	12/16/2014	Ground Water	52.2	61.7
Demolition Area 1	MW-19S	MW-19S_F14	N	12/16/2014	Ground Water	52.7	62.7
Demolition Area 1	MW-19S	MW-19S_F14D	FD	12/16/2014	Ground Water	52.7	62.7
Demolition Area 1	MW-431	MW-431_F14	N	12/16/2014	Ground Water	88	188
Demolition Area 1	MW-432	MW-432_F14	N	12/16/2014	Ground Water	88	188
Demolition Area 1	MW-341M3	MW-341M3_F14	N	12/16/2014	Ground Water	209.5	219.5
	XX9514		N	12/15/2014	Ground Water	102	112
Demolition Area 1	MW-544M3	XX9514_F14 MW-544M3_F14	N	12/15/2014	Ground Water Ground Water	77.5	87.5
Demolition Area 1		MW-544M3_F14	N		Ground Water Ground Water		122
Demolition Area 1	MW-544M2	MW-544M2_F14	_	12/15/2014		112	
Demolition Area 1	MW-544M1	MW-544M1_F14	N	12/15/2014	Ground Water	162	172
Central Impact Area	SSCIACSL02	CIACSL02_090PE1C	FR	12/12/2014	Soil	0	0.25
Central Impact Area	SSCIACSL02	CIACSL02_090PE1B	FR	12/12/2014	Soil	0	0.25
Central Impact Area	SSCIACSL02	CIACSL02_090PE1A	N	12/12/2014	Soil	0	0.25
J3 Range	90PLT01006	90PLT01006_F14	N	12/11/2014	Process Water	0	0
Western Boundary	4036000-04G	4036000-04G_14Q4	N	12/11/2014	Ground Water	55	65
Western Boundary	4036000-03G	4036000-03G_14Q4	N	12/11/2014	Ground Water	50	60
Western Boundary	4036000-06G	4036000-06G_14Q4	N	12/11/2014	Ground Water	108	128
Western Boundary	4036000-01G	4036000-01G_14Q4	N	12/11/2014	Ground Water	38	70
Demolition Area 1	MW-610M2	MW-610M2_F14	N	12/10/2014	Ground Water	85	95
Demolition Area 1	MW-610M1	MW-610M1_F14	N	12/10/2014	Ground Water	110	120
Demolition Area 1	MW-598M2	MW-598M2_F14	N	12/10/2014	Ground Water	88	98
Demolition Area 1	MW-598M1	MW-598M1_F14	N	12/10/2014	Ground Water	122	132
Demolition Area 1	MW-556M2	MW-556M2_F14	N	12/09/2014	Ground Water	111	121
Demolition Area 1	MW-556M1	MW-556M1_F14	N	12/09/2014	Ground Water	153	163
Demolition Area 1	MW-554M2	MW-554M2_F14	N	12/09/2014	Ground Water	89.1	99.1
Demolition Area 1	MW-554M1	MW-554M1_F14	N	12/09/2014	Ground Water	120	130
Demolition Area 1	MW-558M2	MW-558M2_F14	N	12/09/2014	Ground Water	98	108
Demolition Area 1	MW-558M1	MW-558M1_F14	N	12/08/2014	Ground Water	134	144
Demolition Area 1	MW-559M2	MW-559M2_F14	N	12/08/2014	Ground Water	87	97
Demolition Area 1	MW-559M1	MW-559M1_F14	N	12/08/2014	Ground Water	135.6	145.6
Demolition Area 1	MW-641M2	MW-641M2_F14	N	12/08/2014	Ground Water	86.2	96.2
Demolition Area 1	MW-641M1	MW-641M1_F14	N	12/08/2014	Ground Water	113.2	123.2
Demolition Area 1	MW-642M2	MW-642M2_F14	N	12/04/2014	Ground Water	75	85
Demolition Area 1	MW-642M1	MW-642M1_F14	N	12/04/2014	Ground Water	102	112
	FPR-2-EFF-A	FPR-2-EFF-A-105A	N	12/04/2014	Process Water	0	0
Demolition Area 1 Demolition Area 1	FPR-2-GAC-MID3A	FPR-2-GAC-MID3A-105A	N	12/04/2014	Process Water	0	0
	FPR2-POST-IX-A	FPR2-POST-IX-A-105A	N			0	0
Demolition Area 1			N	12/04/2014 12/04/2014	Process Water	0	0
Demolition Area 1	FPR-2-INF	FPR-2-INF-105A			Process Water		
Demolition Area 1	PR-EFF	PR-EFF-105A	N	12/04/2014	Process Water	0	0
Demolition Area 1	PR-MID-2	PR-MID-2-105A	N	12/04/2014	Process Water	0	0
Demolition Area 1	PR-MID-1	PR-MID-1-105A	N	12/04/2014	Process Water	0	0
Demolition Area 1	PR-INF	PR-INF-105A	N	12/04/2014	Process Water	0	0
Demolition Area 1	D1-EFF	D1-EFF-53A	N	12/04/2014	Process Water	0	0
Demolition Area 1	D1-MID-2	D1-MID-2-53A	N	12/04/2014	Process Water	0	0
Demolition Area 1	D1-MID-1	D1-MID-1-53A	N	12/04/2014	Process Water	0	0
Demolition Area 1	D1-INF	D1-INF-53A	N	12/04/2014	Process Water	0	0
Demolition Area 1	MW-211M1	MW-211M1_F14	N	12/03/2014	Ground Water	200	210
Demolition Area 1	MW-211M1	MW-211M1_F14D	FD	12/03/2014	Ground Water	200	210
J2 Range Northern	J2N-EFF-G	J2N-EFF-G-99A	N	12/03/2014	Process Water	0	0
J2 Range Northern	J2N-MID-2G	J2N-MID-2G-99A	N	12/03/2014	Process Water	0	0
J2 Range Northern	J2N-MID-1G	J2N-MID-1G-99A	N	12/03/2014	Process Water	0	0
J2 Range Northern	J2N-INF-G	J2N-INF-G-99A	N	12/03/2014	Process Water	0	0
J2 Range Northern	J2N-EFF-EF	J2N-EFF-EF-99A	N	12/03/2014	Process Water	0	0
J2 Range Northern	J2N-MID-2F	J2N-MID-2F-99A	N	12/03/2014	Process Water	0	0
J2 Range Northern	J2N-MID-1F	J2N-MID-1F-99A	N	12/03/2014	Process Water	0	0
	J2N-INF-EF	J2N-INF-EF-99A	N	12/03/2014	Process Water	0	0
12 Range Northern			113	116/00/6014	II IUUUGGG VVAICI		I ~
J2 Range Northern						100	110
J2 Range Northern  Demolition Area 1  Demolition Area 1	MW-258M1 MW-258M1	MW-258M1_F14 MW-258M1_F14D	N FD	12/03/2014 12/03/2014	Ground Water Ground Water	109 109	119 119

TABLE 1
Sampling Progress: 1 December - 31 December 2014

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
J2 Range Northern	J2N-MID-2E	J2N-MID-2E-99A	N	12/03/2014	Process Water	0	0
J2 Range Northern	J2N-MID-1E	J2N-MID-1E-99A	N	12/03/2014	Process Water	0	0
J1 Range Northern	J1N-EFF	J1N-EFF-14A	N	12/03/2014	Process Water	0	0
J1 Range Northern	J1N-MID2	J1N-MID2-14A	N	12/03/2014	Process Water	0	0
Demolition Area 1	MW-532M2	MW-532M2_F14	N	12/03/2014	Ground Water	138	148
Demolition Area 1	MW-532M2	MW-532M2_F14D	FD	12/03/2014	Ground Water	138	148
J1 Range Northern	J1N-MID1	J1N-MID1-14A	N	12/03/2014	Process Water	0	0
J1 Range Northern	J1N-INF2	J1N-INF2-14A	N	12/03/2014	Process Water	0	0
Demolition Area 1	MW-532M1	MW-532M1_F14	N	12/03/2014	Ground Water	168	178
Central Impact Area	CIA1-EFF	CIA1-EFF-11A	N	12/02/2014	Process Water	0	0
Central Impact Area	CIA1-MID2	CIA1-MID2-11A	N	12/02/2014	Process Water	0	0
Central Impact Area	CIA1-MID1	CIA1-MID1-11A	N	12/02/2014	Process Water	0	0
Central Impact Area	CIA1-INF	CIA1-INF-11A	N	12/02/2014	Process Water	0	0
Central Impact Area	CIA2-EFF	CIA2-EFF-11A	N	12/02/2014	Process Water	0	0
Central Impact Area	CIA2-MID2	CIA2-MID2-11A	N	12/02/2014	Process Water	0	0
Central Impact Area	CIA2-MID1	CIA2-MID1-11A	N	12/02/2014	Process Water	0	0
Central Impact Area	CIA2-INF	CIA2-INF-11A	N	12/02/2014	Process Water	0	0
Demolition Area 2	MW-435M2	MW-435M2_F14	N	12/02/2014	Ground Water	149.6	159.9
Demolition Area 2	MW-435M1	MW-435M1_F14	N	12/02/2014	Ground Water	169.9	180
J1 Range Southern	J1S-EFF	J1S-EFF-85A	N	12/02/2014	Process Water	0	0
J1 Range Southern	J1S-MID-2	J1S-MID-2-85A	N	12/02/2014	Process Water	0	0
J1 Range Southern	J1S-INF-2	J1S-INF-2-85A	N	12/02/2014	Process Water	0	0
J2 Range Eastern	J2E-EFF-IH	J2E-EFF-IH-75A	N	12/02/2014	Process Water	0	0
J2 Range Eastern	J2E-MID-2H	J2E-MID-2H-75A	N	12/02/2014	Process Water	0	0
J2 Range Eastern	J2E-MID-1H	J2E-MID-1H-75A	N	12/02/2014	Process Water	0	0
Northwest Corner	MW-441M2	MW-441M2_F14	N	12/02/2014	Ground Water	109.5	119.5
J2 Range Eastern	J2E-MID-2I	J2E-MID-2I-75A	N	12/02/2014	Process Water	0	0
J2 Range Eastern	J2E-MID-1I	J2E-MID-1I-75A	N	12/02/2014	Process Water	0	0
J2 Range Eastern	J2E-INF-I	J2E-INF-I-75A	N	12/02/2014	Process Water	0	0
J2 Range Eastern	J2E-EFF-K	J2E-EFF-K-75A	N	12/02/2014	Process Water	0	0
J2 Range Eastern	J2E-MID-2K	J2E-MID-2K-75A	N	12/02/2014	Process Water	0	0
J2 Range Eastern	J2E-MID-1K	J2E-MID-1K-75A	N	12/02/2014	Process Water	0	0
J2 Range Eastern	J2E-INF-K	J2E-INF-K-75A	N	12/02/2014	Process Water	0	0
J2 Range Eastern	J2E-EFF-J	J2E-EFF-J-75A	N	12/02/2014	Process Water	0	0
J2 Range Eastern	J2E-MID-2J	J2E-MID-2J-75A	N	12/02/2014	Process Water	0	0
J2 Range Eastern	J2E-MID-1J	J2E-MID-1J-75A	N	12/02/2014	Process Water	0	0
J2 Range Eastern	J2E-INF-J	J2E-INF-J-75A	N	12/02/2014	Process Water	0	0

# TABLE 2 VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS Data Received December 2014

								<b>.</b>						
Area of Concern	Location ID	Field Sample ID	Top Depth (ft bgs)	Bottom Depth (ft bgs)	Date Sampled	Test Method	Analyte	Result Value	Qualifier	Units	MCL/HA	> MCL/HA	MDL	RL
Northwest Corner	MW-441M2	MW-441M2 F14	109.5	119.5	12/02/2014	SW8330	,	0.30	Qualifici	UG/L	0.60	WOENTRY	0.026	0.20
	MW-161S	MW-161S F14	145.5	155.5	11/25/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX) Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	0.86		UG/L	0.60	V	0.026	0.20
Demolition Area 2 Demolition Area 2	MW-160S	MW-160S F14	137.5	147.5	11/25/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	0.51		UG/L	0.60	^	0.026	0.20
								0.51		UG/L				
Demolition Area 2	MW-572M1	MW-572M1_F14	164.9	174.9	11/25/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	_			0.60	ν.	0.026	0.20
Demolition Area 2	MW-573M2	MW-573M2_F14	155.4	165.4	11/24/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	1.8		UG/L	0.60	X	0.026	0.20
Demolition Area 2	MW-573M2	MW-573M2_F14D	155.4	165.4	11/24/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	1.9	1.	UG/L	0.60	X	0.026	0.20
Central Impact Area	MW-633M2	MW-633M2_R2	197	207	11/19/2014	SW6850	Perchlorate	0.052	J	UG/L	2.0		0.019	0.20
Central Impact Area	MW-638M2	MW-638M2_R2	204.2	214.2	11/19/2014	SW6850	Perchlorate	0.33		UG/L	2.0		0.019	0.20
Central Impact Area	MW-638M2	MW-638M2_R2	204.2	214.2	11/19/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	0.66	ļ	UG/L	0.60	Х	0.026	0.20
Central Impact Area	MW-638M1	MW-638M1_R2	261.2	271.2	11/19/2014	SW6850	Perchlorate	0.032	J	UG/L	2.0		0.019	0.20
J1 Range Northern	MW-166M3	MW-166M3_F14	125	135	11/18/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	0.75	1.	UG/L	0.60	Х	0.026	0.20
J1 Range Northern	MW-303M3	MW-303M3_F14	139.7	149.7	11/18/2014	SW6850	Perchlorate	0.045	J	UG/L	2.0		0.019	0.20
J1 Range Northern	MW-303M3	MW-303M3_F14	139.7	149.7	11/18/2014	SW8330	4-Amino-2,6-Dinitrotoluene	0.43	+	UG/L	7.3		0.017	0.20
J1 Range Northern	MW-303M2	MW-303M2_F14	235.1	245.1	11/18/2014	SW6850	Perchlorate	1.9	1	UG/L	2.0	.,	0.019	0.20
J1 Range Northern	MW-303M2	MW-303M2_F14	235.1	245.1	11/18/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	14.5	1	UG/L	0.60	Х	0.026	0.20
J1 Range Northern	MW-303M2	MW-303M2_F14	235.1	245.1	11/18/2014	SW8330	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	4.1		UG/L	400		0.023	0.20
J1 Range Northern	MW-303M2	MW-303M2_F14D	235.1	245.1	11/18/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	14.5		UG/L	0.60	Х	0.026	0.20
J1 Range Northern	MW-303M2	MW-303M2_F14D	235.1	245.1	11/18/2014	SW8330	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	4.1		UG/L	400		0.023	0.20
J1 Range Northern	MW-303M1	MW-303M1_F14	299.1	309.1	11/18/2014	SW6850	Perchlorate	0.047	J	UG/L	2.0		0.019	0.20
Central Impact Area	MW-629M2	MW-629M2_R2	186.9	196.9	11/17/2014	SW6850	Perchlorate	0.84		UG/L	2.0		0.019	0.20
Central Impact Area	MW-629M2	MW-629M2_R2	186.9	196.9	11/17/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	1.9		UG/L	0.60	X	0.026	0.20
Central Impact Area	MW-629M1	MW-629M1_R2	216.9	226.9	11/17/2014	SW6850	Perchlorate	0.17	J	UG/L	2.0		0.019	0.20
Central Impact Area	MW-629M1	MW-629M1_R2	216.9	226.9	11/17/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	9.4		UG/L	0.60	X	0.026	0.20
Central Impact Area	MW-629M1	MW-629M1_R2D	216.9	226.9	11/17/2014	SW6850	Perchlorate	0.17	J	UG/L	2.0		0.019	0.20
Central Impact Area	MW-629M1	MW-629M1_R2D	216.9	226.9	11/17/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	9.5		UG/L	0.60	X	0.026	0.20
Central Impact Area	MW-349M2	MW-349M2_F14	195	205	11/13/2014	SW6850	Perchlorate	0.040	J	UG/L	2.0		0.019	0.20
Central Impact Area	MW-349M1	MW-349M1_F14	229	239	11/13/2014	SW6850	Perchlorate	0.57		UG/L	2.0		0.019	0.20
J1 Range Northern	MW-245M2	MW-245M2_F14	204	214	11/13/2014	SW8330	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	5.0		UG/L	400		0.023	0.20
J1 Range Northern	MW-245M2	MW-245M2_F14	204	214	11/13/2014	SW6850	Perchlorate	68.3		UG/L	2.0	X	0.19	2.0
J1 Range Northern	MW-245M2	MW-245M2_F14	204	214	11/13/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	71.8		UG/L	0.60	X	0.13	1.0
J1 Range Northern	MW-245M2	MW-245M2_F14D	204	214	11/13/2014	SW8330	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	5.0		UG/L	400		0.023	0.20
J1 Range Northern	MW-245M2	MW-245M2_F14D	204	214	11/13/2014	SW6850	Perchlorate	67.9		UG/L	2.0	X	0.19	2.0
J1 Range Northern	MW-245M2	MW-245M2_F14D	204	214	11/13/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	70.9		UG/L	0.60	X	0.13	1.0
J1 Range Northern	MW-245M1	MW-245M1_F14	244	254	11/13/2014	SW6850	Perchlorate	0.21		UG/L	2.0		0.019	0.20
J1 Range Northern	MW-136S	MW-136S_F14	107	117	11/12/2014	SW8330	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	0.91		UG/L	400		0.023	0.20
J1 Range Northern	MW-326M3	MW-326M3_F14	165.2	175.3	11/12/2014	SW6850	Perchlorate	0.034	J	UG/L	2.0		0.019	0.20
J1 Range Northern	MW-326M2	MW-326M2_F14	196.3	206.3	11/12/2014	SW6850	Perchlorate	0.57		UG/L	2.0		0.019	0.20
J1 Range Northern	MW-326M2	MW-326M2_F14	196.3	206.3	11/12/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	13.9		UG/L	0.60	X	0.026	0.20
J1 Range Northern	MW-326M2	MW-326M2_F14	196.3	206.3	11/12/2014	SW8330	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	5.2		UG/L	400		0.023	0.20
J1 Range Northern	MW-326M2	MW-326M2_F14D	196.3	206.3	11/12/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	13.1		UG/L	0.60	X	0.026	0.20
J1 Range Northern	MW-326M2	MW-326M2_F14D	196.3	206.3	11/12/2014	SW8330	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	4.7		UG/L	400		0.023	0.20
J1 Range Northern	MW-326M1	MW-326M1_F14	250	260	11/12/2014	SW6850	Perchlorate	0.12	J	UG/L	2.0		0.019	0.20
J1 Range Northern	MW-346M4	MW-346M4_F14	140	150	11/10/2014	SW6850	Perchlorate	0.041	J	UG/L	2.0		0.019	0.20
J1 Range Northern	MW-346M3	MW-346M3_F14	175	185	11/10/2014	SW6850	Perchlorate	0.14	J	UG/L	2.0		0.019	0.20
J1 Range Northern	MW-346M2	MW-346M2_F14	205.3	215.3	11/10/2014	SW6850	Perchlorate	4.6		UG/L	2.0	Х	0.019	0.20
J1 Range Northern	MW-346M2	MW-346M2_F14	205.3	215.3	11/10/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	5.9		UG/L	0.60	Х	0.026	0.20
J1 Range Northern	MW-346M2	MW-346M2_F14D	205.3	215.3	11/10/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	6.0		UG/L	0.60	X	0.026	0.20

# TABLE 2 VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS Data Received December 2014

J1 Range Northern MV J1 Range Northern MV J1 Range Northern MV J1 Range Northern MV	W-346M1 I	Field Sample ID	Top Depth (ft bgs)	Bottom Depth		Test		Result				>		
J1 Range Northern MV J1 Range Northern MV J1 Range Northern MV J1 Range Northern MV	W-346M1 I		(ft bgs)				In the		0 1:0:	1.1. 14	A 4 C 1 /1 1 A	1101 // 11	1401	lo.
J1 Range Northern MV J1 Range Northern MV J1 Range Northern MV				, ,	•	Method	Analyte	Value	Qualifier	Units		MCL/HA	MDL	RL
J1 Range Northern MV J1 Range Northern MV	W-346M1					SW6850	Perchlorate	20.4			2.0	X	0.057	0.60
J1 Range Northern MV				255	11/10/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	6.0			0.60	X	0.026	0.20
			245	255	11/10/2014	SW6850	Perchlorate	21.2		UG/L	2.0	X	0.057	0.60
	-	MW-346M1_F14D	245	255	11/10/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	6.0		UG/L	0.60	Χ	0.026	0.20
J1 Range Northern MV	W-168M3	MW-168M3_F14	103	113	11/06/2014	SW6850	Perchlorate	0.072	J	UG/L	2.0		0.019	0.20
		MW-168M2_F14	198	208	11/06/2014	SW6850	Perchlorate	0.054	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-164M1		227	237	11/06/2014	SW6850	Perchlorate	0.097	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-191M2	MW-191M2_F14	120	130	11/05/2014	SW6850	Perchlorate	0.052	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-191M2	MW-191M2_F14	120	130	11/05/2014	SW8330	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	0.96		UG/L	400		0.023	0.20
J1 Range Northern MV	W-590M2	MW-590M2_F14	238	248	11/05/2014	SW6850	Perchlorate	0.74		UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-590M1	MW-590M1_F14	258	268	11/05/2014	SW6850	Perchlorate	0.042	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-584M2	MW-584M2_F14	228	238	11/05/2014	SW6850	Perchlorate	0.14	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-584M1	MW-584M1_F14	248	258	11/05/2014	SW6850	Perchlorate	5.2		UG/L	2.0	X	0.019	0.20
J1 Range Northern MV	W-479M1	MW-479M1_F14	240	250	11/04/2014	SW6850	Perchlorate	0.047	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-401M3	MW-401M3_F14	228.5	238.5	11/04/2014	SW6850	Perchlorate	0.14	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-401M1	MW-401M1_F14	256.1	266.1	11/04/2014	SW6850	Perchlorate	0.023	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-606M2	MW-606M2_F14	193.2	203.2	11/04/2014	SW6850	Perchlorate	0.055	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-606M1	MW-606M1_F14	233.3	243.3	11/04/2014	SW6850	Perchlorate	0.021	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-430M2	MW-430M2_F14	188.4	198.4	11/03/2014	SW6850	Perchlorate	0.059	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-430M1	MW-430M1_F14	245.2	255.2	11/03/2014	SW6850	Perchlorate	0.028	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-541M1	MW-541M1_F14	210	220	11/03/2014	SW6850	Perchlorate	0.048	J	UG/L	2.0		0.019	0.20
J1 Range Northern J11	IN-INF1B .	J1N-INF1B_F14	0	0	11/03/2014	SW6850	Perchlorate	1.2		UG/L	2.0		0.019	0.20
J1 Range Northern J11	IN-INF1A .	J1N-INF1A_F14	0	0	11/03/2014	SW6850	Perchlorate	0.074	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-369M1	MW-369M1_F14	254.1	264.1	11/03/2014	SW8330	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	0.24		UG/L	400		0.023	0.20
J1 Range Northern MV	W-369M1	MW-369M1_F14	254.1	264.1	11/03/2014	SW6850	Perchlorate	1.0		UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-369M1	MW-369M1_F14	254.1	264.1	11/03/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	1.9		UG/L	0.60	Х	0.026	0.20
J2 Range Northern MV	W-620M1	MW-620M1_R3	268.6	278.6	11/03/2014	SW6850	Perchlorate	0.019	J	UG/L	2.0		0.019	0.20
J2 Range Northern MV	W-313M1	MW-313M1_F14R	255.4	265.4	11/03/2014	SW6850	Perchlorate	5.2		UG/L	2.0	X	0.019	0.20
J1 Range Northern MV	W-220M1	MW-220M1_F14	248	258	10/30/2014	SW6850	Perchlorate	0.026	J	UG/L	2.0		0.019	0.20
Central Impact Area MV	W-253M1	MW-253M1_F14	265.4	275.4	10/30/2014	SW6850	Perchlorate	0.024	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-315M2	MW-315M2_F14	195.7	205.7	10/30/2014	SW6850	Perchlorate	0.055	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-265M3	MW-265M3_F14	200	210	10/30/2014	SW6850	Perchlorate	0.093	J	UG/L	2.0		0.019	0.20
J1 Range Northern MV	W-265M3	MW-265M3_F14	200	210	10/30/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	0.31		UG/L	0.60		0.026	0.20
J1 Range Northern MV	W-265M2	MW-265M2_F14	225	235	10/30/2014	SW8330	Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	0.26		UG/L	400		0.023	0.20
J1 Range Northern MV	W-265M2	MW-265M2_F14	225	235	10/30/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	1.3		UG/L	0.60	X	0.026	0.20
J1 Range Northern MV	W-265M2	MW-265M2_F14	225	235	10/30/2014	SW6850	Perchlorate	48.9		UG/L	2.0	X	0.19	2.0
J1 Range Northern MV	W-265M2	MW-265M2_F14D	225	235	10/30/2014	SW6850	Perchlorate	47.0		UG/L	2.0	Χ	0.19	2.0
J1 Range Northern MV	W-265M1	MW-265M1_F14	265	275	10/30/2014	SW6850	Perchlorate	0.097	J	UG/L	2.0		0.019	0.20
Central Impact Area MV	W-623M2	MW-623M2_R2	291.8	301.8	10/29/2014	SW6850	Perchlorate	0.025	J	UG/L	2.0		0.019	0.20
Central Impact Area MV	W-623M2	MW-623M2_R2	291.8	301.8	10/29/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	2.7		UG/L	0.60	X	0.026	0.20
Central Impact Area MV	W-623M2	MW-623M2_R2D	291.8	301.8	10/29/2014	SW6850	Perchlorate	0.021	J	UG/L	2.0		0.019	0.20
Central Impact Area MV	W-623M2	MW-623M2_R2D	291.8	301.8	10/29/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	2.6		UG/L	0.60	Х	0.026	0.20
	-			240	10/29/2014	SW6850	Perchlorate	0.040	J	UG/L	2.0		0.019	0.20
Central Impact Area MV	W-625M1	MW-625M1_R2	260	270	10/29/2014	SW6850	Perchlorate	0.089	J	UG/L	2.0		0.019	0.20
	-		260	270	10/29/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	0.22		UG/L	0.60		0.026	0.20
			120.8	130.8	10/29/2014	SW6850	Perchlorate	0.058	J	UG/L	2.0		0.019	0.20
			215.5	225.5	10/28/2014	SW6850	Perchlorate	43.6		UG/L	2.0	X	0.11	1.2

# TABLE 2 VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS Data Received December 2014

Data Necessed December 2014														
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-567M1	MW-567M1_F14	215.5	225.5	10/28/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	6.4		UG/L	0.60	Χ	0.026	0.20
J1 Range Northern	MW-567M1	MW-567M1_F14D	215.5	225.5	10/28/2014	SW6850	Perchlorate	44.4		UG/L	2.0	Χ	0.11	1.2
J1 Range Northern	MW-567M1	MW-567M1_F14D	215.5	225.5	10/28/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	6.3		UG/L	0.60	Χ	0.026	0.20
J1 Range Northern	MW-605M2	MW-605M2_F14	182.2	192.2	10/28/2014	SW6850	Perchlorate	0.45	J	UG/L	2.0		0.11	1.2
J1 Range Northern	MW-605M1	MW-605M1_F14	220.2	230.2	10/28/2014	SW6850	Perchlorate	0.034	J	UG/L	2.0		0.019	0.20
J1 Range Northern	MW-286M2	MW-286M2_F14	205	215	10/28/2014	SW6850	Perchlorate	0.11	J	UG/L	2.0		0.019	0.20
J1 Range Northern	MW-286M1	MW-286M1_F14	259	269	10/28/2014	SW6850	Perchlorate	0.020	J	UG/L	2.0		0.019	0.20
J1 Range Northern	MW-370M3	MW-370M3_F14	175	185	10/28/2014	SW6850	Perchlorate	0.045	J	UG/L	2.0		0.019	0.20
J1 Range Northern	MW-370M2	MW-370M2_F14	215.5	225.5	10/28/2014	SW6850	Perchlorate	0.30		UG/L	2.0		0.019	0.20
J2 Range Northern	MW-619M2	MW-619M2_R3	234.1	244.1	10/27/2014	SW6850	Perchlorate	0.036	J	UG/L	2.0		0.019	0.20
J2 Range Northern	MW-619M1	MW-619M1_R3	255.1	265.1	10/27/2014	SW6850	Perchlorate	0.65		UG/L	2.0		0.019	0.20
J2 Range Northern	MW-613M2	MW-613M2_R3	246.1	256.1	10/27/2014	SW6850	Perchlorate	0.034	J	UG/L	2.0		0.019	0.20
J2 Range Northern	MW-613M1	MW-613M1_R3	267.1	277.1	10/27/2014	SW6850	Perchlorate	0.038	J	UG/L	2.0		0.019	0.20
J2 Range Northern	MW-612M2	MW-612M2_R3	267	277	10/27/2014	SW6850	Perchlorate	0.041	J	UG/L	2.0		0.019	0.20
J2 Range Northern	MW-612M1	MW-612M1_R3	297	307	10/27/2014	SW6850	Perchlorate	0.039	J	UG/L	2.0		0.019	0.20
J1 Range Northern	MW-564M1	MW-564M1_F14	227	237	10/22/2014	SW8330	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	2.1		UG/L	0.60	Χ	0.026	0.20
J1 Range Northern	MW-564M1	MW-564M1_F14	227	237	10/22/2014	SW6850	Perchlorate	60.6		UG/L	2.0	Χ	0.19	2.0
J1 Range Northern	MW-564M1	MW-564M1_F14D	227	237	10/22/2014	SW6850	Perchlorate	62.3		UG/L	2.0	Χ	0.19	2.0
J1 Range Northern	MW-549M2	MW-549M2_F14	187.3	197.3	10/22/2014	SW6850	Perchlorate	0.067	J	UG/L	2.0		0.019	0.20
J1 Range Northern	MW-549M1	MW-549M1_F14	227.4	237.4	10/22/2014	SW6850	Perchlorate	3.4		UG/L	2.0	Χ	0.019	0.20
J1 Range Northern	MW-563M1	MW-563M1_F14	215	225	10/22/2014	SW6850	Perchlorate	0.43		UG/L	2.0		0.019	0.20
J1 Range Northern	MW-547M2	MW-547M2_F14	178	188	10/22/2014	SW6850	Perchlorate	0.036	J	UG/L	2.0		0.019	0.20
J1 Range Northern	MW-547M1	MW-547M1_F14	237	247	10/22/2014	SW6850	Perchlorate	0.25		UG/L	2.0		0.019	0.20
J1 Range Northern	MW-566M1	MW-566M1_F14	232	242	10/22/2014	SW6850	Perchlorate	8.9		UG/L	2.0	Х	0.019	0.20
J1 Range Northern	MW-566M1	MW-566M1 F14D	232	242	10/22/2014	SW6850	Perchlorate	8.8		UG/L	2.0	Х	0.019	0.20